



MI 350 Series

Item Reference Guide

Revision 13

5 February 2024

About this guide:

This guide lists Item numbers and option codes for the following products and firmware versions.

Product Name	Product Type	Firmware Version
EC 350	PTZ Volume Corrector	Up through 2.06
ERX 350	P & T Recorder	Up through 2.06
MIWI350	Volume Corrector & Recorder	Up through 2.06

This guide is intended to give a listing of all Items available in the 350 series of products (EC / ERX/MIWI). The guide also provides a basic description of each Item along with the Firmware Default value and list of possible selectable options. Instruments with older firmware than stated above may not necessarily provide all listed Items or options. Note that Customer Specs defaults can differ from the actual 'Firmware Defaults' values. This Guide refers strictly to Firmware Defaults. Note that many Items return to their Firmware Default values after a Firmware Upgrade and would need to be restored back using a previously saved Item File. Please refer to EC 350 / ERX 350 User Manuals for additional operational information.

Notes:

- In this guide, bullets under the Instrument name indicate this Item code and/or option is available for that product per the firmware listed above. Blank or no bullet means Item is not available.
- For Information about CloudLink Modem Items – please refer to the CloudLink Item Reference Guide. CloudLink Modem Item numbers begin at # 3000.

REVISION CHANGES LIST:

Revision 1 changes:

Firmware Default Value for Item 092 should state **CCF** (not MCF)
Text typo in description should state: **Uncorrected** (not Corrected)
Note that Customer Specs can differ from Firmware Defaults

Revision 2 changes:

ERX 350 – removed reference to Item 059, 060, and 062
Added Items: 1490, 1553, 1554, and 1555 (Serial port reset)
Added 'Priority mode (Item 1230) and related Items 1235 and 1382 for call first numbers
Adjustments to recommended values for Lithium Battery packs for Shutdown and Low Battery Alarm Limits
Added Items 1466, 1471, 1472, 1479, 1497

Revision 3 changes:

Items 60, 527 and 1001 default values corrections

Revision 4 changes:

Items, 496/787, 1032 default values changed

Revision 5 changes:

Items 1001 clarifications
Added Item 1376, 1380, and 1383

Revision 6 changes:

Items 095 clarifications, Corrections to Daily / Monthly values for AT Log 2-5 Intervals Items: 1065,1089, 1113, 1137

Revision 7 changes:

Items 095 clarifications,
Items 1056/1057 default values changed
Added units of Ounces for P1/P2 Pressures – Items 87, 408, 549, 550

Revision 8 changes:

MIWI350 R110.1 Release with Pressure, P3 feature related new item list.

Revision 9 changes:

Changed default values of some items which were incorrect from the previous versions.

Revision 10 changes:

Added two new CloudLink Item numbers and Item 1490 default value updated.

Revision 11 changes:

Added one Item number 449 Volume Switch Filter.

Revision 12 changes:

Added P4 items
Added Digital Switch Inputs items

Added API21.1 compliance items

Added Force call in item

Added i1617 item

Updated i449 item

Added i1694 item

Revision 13 changes:

Added items 1696, 1697, 1698 and 1699.

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
0	Corrected Volume Totalized volume, corrected to base conditions (P-T-Z). Volume pulses weighted by Correction Factor (Item 043). Volume units defined by Item 090. Number of digits defined by Item 096. Abbreviated as: 'CorVol'	0	00000000 – 99999999	•		•	
2	Uncorrected Volume Totalized meter volume (no correction). Volume units defined by Item 092. Number of digits defined by Item 097. Abbreviated as: 'UncVol'.	0	00000000 – 99999999	•		•	
5	Ch-A Pulses Waiting Number of volume pulses for Channel A pending transmission. Normally zero.	0		•		•	
6	Ch-B Pulses Waiting Number of volume pulses for Channel B pending transmission. Normally zero.	0		•		•	
7	Ch-C Pulses Waiting Number of volume pulses for Channel C pending transmission. Normally zero.	0		•		•	
8	P1 Gas Pressure Most recently measured pressure of P1 transducer Used in calculating the pressure correction factor (Item 044). The pressure scaled to the unit of measure per Item	0.0		•		•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	087. Updated at time of P/T Measurement cycle which is controlled by Item 586. (EC 350 defaults to 30 sec measure rate).						
10	P1 High Alarm Limit P1 Pressure High Alarm set point.	99999.99		•		•	
11	P1 Low Alarm Limit P1 Pressure Low Alarm set point	-1.0		•		•	
12	P1 Cal Atmos Pressure Atmospheric pressure optionally entered by the instrument technician during the most recent calibration of an absolute pressure transducer.	0.0		•		•	
13	Base Pressure Base pressure (per the contract) used in calculating Pressure Factor (Item 044).	14.73		•		•	
14	Atmospheric Pressure Atmospheric pressure per the contract to convert gauge pressure readings (for gauge type transducers) to absolute pressure used in calculating Pressure Factor (Item 044).	14.73		•		•	
15	Press used at P1-Zero The pressure value used during the most recent P1 Pressure Zero calibration.	0.0		•		•	
16	Press used at P1-Span	0.0		•		•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	The pressure value used during the most recent P1 Pressure Span calibration.						
17	Calibration P1-Zero The offset (zero point) for the P1 Pressure transducer during the most recent P1 Pressure Zero calibration.	0.0	Limit of change = 2% of Full Scale of Transducer Range.	•		•	
18	Cal Prev-1 P1-Zero Previous value of Item 017	0.0		•		•	
19	Cal Prev-2 P1-Zero Previous value of Item 018	0.0		•		•	
20	Calibration P1-Span The span (gain factor) for the P1 Pressure transducer during the most recent P1 Pressure Span calibration.	1.0		•		•	
21	Cal Prev-1 P1-Span Previous value of Item 020	1.0		•		•	
22	Cal Prev-2 P1-Span Previous value of Item 021	1.0		•		•	
23	Min P Cal Point Diff % The configurable minimum spread required between Pressure Cal Zero (017) and Pressure Cal Span (020) calibration points.	50.0		•	•	•	•
24	Excess P Cal Change %	2.0		•	•	•	•

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	The configurable maximum allowable change to Pressure Cal Zero (017) during Pressure Zero calibration and to Pressure Cal Span (020) during Pressure Span calibration.						
25	P1 Press Range (PSI) Range specified in PSI units only Note: Range value comes directly from the P1 PnPPT Transducer and value is not configurable (R-O).	30.0		•		•	
26	Gas Temperature Most recently measured temperature of Temperature probe. Used in calculating the temperature correction factor (Item 045). Unit of measure per Item 089. Updated at time of P/T Measurement cycle which is controlled by Item 586. (EC 350 defaults to 30 sec measure rate).	0.0		•		•	
27	Gas Temp Lo Alarm Limit Temp Low Alarm set point	-35.0		•		•	
28	Gas Temp Hi Alarm Limit Temp High Alarm set point	165.0		•		•	
29	Temp Used at T-Zero Temperature applied at T-Zero	0.0		•		•	
30	Temp Used at T-Span Temperature applied at T-Span	0.0		•		•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
31	Case Temperature Current Temperature inside enclosure	32.0		•		•	
32	Case Temp Max Max Temperature inside enclosure since last reset.	-40.0		•		•	
33	Case Temp Min Min Temperature inside enclosure since last reset.	158.0		•		•	
34	Base Temperature Configurable – used for generating Temperature Factor (Item 045) for Volume correction.	60.0		•		•	
35	Calibration T-Zero The offset (zero point) for the Temperature probe during the most recent Temperature Zero calibration	0.0		•		•	
36	Cal Prev-1 T-Zero Previous value of Item 035.	0.0		•		•	
37	Cal Prev-2 T-Zero Previous value of Item 036.	0.0		•		•	
38	Calibration T-Span The span (gain factor) for the Temperature probe during the most recent Temperature Span calibration.	1.0	Range of change = 0.5 to 2.0	•		•	
39	Cal Prev-1 Temp-Span Previous value of T-Span	1.0		•		•	
40	Cal Prev-2 Temp-Span	1.0		•		•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Second most previous value of T-Span						
41	Min TCal Point Diff % The configurable minimum spread required between Item 035 and Item 038 calibration points. Used in ERX 350 mode – but per Items 514 and 516.	10.0		•	•	•	•
42	Excess TCal Change % The configurable maximum allowable change to Item 035 during Temperature Zero calibrations and Item 038 during Temperature Span calibration. Used in ERX 350 mode – but per Items 514 and 516.	2.0		•	•	•	•
43	Total Correction Factor Equates to: { Item 044 * Item 045 * Item 046 * Item 116 }. Total Factor updates when Pressure and Temperature are measured and Super is calculated. Update rate is controlled by Item 586. (Defaults to 30 sec measurement update rate).	1.0		•		•	
44	Press Correction Factor Factor updates when Pressure is measured. Updated at time of Measurement cycle which is controlled by Item 586 (default interval rate of 30 seconds). To operate in Fixed Pressure Factor mode – configure Item 109 as ‘Fixed’ (code 0) and set appropriate Pressure value at Item 1161 (Fixed Pressure Value). Do not try to configure fixed values at Item 008 or 044 as they are Read-Only. See Item 109.	1.0		•		•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
45	Temp Correction Factor Factor updates when Temperature is measured. Updated at time of Measurement cycle which is controlled by Item 586 (default interval rate of 30 seconds). To operate in Fixed Temperature Factor mode – configure Item 111 as 'Fixed' (code 0) and set appropriate Temperature value at Item 1162 (Fixed Temperature Value). Do not try to configure fixed values at Item 026 or 045 as they are Read-Only. See Item 111.	1.0		•	•		
46	Aux Correction Factor User configurable parameter to allow for any additional correction factoring not covered by P, T or Super factors. Typically, not used.	1.0		•	•		
47	Unsquared Supercompress Fpv value computed from P and T measurements. Updated every measurement cycle (per Item 586)	1.0		•	•		
48	Battery Voltage Reading Measured voltage from the main Battery. Update rate is 10 minutes. Three consecutive low reading will trip a Battery Low Alarm condition (Item 099)	6.0	Alkaline Packs are 6 V Lithium Packs are 7.2 V	•	•		
49	Battery Low Voltage Limit Battery voltage low Alarm limit set point for setting Alarm Item 099.	4.6	Alkaline Battery Packs use value: 4.6V	•	•		
		5.0	Lithium Battery Packs use value: 5.0V	•	•		

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
50	Shutdown Voltage Limit Low limit for Item 048 at which Instrument may enter dormant mode of operations to help preserve any volatile Instrument data.	4.0	Alkaline Battery Packs use value: 4.0V Lithium Battery Packs use value: 4.7V	•		•	
53	Specific Gravity for Supercompress	0.6	0.554 to 1.0	•		•	
54	% N2 for Supercompress Percent Nitrogen	0.0	0 to15%	•		•	
55	% CO2 for Supercompress Percent Carbon Dioxide	0.0	0 to15%	•		•	
56	Pulse Channel A Output Scaling Read-Only scaling factor for the value of Channel-A Volume output pulses (typically used in AMR applications). Value is automatically set by selection of Item 1193 and associated Volume units	2.0	Auto set by configuring Item 1193	•		•	
57	Pulse Channel B Output Scaling Read-Only scaling factor for the value of Channel-B Volume output pulses (typically used in AMR applications). Value is automatically set by selection of Item 1194 and associated Volume units	2.0	Auto set by configuring Item 1194	•		•	
58	Pulse Channel C Output Scaling Read-Only scaling factor for the value of Channel-C Volume output pulses (typically used in AMR applications).	2.0	Auto set by configuring Item 1195	•		•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Value is automatically set by selection of Item 1195 and associated Volume units						
59	Battery Usage Cycles Read Only Item generally used for tracking Lithium battery life (usage amount) Note: total Battery Usage cycles total counts is not always available per Item 059 because the maximum count value possible exceeds display ability of 99999999. Item 059 is mainly used for checking battery usage for particular events (not total usage). For total usage – see Item 060.	8	Max Alkaline Battery cycles = 43200000000. Max Lithium Battery cycles = 66600000000. Item 059 display resolution limited to: 99999999	•		•	
60	Battery Remain Months Low Limit Low limit value of Item 1001 for tripping Battery Usage Cycle Alarm (Item 100). Value is in months. See Item 1001	8		•		•	
62	Unit Serial Number Programmed at the factory to match the serial number label.	00000000	1–20 Alpha-numeric characters	•		•	
75	Scroll List Item 7 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	045	Temperature Factor Any Valid Item Number	•		•	
76	Scroll List Item 8 Configuration Item for defining which Item is viewable in HMI Display List menu.	043	Total Correction Factor Any Valid Item Number	•		•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
77	Scroll List Item 9 Configuration Item for defining which Item is viewable in HMI Display List menu.	113	High Res CorVol Any Valid Item Number	•		•	
78	Scroll List Item 10 Configuration Item for defining which Item is viewable in HMI Display List menu.	892	High Res UncVol Any Valid Item Number	•		•	
79	Scroll List Item 11 Configuration Item for defining which Item is viewable in HMI Display List menu.	114	Meter Scaling Any Valid Item Number	•		•	
80	Scroll List Item 12 Configuration Item for defining which Item is viewable in HMI Display List menu.	122	Firmware Ver Any Valid Item Number	•		•	
81	Scroll List Item 13 Configuration Item for defining which Item is viewable in HMI Display List menu.	255	<i>Not Assigned</i> Any Valid Item Number	•		•	
82	Scroll List Item 14 Configuration Item for defining which Item is viewable in HMI Display List menu.	255	<i>Not Assigned</i> Any Valid Item Number	•		•	
83	Scroll List Item 15 Configuration Item for defining which Item is viewable in HMI Display List menu.	255	<i>Not Assigned</i> Any Valid Item Number	•		•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
84	Scroll List Item 16 Configuration Item for defining which Item is viewable in HMI Display List menu.	255	<i>Not Assigned</i> Any Valid Item Number	•		•	
85	Scroll List Item 17 Configuration Item for defining which Item is viewable in HMI Display List menu.	255	<i>Not Assigned</i> Any Valid Item Number	•		•	
86	Scroll List Item 18 Configuration Item for defining which Item is viewable in HMI Display List menu.	255	<i>Not Assigned</i> Any Valid Item Number	•		•	
87	P1 Pressure Units Units-of-measure for P1 Pressure and all related Pressure Items related directly to pressure correction. This Item does not apply for units of P2.	0	PSI	•		•	
		1	kPa	•		•	
		2	mPa	•		•	
		3	Bar	•		•	
		4	mBar	•		•	
		5	KGcm2	•		•	
		6	in WC	•		•	
		7	in HG	•		•	
		8	mm HG	•		•	
		9	Ounces	•		•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
88	# of Dec for P1 Press Number of digits to the right of the decimal point for P1 Pressure readings. Controls display resolution.	0	XXXXXXX.XXX	•	•		
		1	XXXXXXX.X	•	•		
		2	XXXXXX.XX	•	•		
		3	XXXX.XXXX	•	•		
		4	XXX.XXXXX	•	•		
	# of Dec for P3 Press Number of digits to the right of the decimal point for P3 Pressure readings. Controls display resolution	0	XXXXXXXXXX			•	
		1	XXXXXXX.X			•	
		2	XXXXXX.XX			•	
		3	XXXX.XXXX			•	
		4	XXX.XXXXX			•	
89	Temperature Units Units-of-measure for T1 Temperature and all related Temperature Items related directly to temperature correction	0	Fahrenheit	•	•		
		1	Celsius	•	•		
		2	Rankine	•	•		
		3	Kelvin	•	•		
90	Cor Volume Units Units-of-measure for Corrected volume related Items	0	CF	•	•		
		1	CF x 10	•	•		
		2	CF x 100	•	•		

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	(e.g. Item 000, 113, 208, etc.)	3	CF x 1000	•		•	
		4	CF x 10K	•		•	
		5	CCF	•		•	
		6	MCF	•		•	
		7	m3 x 0.1	•		•	
		8	m3	•		•	
		9	m3 x 10	•		•	
		10	m3 x 100	•		•	
		11	m3 x 1K	•		•	
92	Unc Volume Units Units-of-measure for Uncorrected volume related Items (e.g. Item 002, 892, 218, etc.)	0	CF	•		•	
		1	CF x 10	•		•	
		2	CF x 100	•		•	
		3	CF x 1000	•		•	
		4	CF x 10K	•		•	
		5	CCF	•		•	
		6	MCF	•		•	
		7	m3 x 0.1	•		•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MiWi350 (EC 350)	MiWi350 (ERX 350)
		8	m3	•		•	
		9	m3 x 10	•		•	
		10	m3 x 100	•		•	
		11	m3 x 1K	•		•	
93	Ch-A Output Selection Selects the type of information to be transmitted out on pulse output channel A.	0	Cor Vol Pulses	•		•	
	2	Unc Vol Pulses	•		•		
	3	Off (Disabled)	•		•		
94	Ch-B Output Selection Selects the type of information to be transmitted out on pulse output channel B.	0	Cor Vol Pulses	•		•	
	2	Unc Vol Pulses	•		•		
	3	Off (Disabled)	•		•		
95	Ch-C Output Selection Selects the type of information to be transmitted out on pulse output channel C. Option codes 0 and 2 are selected when interfacing with an AMR device that needs Corrected or Uncorrected volume pulses. Option code 4 is used if a fixed 100ms Form-A Alarm pulse signal is desired. Note: A Form-B Alarm pulse signal is also available on Ch-D output terminals. See Item 1016 for pulse width configuration	0	Cor Vol Pulses	•	•	•	
	2	Unc Vol Pulses	•	•	•		
	3	Off (Disabled)	•	•	•	•	
	4	Alarm Pulse (Form-A)	•	•	•	•	
	5	Modem Pwr MiWi350 Case (Modem Power Control signals for MiWi350 or MI Wireless Comm Box)	•	•	•	•	
	6	Modem Reset CL R110/CloudLink 5G	•	•	•	•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MiWi350 (EC 350)	MiWi350 (ERX 350)
	<p>Option code 5 is used with MiWi350 or retro-fitting the '350' instrument with a MI Wireless Comm Box. The Modem can be any series of CloudLink, RV50, or other modem types. MiWi350 installations include the 'PD' Power Distribution Board to route regulated power to the 350 and the modem, and allow for Modem Power Control functionality (same as legacy MPC)</p> <p>For all Modem types: (e.g. CloudLink R100, CloudLink R110, CloudLink 5G, Sierra RV50, or any other modem) – configure Item 1458 Modem Type to value: Other' to ensure proper modem power control operations.</p> <p>Option code 6 is used when a CloudLink R110/CloudLink 5G modem is installed inside a standard '350' enclosure or a MiWi350 assembly. This option code enables the 350 Instrument to provide an automatic daily reset of the CL Modem (via its Reset terminals) just before midnight @ 23:57:00. MiWi350 installations include the 'PD' Power Distribution Board to route regulated power to the 350 and the modem. This option does not perform legacy Modem Power Control functionality – only a daily reset pulse for a CL R110 Modem. Note: CloudLink R100 does not support this reset option. Ensure Item 1458 Modem Type is set to CloudLink</p>						

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
96	Corr Vol # of Digits Number of Volume digits displayed on LCD for CorVol value (Item 000).	8	8 Digits	•		•	
		7	7 Digits	•		•	
		6	6 Digits	•		•	
		5	5 Digits	•		•	
		4	4 Digits	•		•	
97	Unc Vol # of Digits Number of Volume digits displayed on LCD for UncVol value (Item 002).	8	8 Digits	•		•	
		7	7 Digits	•		•	
		6	6 Digits	•		•	
		5	5 Digits	•		•	
		4	4 Digits	•		•	
98	Meter Index Rate Selection to indicate the amount of uncorrected volume for each rotation of the output shaft from the gas meter.	0	ROTARY	•		•	
		1	1 CF	•		•	
		2	2 CF	•		•	
		3	5 CF	•		•	
		4	10 CF	•		•	
		5	50 CF	•		•	
		6	100 CF	•		•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
		7	500 CF	•		•	
		8	1000 CF	•		•	
		9	10000 CF	•		•	
		10	0.1 m3	•		•	
		11	1 m3	•		•	
		12	10 m3	•		•	
		13	100 m3	•		•	
		14	1000 m3	•		•	
99	Battery Low Alarm Indicates the Battery pack has exceeded the low limit value set by Item 049 (Battery Low Limit). Note: Battery measurement occurs at 10-minute intervals. Three consecutive low readings are required for Alarm to set. This Alarm does not set if an External Supply voltage is being used.	0 / 1	No / Yes	•		•	
100	Battery Cycles Alarm Batteries life tracking based on 'usage' counts. Alarm is set when Item 1001 (Battery Months Remaining) drops below configurable value of Item 060 (Battery Remain Low Limit).	0 / 1	No / Yes	•		•	

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	See Item 1162 to select Battery Pack type (Lithium, Alkaline).						
102	Vol Sensor – 1 Alarm Indicates a faulty Volume Sensor 1. Alarm remains active until manually cleared.	0 / 1	No / Yes	•		•	
103	Vol Sensor – 2 Alarm Indicates a faulty Volume Sensor 2. Alarm remains active until manually cleared.	0 / 1	No / Yes	•		•	
104	<p>System Alarms Bit coded Alarm. Alarm indicates a hardware fault or system error.</p> <p>Note: Multiple, simultaneous alarms are handled by displaying the sum of the decimal values (numbers inside parentheses) for all active alarm.</p> <p>Example: CPU Reset (1), Watchdog Reset (2) and CPU Clock Error (4096) would display error code: 4099.</p>	0 (Inactive)	Bit-0 (1): CPU Reset. Bit-1 (2): Watchdog Reset Bit-2 (4): Hard Fault Reset Bit-3 (8): SPI Bus Error Bit-9 (512): AT Log Sector Erase Failed Bit-10 (1024): Precious Items Default Failed Bit-11 (2048): CDM Board Version Detection Failed Bit-12 (4096): CPU Clock Error Bit-13 (8192): AT Log Write Failure Bit-14 (16384): Item 43 Out of Range	•	•	•	•

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
			Error				
107	Tamper Detected Alarm Alarm is set when door tamper switch is tripped (Case door is open). User will need to clear this Alarm manually.	0 / 1	No / Yes	•	•	•	•
108	Master Alarm Status Indicate if the unit has any active Alarms. '0' indicates no active Alarms and '1' indicates one or more active Alarms. Note: Item 108 cannot be cleared directly. Alarm Bell Icon displayed on LCD when Item 108 is set (active). Alarm Call-In is also triggered if Instrument is properly setup for this event. Host systems can simply check Item 108 to know if the Instrument is in an Alarm condition . If Yes – then Host system will need to check all Alarm Items to find which is actively set.	0 / 1	No / Yes	•	•		
109	Pressure Factor Mode Selects Live or Fixed Factor for Pressure Factor. Live value comes from measurement of Item 008 (P1 Gas Pressure).	0	Fixed Factor (not measured) –Item 1161 used to compute Item 044.	•	•		

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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	For Fixed Factor, the Pressure Factor is set from value of Item 1161 (Fixed Pressure Value). Do not directly set value of Item 008 or 044 when using Fixed Factor mode – use Item 1161.	1	Live (measured) – Item 008 used to compute Item 044.	•		•	
111	Temperature Factor Mode Selects Live or Fixed Factor for Temperature Factor. Live value comes from measurement of Item 026 (Gas Temperature). For Fixed Factor, the Temperature Factor is set from value of Item 1162 (Fixed Temperature Value). Do not directly set value of Item 026 or 045 when using Fixed Factor mode – use Item 1162.	0	Fixed Factor (not measured) – Item 1162 used to compute Item 045.	•		•	
	1	Live (measured) – Item 026 used to compute Item 045	•		•		
112	P1 Transducer Type Type of transducer installed. Affects how Pressure factor is calculated. Note: Value comes directly from the P1 PnPPT Transducer and value is not configurable (R-O).	0	Gauge	•		•	
	1	Absolute	•		•		
	2	None	•		•		
	P3 Transducer Type Type of transducer installed. Note: Value comes directly from the P3 PnPPT Transducer and value is not configurable (R-O).	0	Gauge				•
	1	Absolute				•	
	2	None				•	
113	Hi Res Cor Vol			•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Display of the fractional portion (to the fourth decimal) of Item 000 (Totalized Corrected Volume) with the last three CorVol integers for reference and displayed in CorVol Unit (Item 90).	0.0000					
114	<p>Meter Scaling Factor Scaling factor applied to input pulses from meter and applies to both Uncorrected and Corrected volumes. Item 114 is set automatically by selecting a Meter Model using Item 432. This applies to both Index Drive and Rotary meter models.</p> <p>Note: Additional meter scaling can be made using Item 805 (mainly in cases of Rotary meters where Item 114 is locked).</p>	1.0000	Index Drive / UMB type meter models assume 1.0000. Each Rotary meter model has a specific value for Item 114 that is auto set based on selection at Item 432.	•	•		
116	Squared Supercompress Squared value of Item 047 – used to compute Item 043.	1.000		•	•		
118	Reference Number 1 Optional storage of an integer value, and no specific function.	0	00000000 – 99999999	•	•	•	•
119	Reference Number 2 Optional storage of an integer value, and no specific function.	0	00000000 – 99999999	•	•	•	•
120	Calibration Date P1 Press	01 01 01		•	•		

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Calibration dates are auto-inserted after Zero calibration of P1 Pressure by MasterLink.						
121	Calibration Date Temp Calibration dates are auto-inserted after Zero calibration of Temperature by MasterLink.	01 01 01		•	•		
122	Firmware Version Version of currently installed firmware in Flash	1.xxxx	1.10 or higher	•	•	•	
127	Instrument Type Numeric code assign to each type of instrument as an identifier (mainly used by Host Software). Value is Locked and requires access code via Item 264 to modify!	14		•	•	•	•
130	Scroll List Item 1 Configuration Item for defining which Item is viewable in HMI Display List menu.	002	UncVol Any Valid Item Number	•	•		
131	Scroll List Item 2 Configuration Item for defining which Item is viewable in HMI Display List menu.	000	CorVol Any Valid Item Number	•	•		
132	Scroll List Item 3 Configuration Item for defining which Item is viewable in HMI Display List menu.	008	P1 Pressure Any Valid Item Number	•	•		
133	Scroll List Item 4 Configuration Item for defining which Item is viewable in HMI Display List menu.	026	Gas Temperature Any Valid Item Number	•	•		

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
134	Scroll List Item 5 Configuration Item for defining which Item is viewable in HMI Display List menu.	1001	Battery Remain Any Valid Item Number	•		•	
135	Scroll List Item 6 Configuration Item for defining which Item is viewable in HMI Display List menu.	044	Pressure Factor Any Valid Item Number	•		•	
137	P1 Press Range User Pressure range of transducer, scaled to Pressure units per Item 087. Note: Range value comes directly from the P1 PnPPT Transducer and value is not configurable (R-O).	30.0	Range value is provided by the installed pressure transducer	•		•	
138	P1 Transducer S/N Programmed at the factory to match P1 Transducer S/N label. Note: value comes directly from the P1 PnPPT Transducer and value is not configurable (R-O).	00000000	20 Character Alpha-numeric string	•		•	
139	Metrological Access User access change protection control with respect to Item changes (Item writes). There are 5 options: (0) Full Read/Write – no restrictions (unprotected). (1) Full Read-Only – not possible to write to Metrological Items.	0	Full Read/Write (unrestricted)	•	•	•	•
		1	Full Read-Only	•	•	•	•
		2	Metrological Event Protected	•	•	•	•
		3	Metrological Sealed	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	(2) Metrological Event Protection: Metrological Items can be changed if Event Log is not full, meaning Item changes can be logged. (3) Metrological Sealed: Metrological Items cannot be changed. (4) Metrological Event Locked: Similar to option code (2) Event Protection – but reading of Event Log does not allow more changes as it does with option code (2). Once Event Log is full – no more changes even after reading out Event Log. See EC 350 User Manual for more details.	4	Metrological Event Locked	•	•	•	•
140	Energy Totalized gas energy, equivalent to the totalized corrected volume multiplied by the Gas Energy Value (Item 142).	0	00000000 – 99999999	•		•	
141	Energy Units Unit-of-measure for Energy	0	Therms	•		•	
		1	DecaTherms	•		•	
		2	MegaJoules	•		•	
		3	GigaJoules	•		•	
		4	KiloCals	•		•	
		5	KiloWattHours	•		•	
142	Gas Energy Value		BTU/cu.ft.	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	User provided value of Energy per unit of CorVol. 1000 BTU / CF per Item 141 Units.	1000.0	KJOULES/m3 KILOCAL/m3 WHR/m3				
143	P1 Press Low Alarm Alarm is set when value of Item 008 drops below configurable limit per Item 011. Manually clear unless in RBX mode.	0 / 1	No / Yes	•		•	
144	Temperature Low Alarm Alarm is set when value of Item 026 drops below configurable limit per Item 027. Manually clear unless in RBX mode.	0 / 1	No / Yes	•		•	
145	P1 Press High Alarm Alarm is set when value of Item 008 exceeds configurable limit per Item 010. Manually clear unless in RBX mode.	0 / 1	No / Yes	•		•	
146	Temperature High Alarm Alarm is set when value of Item 026 exceeds configurable limit per Item 028. Manually clear unless in RBX mode	0 / 1	No / Yes	•		•	
147	Supercompress Method User selectable method of computing the Supercompressibily factor, which becomes part of the Total Correction Factor at Item 043.	0	Fixed	•		•	
		1	NX-19	•		•	
		2	AGA8 Gross 1 (Heating Value)	•		•	
		3	AGA8 Gross 2 (Relative Density)	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
		4	AGA8 Detail Method	•	•	•	
148	Incremental Energy Energy (140) per user-selected time interval (Item 1178)	0		•	•	•	
156	P3 Intrv High P Time Time for Item 653 – EC350 Time for Item 422 – ERX350	00 00 00				•	•
157	P3 Intrv High P Date Date for Item 653 – EC350 Date for Item 422 – ERX350	01 01 01				•	•
158	P3 Intrv Low P Time Time for Item 654 – EC350 Time for Item 423 – ERX350	00 00 00				•	•
159	P3 Intrv Low P Date Date for Item 654 – EC350 Date for Item 423 – ERX350	01 01 01				•	•
163	Flow Rate High Alarm High Flow Alarm indicator. Item 208 exceeds limit per Item 164.	0 / 1	No / Yes	•	•	•	
164	Flow Rate Hi Alarm Limit High Flow Limit of Item 208 for tripping Alarm at Item 163	99999.99		•	•	•	
165	RBX Alarm Enable	0	No (Standard Alarm)	•	•	•	
		1	Yes (enable RBX alarm)	•	•	•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Enable RBX to auto-clear alarms when conditions return to normal.						
166	RBX Dead Band P1 Pressure Pressure Dead Band in PSI	5.0		•	•		
167	RBX Dead Band Temperature Temperature Dead Band in degrees F	10.0		•	•		
169	RBX Dead Band Flow Rate Units in CorVol units (Item 090) per Hour.	2.0	2.0 MCF/Hr.	•	•		
170	Protocol Code A Enable to transmit the Error Code 21 "Timeout error message".	0	Send Errors	•	•		
		1	No Errors	•	•		
		2	Multi-drop Primary				
		3	Multi-drop Secondary				
171	Wait for ENQ Timeout Wait period for ENQ before sending timeout error 21 Note: Does not apply when using IrDA	25	1 – 60 seconds	•	•		
172	Wait for SN Timeout Wait period for Sign-on before sending timeout err 21	25	1 – 60 seconds	•	•		
176	RBX Event Status of RBX activity	0	No (no RBX activity since last interrogation)	•	•		
		1	Yes (RBX activity since last interrogation)	•	•		

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Either manually reset this Item back to zero after it is queried, or have the host computer handle it if on automated calls						
183	Previous Day Corvol Item 000 from the Previous Gas Day	0		•		•	
184	Previous Day Uncvol Item 002 from the Previous Gas Day	0		•		•	
185	Prev Day Avg P1 Press	0.0		•		•	
186	Previous Day Avg Temp	0.0		•		•	
187	Avg Unsquared Super Interval average of Item 047 (interval per Item 1178)	0.0		•		•	
188	Daily Avg Unsq Super Gas Day average of Item 047	0.0		•		•	
189	Prev Day Avg Unsq Super Previous Gas Day average of Item 047	0.0		•		•	
190	Daily Energy Gas Day average of Item 140	0.0		•		•	
191	Previous Day Energy Previous Gas Day average of Item 140	0.0		•		•	
192	Daily Pk Flow Rate Highest value of Item 209 within the Gas Day	0.0		•		•	
193	Daily Pk Flow Time	00 00 00		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Ending Hour during the Gas Day for Item 192						
194	Prev Day Pk Flow Rate Previous Day value of Item 192	0.0		•		•	
195	Prev Day Pk Flow Time Ending Hour during previous Gas Day for Item 194	00 00 00		•		•	
196	Obsolete Event Log User ID User ID number for security access (passcode) and used in Event records for change identification.	00	00 – 99	•		•	
200	Site ID # Part 1 Configurable ID number – used by software as the main search criteria.	00000000	8 Digit Numeric value	•		•	
201	Site ID # Part 2 Configurable ID number – used by software as the main search criteria.	00000000	8 Digit Numeric value	•		•	
202	AT Group-1 Interval Time period that determines how often TIME records are placed in Audit Trail Log 1 memory. Note: Statistical Items are not computed per this Item – see Item 1178.	1	1 Minute	•		•	
		5	5 Minutes	•		•	
		10	10 Minutes	•		•	
		15	15 Minutes	•		•	
		30	30 Minutes	•		•	
		60	60 Minutes	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
		24	Daily	•		•	
		31	Monthly	•		•	
203	Time Instrument's internal Clock time. 24-hour clock (HH:MM: SS)	00 00 00	00:00:000 – 23:59:59	•		•	
204	Date Instrument's date. 6-digit Calendar Date. Format selected using Item 262. Note: LCD (HMI) displays Year as 4-digits	01-01-01		•		•	
205	Gas Day Start Time Configurable Time for Start of the Gas Day (Correctors).	09 00 00		•		•	
206	P1 Interval Avg Press P1 Pressure (008) average for the time period set by Item 1178	0.0		•		•	
207	Interval Avg Gas Temp T1 Temperature (026) average for the time period set by Item 1178	0.0		•		•	
208	Avg Flow Rate (Cor Vol) Flow Rate (209) average for the time period set by Item 1178	0.0		•		•	
209	Flow Rate (Cor Vol)	0.0		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Meter Flow Rate (based on Item 000) – updated every second if Instrument has any new volume input. In units per Item 090						
210	Peak Flow Rate (Cor Vol) Largest value of Item 209 during the Gas Day	0.0		•		•	
211	Peak Hour Cor Vol Largest 1-hour of accumulated CorVol during the Gas Day	0.0		•		•	
212	Peak Hour Time Ending hour for Item 211	00 00 00		•		•	
213	Peak Hour Date Date for Item 211	01 01 01		•		•	
214	P1 Interval High Press Highest value of P1 Pressure (008) measured within interval period set by Item 1178	0.0		•		•	
215	P1 Interval Low Press Lowest value of P1 Pressure (008) measured within interval period set by Item 1178	99999.99		•		•	
216	Interval High Gas Temp Highest value of T1 Temperature (026) measured within interval period set by Item 1178	-40.0		•		•	
217	Interval Low Gas Temp	158		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Lowest value of T1 Temperature (026) measured within interval period set by Item 1178						
218	Inst Dial Rate (Unc Vol) Meter Rate (based on Item 002) – updated every second if Instrument has any new volume input, in units of CF/Hr	0.0		•	•		
219	Peak Dial Rate (Unc Vol) Largest value of Item 218 for the interval	0.0		•	•		
221	Daily Cor Vol Alarm Limit CorVol High Alarm set point for tripping Alarm Item 222	99999999		•	•		
222	Daily Cor Vol Alarm Sets if Item 223 exceeds Item 221	0 / 1	No / Yes	•	•		
223	Daily Cor Vol Accumulated Cor Vol for current Gas Day (Ends at Start Time)	00000000		•	•		
224	Daily Unc Vol Accumulated Unc Vol for current Gas Day (Ends at Start Time)	00000000		•	•		
225	Incremental Cor Vol Cor Vol (Item 000) per interval of Item 1178 interval period	0		•	•		
226	Incremental Unc Vol Unc Vol (002) per interval of Item 1178 interval period	0		•	•		
229	AT Group-1 Item-5	48	Battery Voltage	•	•		

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Configuration parameter for Audit Trail Log 1 – Record Item # 5.		Any Valid Item Number				
	AT Group-1 Item-15 Configuration parameter for Audit Trail Log 1 – Record Item # 15.	255	Not Assigned Any Valid Item Number	•			•
230	AT Group-1 Item-6 Configuration parameter for Audit Trail Log 1 – Record Item # 6.	0	Corrected Volume Any Valid Item Number	•		•	
	AT Group-1 Item-16 Configuration parameter for Audit Trail Log 1 – Record Item # 16.	255	Not Assigned Any Valid Item Number		•		•
231	AT Group-1 Item-7 Configuration parameter for Audit Trail Log 1 – Record Item # 7.	2	Uncorrected Volume Any Valid Item Number	•		•	
	AT Group-1 Item-17 Configuration parameter for Audit Trail Log 1 – Record Item # 17.	255	Not Assigned Any Valid Item Number		•		•
232	AT Group-1 Item-8 Configuration parameter for Audit Trail Log 1 – Record Item # 8.	8	P1 Gas Pressure Any Valid Item Number	•		•	
	AT Group-1 Item-18 Configuration parameter for Audit Trail Log 1 – Record Item # 18.	255	Not Assigned Any Valid Item Number		•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
233	AT Group-1 Item-9 Configuration parameter for Audit Trail Log 1 – Record Item # 9.	26	Gas Temperature Any Valid Item Number	•		•	
	AT Group-1 Item-19 Configuration parameter for Audit Trail Log 1 – Record Item # 19.	255	Not Assigned Any Valid Item Number		•		•
234	AT Group-1 Item-10 Configuration parameter for Audit Trail Log 1 – Record Item # 10.	31	Case Temperature Any Valid Item Number	•		•	
	AT Group-1 Item-20 Configuration parameter for Audit Trail Log 1 – Record Item # 20.	255	Not Assigned Any Valid Item Number		•		•
243	Month Peak Hour Cor Vol Largest hourly CorVol of the current Gas month	00000000		•		•	
244	Month Peak Hour Date Date for Item 243	01 01 01		•		•	
245	Month Peak Hour Time Ending hour for Item 243	00 00 00		•		•	
246	Month Peak Day Cor Vol Largest daily CorVol of the current 'Gas' month	00000000		•		•	
247	Month Peak Day Date Date for Item 246	01 01 01		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
248	Prev Mo Pk Hour Cor Vol Largest hourly CorVol of the previous 'Gas' month	00000000		•		•	
249	Prev Mo Pk Hour Date Date for Item 248	01 01 01		•		•	
250	Prev Mo Pk Hour Time Ending hour for Item 248	00 00 00		•		•	
251	Prev Mo Pk Day Cor Vol Largest daily CorVol of the previous 'Gas' month	00000000		•		•	
252	Prev Mo Pk Day Date Date for Item 251	01 01 01		•		•	
253	Max Day Cor Vol Largest Daily CorVol since last manual reset	00000000		•		•	
254	Max Day Date Date for Item 253	01 01 01		•		•	
255	Reserved "255" used to indicate an unused slot for Display List & Audit Trail columns		Indicates unused	•	•	•	•
256	P1 Daily Average Press Average of P1 Pressure (008) for the Gas Day	0.0		•		•	
257	Daily Average Temp Average of T1 Temperature (026) for the Gas Day	0.0		•		•	
258	AT Group 1 Item-1	225	Incremental Cor Vol	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Configuration parameter for Audit Trail Log 1 – Record Item # 1		Any Valid Item Number				
	AT Group 1 Item-11 Configuration parameter for Audit Trail Log 1 – Record Item # 11	255	Not Assigned Any Valid Item Number	•			•
259	AT Group-1 Item-2 Configuration parameter for Audit Trail Log 1 – Record Item # 2	226	Incremental Unc Vol Any Valid Item Number	•		•	
	AT Group-1 Item-12 Configuration parameter for Audit Trail Log 1 – Record Item # 12	255	Not Assigned Any Valid Item Number		•		•
260	AT Group-1 Item-3 Configuration parameter for Audit Trail Log 1 – Record Item # 3	206	P1 Interval Avg Press Any Valid Item Number	•		•	
	AT Group-1 Item-13 Configuration parameter for Audit Trail Log 1 – Record Item # 13	255	Not Assigned Any Valid Item Number		•		•
261	AT Group-1 Item-4 Configuration parameter for Audit Trail Log 1 – Record Item # 4	207	Interval Avg Gas Temp Any Valid Item Number	•		•	
	AT Group-1 Item-14 Configuration parameter for Audit Trail Log 1 – Record Item # 14	255	Not Assigned Any Valid Item Number		•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
262	Date Format Format of the Date at Item 204 and all other date related Items.	0	MM-DD-YY	•		•	
		1	DD-MM-YY	•		•	
		2	YY-MM-DD	•		•	
264	Miscellaneous Action Special actions – diagnostic usage. (e.g. Clear AT Log, Force Modem Pwr On/Off, etc.). These ‘actions’ are one-shot type. Actions happen only once per command. Several codes are used mainly by Production. Not normally accessed by field personnel.	0	Various unique codes Each code is 8 digits. (typically begin with: 201)	•	•	•	•
265	Memory Address Special diagnostic usage. Not normally accessed by field personnel. Used to retrieve data from Instrument using Item 266. Not usable by field personnel – data is raw / unformatted.	0		•	•	•	•
266	Memory Data Used in conjunction with Item 265 to obtain data from Instrument in a raw format.	0		•	•	•	•
267	Miscellaneous Config Special code settings used to cause Instrument to operate in a specific manor generally for diagnostic purposes. These codes (settings) will remain set through a power cycle. Not normally accessed by field personnel.	0		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
272	Serial Baud Rate Baud rate for the instrument's Serial port (TB4) for RS-232 or RS-485 Note: This baud rate must match the baud rate of the connected modem to establish a serial link Note: Baud Rate setting remains intact after a FW Upgrade or forcing basic defaults.	0	9600	•	•		
		1	4800	•	•		
		2	2400	•	•		
		3	1200	•	•		
		4	19200	•	•		
		5	38400	•	•		
		6	57600	•	•		
		7	115200	•	•		
273	Max Flow Rate (Cor Vol) Highest value for Item 209 since last manual reset	0.0		•	•		
274	Max Flow Rate Time Time for Item 273	00 00 00		•	•		
275	Max Flow Rate Date Date for Item 273	01 01 01		•	•		
276	Max Flow Rate Press Pressure for Item 273	0.0		•	•		
277	Max Hour Cor Vol Highest value for Item 211 since last manual reset	00000000		•	•		
278	Max Hour Cor Vol Time End hour for Item 277	00 00 00		•	•		

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
279	Max Hour Cor Vol Date Date for Item 277	01 01 01		•		•	
280	Max Hour Cor Vol Press Pressure for Item 277	0.0		•		•	
281	Max Dial Rate (Unc Vol) Highest value for Item 218 since last manual reset	0		•		•	
282	Max Dial Rate Time Time for Item 281	00 00 00		•		•	
283	Max Dial Rate Date Date for Item 281	01 01 01		•		•	
284	Max Dial Rate Press Pressure for Item 281	0.0		•		•	
285	P1 Max Pressure Highest value for Item 008 since last manual reset	0.0		•		•	
286	P1 Max Pressure Time Time for Item 285	00 00 00		•		•	
287	P1 Max Pressure Date Date for Item 285	01 01 01		•		•	
288	Max Press Flow Rate Flow Rate for Item 285	0.0		•		•	
289	P1 Min Pressure Lowest value for Item 008 since last manual reset	99999.99		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
290	P1 Min Pressure Time Time for Item 289	00 00 00		•		•	
291	P1 Min Pressure Date Date for Item 289	01 01 01		•		•	
292	Min Press Flow Rate Flow Rate for Item 289	0.0		•		•	
293	Max Gas Temperature Highest value for Item 026 since last manual reset	-40.0		•		•	
294	Max Gas Temp Time Time for Item 293	00 00 00		•		•	
295	Max Gas Temp Date Date for Item 293	01 01 01		•		•	
296	Max Gas Temp Flow Rate Flow Rate for Item 293	0.0		•		•	
297	Min Gas Temperature Lowest value for Item 026 since last manual reset	158.0		•		•	
298	Min Gas Temp Time Time for Item 297	00 00 00		•		•	
299	Min Gas Temp Date Date for Item 297	01 01 01		•		•	
300	Min Gas Temp Flow Rate Flow Rate for Item 297	0.0		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
333	Call-In Trigger Type Determines which activity will cause the Instrument to Call-In to the Host system (Alarm / Scheduled Calls). Two Phone numbers are possible for each method. Note: to stop (cancel) Call-In retries – set Item 333 to code 0 (No Call-In) and then back to the desired value (i.e., toggle the value).	0	No Call-In	•	•	•	•
		1	Alarm Call-In Only	•	•	•	•
		2	Scheduled Call-In Only	•	•	•	•
		3	Alarm and Scheduled Call-In Only	•	•	•	•
334	Scheduled Call-In Date Date of next Call-in. Intended to be set to by host software after each Call-in	01 01 01	(must be set to date >= Item 204)	•	•	•	•
335	Scheduled Call-In Time Time of next Call-in. May be set by host software after each call or re-used for next Call-in	00 00 00	(must be set to time > Item 203)	•	•	•	•
336	Call-In Retry By The system sub-assembly that is expected to perform the call retry for failed Calls. Host: The Host system handles Call retries. Instrument: The MI Instrument handles Call retries. It's preferable to have Instrument initiate the call-in retries to ensure data is received by Host.	0	Host	•	•	•	•
		1	Alarm: Host Scheduled: Instrument	•	•	•	•
		2	Alarm: Instrument Scheduled: Host	•	•	•	•
		3	Instrument (Alarm + Sched)	•	•	•	•
337	Last Mdm Call-In Result	0	Call Unsuccessful	•	•	•	•
		1	Call successful	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Reports status of most recent Call-In – applies to both Alarm and Scheduled calls and also for Tel #1 or #2. Only the last (most recent) call status is reported.	2	No Call Attempted	•	•	•	•
338	Sched Call Unprocessed Updated by Host system to indicate it has successfully completed data retrieval for the Call. At the start of each Schedule Call-In, Item 338 is initialized to '1'. The Host system is then required to write Item 338 to value of '0' as the last step in its data retrieval process of a Scheduled Call-In. Doing so informs the Instrument the Call is successful and all needed information was received. Failure to write Item 338 to '0' will cause a Call retry – if configured in Item 336 for Instrument retry.	0	No (indicates no Call-in activity since last interrogation)	•	•	•	•
		1	Yes (indicates Call-in activity since last interrogation)	•	•	•	•
339	Sched Call-In Number 1 First Internet IP#/Phone# to use for Scheduled Call-In. If both Sched Numbers are used, each is called in an alternating manner (i.e. Number 1 then 2) until each is successful. Once a number is successful – that number stops call retries. Blank means disabled.	blank	50 Characters max	•	•	•	•
373	% Methane (AGA8) The following 19 Items are for reference only and display the values assigned to each of the individual gas	0	0 – 100 %	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	composition parameters used in the <u>AGA8 Detailed</u> method of Super calculations. Specific Gravity, % Nitrogen, and % Carbon Dioxide are also part of this group but are displayed at Items 53 – 55. Note: The sum total for all parameters cannot exceed 100%.						
374	% Ethane (AGA8)	0	0 – 100 %	•	•		
375	% Propane (AGA8)	0	0 – 100 %	•	•		
376	% I-Butane (AGA8)	0	0 – 100 %	•	•		
377	% N-Butane (AGA8)	0	0 – 100 %	•	•		
378	% I-Pentane (AGA8)	0	0 – 100 %	•	•		
379	% N-Pentane (AGA8)	0	0 – 100 %	•	•		
380	% Hexane (AGA8)	0	0 – 100 %	•	•		
381	% Heptane (AGA8)	0	0 – 100 %	•	•		
382	% Octane (AGA8)	0	0 – 100 %	•	•		
383	% Nonane (AGA8)	0	0 – 100 %	•	•		
384	% Hydrogen Sulfide (AGA8)	0	0 – 100 %	•	•		
385	% Hydrogen (AGA8)	0	0 – 100 %	•	•		
386	% Helium (AGA8)	0	0 – 100 %	•	•		

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
387	% Oxygen (AGA8)	0	0 – 100 %	•		•	
388	% Carbon Monoxide (AGA8)	0	0 – 100 %	•		•	
389	% Argon (AGA8)	0	0 – 100 %	•		•	
390	% Decane (AGA8)	0	0 – 100 %	•		•	
391	% Water (AGA8)	0	0 – 100 %	•		•	
399	Flow Rate Lo Alarm Lim Low Flow Limit of Item 208 for tripping Alarm at Item 461	0		•		•	
404	Previous Hour Cor Vol Previous value of Item 225	0		•		•	
405	Site ID Send Delay Time Delay before sending Site ID string to Host system after modems connect on a Call-In. Allows time for Host to be ready for SITE ID string message once modems go 'transparent'. Generally, no need to adjust – as Instrument does retries for sending SITE ID if no response from Host.	5 sec	1 – 60 seconds	•	•	•	•
407	P2 Transducer Type Type of transducer installed. Affects how Pressure factor is calculated. Note: value comes directly from the P2 PnPPT Transducer and value is not configurable (R-O).	0	Gauge	•	•	•	•
		1	Absolute	•	•	•	•
		2	None	•	•	•	•
408	P2 Pressure Units	0	PSI	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
Unit-of-measure for P2 Pressure and all related P2 Pressure Items		1	kPa	•		•	
		2	mPa	•		•	
		3	Bar	•		•	
		4	mBar	•		•	
		5	KGcm2	•		•	
		6	in WC	•		•	
		7	in HG	•		•	
		8	mm HG	•		•	
		9	Ounces	•		•	
P3 Pressure Units Unit-of-measure for P3 Pressure		0	PSI				•
		1	kPa				•
		2	mPa				•
		3	Bar				•
		4	mBar				•
		5	KGcm2				•
		6	in WC				•
		7	in HG				•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
409	% of Dec for P2 Press Number of digits to the right of the decimal point for P2 Pressure readings. Controls display resolution.	8	mm HG				•
		9	Ounces				•
		0	X XX X X X X X	•	•	•	•
		1	X X X X X . X	•	•	•	•
		2	X X X X X . X X	•	•	•	•
		3	XXXX.XXX	•	•	•	•
		4	XXX.XXXX	•	•	•	•
410	Calibration Date P2 Press Calibration dates are auto-inserted after Zero calibration of P2	01 01 01		•		•	
	Calibration Date P3 Press Calibration dates are auto-inserted after Zero calibration of P3	01 01 01					•
411	P2 Transducer S/N Programmed at the factory to match P2 Transducer S/N label	00000000	20 Character Alpha-numeric string	•		•	
	P3 Transducer S/N Programmed at the factory to match P3 Transducer S/N label	00000000	20 Character Alpha-numeric string				•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
412	P2 Press Range (PSI) Pressure range of transducer scaled to PSI Note: Range value comes directly from the P2 PnPPT Transducer and value is not configurable (R-O).	30.0	Range depends on Transducer Type	•		•	
	P3 Press Range (PSI) Pressure range of transducer, scaled to Pressure units per Item 408. Note: Range value comes directly from the P3 PnPPT Transducer and value is not configurable (R-O).	30.0	Range value is provided by the installed pressure transducer				•
413	Pressure used at P2-Cal Zero The pressure value used during the most recent P2 Pressure Zero calibration.	0.0		•	•	•	•
414	Calibration P2-Zero The offset (zero point) for the P2 Pressure transducer during the most recent P2 Pressure Zero calibration.	0.0		•		•	
	Calibration P3-Zero The offset (zero point) for the P3 Pressure transducer during the most recent P3 Pressure Zero calibration.	0.0					•
415	Cal Prev-1 P2-Zero	0.0		•		•	
	Cal Prev-1 P3-Zero	0.0					•
416	Pressure used at P2-Span	0.0		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	The pressure value used during the most recent P2 Pressure Span calibration.						
417	Calibration P2-Span The span (gain factor) for the P2 Pressure transducer during the most recent P2 Pressure Span calibration.	1.0		•	•		
	Calibration P3-Span The span (gain factor) for the P3 Pressure transducer during the most recent P3 Pressure Span calibration	1.0					•
418	Cal Prev-1 P2-Span	1.0		•	•		
	Cal Prev-1 P3-Span	1.0					•
419	P2 Pressure Range user Pressure range of transducer, scaled to Pressure units per Item 408. Note: Range value comes directly from the P2 PnPPT Transducer and value is not configurable (R-O).	0.0	Range value is provided by the installed pressure transducer	•	•		
	P3 Press Range user Pressure range of transducer scaled to PSI. Note: Range value comes directly from the P3 PnPPT Transducer and value is not configurable (R-O)	30.0	Range depends on Transducer Type				•
420	P2 Gas Pressure Most recently measured pressure of P2 transducer. Must be enabled for use from Item 1053. P2 Pressure	0.0		•	•		

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	measurement updated at interval selected by Item 586 (same as for P1 and T).						
	P3 Gas Pressure Most recently measured pressure of P3 transducer. Must be enabled for use from Item 1054. P3 Pressure measurement updated at interval selected by Item 586.	0.0					•
421	P2 Interval Avg Press P2 Pressure (420) average for the time period set by Item 1178	0.0		•		•	
	P3 Interval Avg Press P3 Pressure (420) average for the time period set by Item 1178	0.0					•
422	P2 Interval High Press Highest value of P2 Pressure (420) measured within interval period set by Item 1178	0.0		•		•	
	P3 Interval High Press Highest value of P3 Pressure (420) measured within interval period set by Item 1178	0.0					•
423	P2 Interval Low Press Lowest value of P2 Pressure (420) measured within interval period set by Item 1178	99999.99		•		•	
	P3 Interval Low Press	99999.99					•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Lowest value of P3 Pressure (420) measured within interval period set by Item 1178						
424	P2 Daily Average Press Average of P2 Pressure (420) for the Gas Day	0.0		•	•		
	P3 Daily Average Press Average of P3 Pressure (420) for the Gas Day	0.0					•
425	P2 Prev Daily Avg Press Average of P2 Pressure (420) for the previous Gas Day	0.0		•	•		
	P3 Prev Daily Average Press Average of P3 Pressure (420) for the previous Gas Day	0.0					•
426	P2 Max Pressure Highest value for Item 420	0.0		•	•		
	P3 Max Pressure Highest value for Item 420	0.0					•
427	P2 Max Pressure Time Time for Item 426	00 00 00		•	•		
	P3 Max Pressure Time Time for Item 426	00 00 00					•
428	P2 Max Pressure Date Date for Item 426	01 01 01		•	•		
	P3 Max Pressure Date Date for Item 426	00 00 00					•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
429	P2 Min Pressure Lowest value for Item 420	99999.99		•		•	
	P3 Min Pressure Lowest value for Item 420	99999.99					•
430	P2 Min Pressure Time Time for Item 429	00 00 00		•		•	
	P3 Min Pressure Time Time for Item 429	00 00 00					•
431	P2 Min Pressure Date Date for Item 429	01 01 01		•		•	
	P3 Min Pressure Date Date for Item 429	01 01 01					•
432	Meter Model Model of meter to which the EC 350 Corrector is mounted. Applies to both ID (UMB) and Rotary meter models.	0	Other	•		•	
	Note: Changing the selection at this Item will automatically set the values at Items 098 and 114 for the selected meter.	20	Dresser I-D B3 8C175/200	•		•	
		21	Dresser I-D B3 11C175/200	•		•	
		22	Dresser I-D B3 15C175/200	•		•	
		23	Dresser I-D B3 1M300	•		•	
		24	Dresser I-D B3 2M175/200	•		•	
		25	Dresser I-D B3 3M175/300	•		•	
		26	Dresser I-D B3 5M175	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	scaling can be made using Item 805 (Auxiliary Meter Factor).	27	Dresser I-D B3 7M175	•		•	
	The default value of Item 114 for ID (UMB) meter models is 1.000.	28	Dresser I-D B3 11M175	•		•	
	Select ' Other ' if your meter model is NOT listed and you want to manually enter values for Items 114 and 098	29	Dresser I-D B3 16M175	•		•	
		30	Dresser I-D B3 23M175	•		•	
		31	Dresser I-D B3 38M175	•		•	
		32	Dresser I-D B3 56M175	•		•	
		40	Dresser I-D LMMA 1.5M	•		•	
		41	Dresser I-D LMMA 2M	•		•	
		42	Dresser I-D LMMA 3M	•		•	
		43	Dresser I-D LMMA 5M	•		•	
		44	Dresser I-D LMMA 7M	•		•	
		45	Dresser I-D LMMA 11M	•		•	
		46	Dresser I-D LMMA 16M	•		•	
		47	Dresser I-D LMMA 23M	•		•	
		48	Dresser I-D LMMA 38M	•		•	
		49	Dresser I-D LMMA 56M	•		•	
		50	Dresser I-D LMMA 102M	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		60	Dresser ROT B3 8C175/200	•		•	
		61	Dresser ROT B3 11C175/200	•		•	
		62	Dresser ROT B3 15C175/200	•		•	
		63	Dresser ROT B3 1M300	•		•	
		64	Dresser ROT B3 2M175/200	•		•	
		65	Dresser ROT B3 3M175/300	•		•	
		66	Dresser ROT B3 5M175	•		•	
		67	Dresser ROT B3 7M175	•		•	
		68	Dresser ROT B3 11M175	•		•	
		69	Dresser ROT B3 16M175	•		•	
		70	Dresser ROT B3 23M175	•		•	
		71	Dresser ROT B3 23M232	•		•	
		72	Dresser ROT B3 38M175	•		•	
		73	Dresser ROT B3 56M175	•		•	
		80	Dresser ROT LMMA 1.5M	•		•	
		81	Dresser ROT LMMA 2M	•		•	
		82	Dresser ROT LMMA 3M	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		83	Dresser ROT LMMA 5M	•		•	
		84	Dresser ROT LMMA 7M	•		•	
		85	Dresser ROT LMMA 11M	•		•	
		86	Dresser ROT LMMA 16M	•		•	
		87	Dresser ROT LMMA 23M	•		•	
		88	Dresser ROT LMMA 38M	•		•	
		89	Dresser ROT LMMA 56M	•		•	
		90	Dresser ROT LMMA 102M	•		•	
		100	Elster-AMC ROT RPM 9.0C	•		•	
		101	Elster-AMC ROT RPM 1.5M	•		•	
		102	Elster-AMC ROT RPM 3.5M	•		•	
		103	Elster-AMC ROT RPM 5.5M	•		•	
		104	Elster-AMC ROT RPM 7.0M	•		•	
		105	Elster-AMC ROT RPM 11.0M	•		•	
		106	Elster-AMC ROT RPM 16.0M	•		•	
		107	Elster-AMC ROT RPM 2.0M	•		•	
		110	Elster I-D DIAPHR AL 800	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		111	Elster I-D DIAPHR AL 1000	•		•	
		112	Elster I-D DIAPHR AL 1400	•		•	
		113	Elster I-D DIAPHR AL 2300	•		•	
		114	Elster I-D DIAPHR AL 5000	•		•	
		120	Elster I-D TURBIN 3GT	•		•	
		121	Elster I-D TURBIN 4GT	•		•	
		122	Elster I-D TURBIN 6GT	•		•	
		123	Elster I-D TURBIN 12GT	•		•	
		141	Romet ROT RM1000	•		•	
		142	Romet ROT RM1500	•		•	
		144	Romet ROT RM3000	•		•	
		145	Romet ROT RM5000	•		•	
		146	Romet ROT RM7000	•		•	
		147	Romet ROT RM11000	•		•	
		148	Romet ROT RM16000-24	•		•	
		149	Romet ROT RM16000-20	•		•	
		150	Romet ROT RM23000	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		151	Romet ROT RM38000	•		•	
		153	Romet ROT RM600	•		•	
		154	Romet ROT RM2000	•		•	
		155	Romet ROT RM25000	•		•	
		156	Romet ROT RM56000	•		•	
		160	Sensus I-D DIAPHR 750	•		•	
		161	Sensus I-D DIAPHR 1600	•		•	
		162	Sensus I-D DIAPHR 3000	•		•	
		163	Sensus I-D DIAPHR 5000	•		•	
		164	Sensus I-D DIAPHR 10000	•		•	
		170	Sensus I-D ROTARY R-3	•		•	
		171	Sensus I-D ROTARY R-5	•		•	
		172	Sensus I-D ROTARY R-8	•		•	
		173	Sensus I-D ROTARY R-11	•		•	
		180	Sensus I-D TURBIN 2" TP-4	•		•	
		181	Sensus I-D TURBIN 2" 5-HP	•		•	
		182	Sensus I-D TURBIN 3" 10-HP	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		183	Sensus I-D TURBIN 4" T-18	•		•	
		184	Sensus I-D TURBIN 6" T-30	•		•	
		185	Sensus I-D TURBIN 8" T-60	•		•	
		186	Sensus I-D TURBIN 12" T-140	•		•	
		190	Dresser ROT MET B3 8C175/200	•		•	
		191	Dresser ROT MET B3 11C175/200	•		•	
		192	Dresser ROT MET B3 15C175/200	•		•	
		193	Dresser ROT MET B3 1M3 00	•		•	
		194	Dresser ROT MET B3 2M 175/200	•		•	
		195	Dresser ROT MET B3 3M 175/300	•		•	
		196	Dresser ROT MET B3 5M 175	•		•	
		197	Dresser ROT MET B3 7M 175	•		•	
		198	Dresser ROT MET B3 11M 175	•		•	
		199	Dresser ROT MET B3 16M 175	•		•	
		200	Dresser ROT MET B3 23M 175	•		•	
		201	Dresser ROT MET B3 23M 232	•		•	
		202	Dresser ROT MET B3 38M 175	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		203	Dresser ROT MET B3 56M 175	•		•	
		210	Romet ROT RM16	•		•	
		211	Romet ROT RM30	•		•	
		212	Romet ROT RM40	•		•	
		214	Romet ROT RM55	•		•	
		215	Romet ROT RM85	•		•	
		216	Romet ROT RM140	•		•	
		218	Romet ROT RM200	•		•	
		219	Romet ROT RM300	•		•	
		221	Romet ROT RM450	•		•	
		223	Romet ROT RM650	•		•	
		224	Romet ROT RM700	•		•	
		225	Romet ROT RM1100	•		•	
		226	Romet ROT RM1600	•		•	
		230	Romet ROT G10	•		•	
		231	Romet ROT G16	•		•	
		232	Romet ROT G25	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		233	Romet ROT G40	•		•	
		234	Romet ROT G65	•		•	
		235	Romet ROT G100	•		•	
		236	Romet ROT G160	•		•	
		237	Romet ROT G250	•		•	
		238	Romet ROT G400	•		•	
		239	Romet ROT G400–150	•		•	
		240	Romet ROT G650	•		•	
		241	Romet ROT G1000	•		•	
		250	Elster I-D RABO 3.5M/G65	•		•	
		251	Elster I-D RABO 5.5M/G100	•		•	
		252	Elster I-D RABO 9M/G165	•		•	
		253	Elster I-D RABO 14M/G250	•		•	
		254	Elster I-D RABO 23M/G400	•		•	
432		260	Elster ROT RABO 3.5M/G65	•		•	
		261	Elster ROT RABO 5.5M/G100	•		•	
		262	Elster ROT RABO 9M/G165	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		263	Elster ROT RABO 14M/G250	•		•	
		264	Elster ROT RABO 23M/G250	•		•	
433	Volume Input Mode Selection to identify the type and operation of uncorrected volume input signal. For ID type Meters (ID in name) – Item 433 will automatically be set to: LF–UMB/Instrument Drive (code 0). For Rotary type Meters (ROT in name) – Item 433 will automatically be set to: HF–Rotary Low Res (code 1). For Bidirectional applications – Item 433 needs to be set manually to either: LF Bidirectional CW or CCW depending meter Notes: <ul style="list-style-type: none">• LF = "Low Frequency"• HF = "High Frequency"• CW = "Clock Wise"• CCW = "Counter-Clock Wise"	0	LF–UMB/Instrument Drive	•		•	
		1	HF–Rotary Low Res	•		•	
		2	HF–Rotary High Res	•		•	
		3	LF Bidirectional F=CW	•		•	
		4	LF Bidirectional F=CCW	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	➤ HF – (Rotary) input connects at P8 (white connector).						
434	Daily Backup Volume (EC 350 + CloudLink) If using CloudLink modem in mode for Pulse counting – Item 434 will synch on daily basis with CloudLink to get pulses and scale them to units of Item 002 (UncVol). See Item 1463 for Backup Volume Alarm Limit setting – used to trip Alarm Item 435.	0	(Units per Item 002)	•	•		
435	Daily Backup Vol Alarm Alarm is set when value of Item 002 differs from Item 434 by more than configurable amount of Item 1463. Alarm operations requires a non-zero value for Item 1463 (disabled if Item 1463=0)	0 / 1	No / Yes	•	•		
436	Backup UVol Alarm Time Time of Item 435 (since last Alarm clear)	00 00 00		•	•		
437	Backup UVol Alarm Date Date of Item 435 (since last Alarm clear)	01 01 01		•	•		
438	Reversing Flow Alarm Sets when Item 433 is in modes '3' or '4' and Reverse Volume is detected. Generally, this Alarm is masked off as to not cause a nuisance alarm. User can decide if Reverse	0 / 1	No / Yes	•	•		

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	flow (volume) should represent an alarm type condition by unmasking this Alarm.						
439	Meter Displacement (CF) The volume displacement for meter type selected at Item 432 (Always expressed in CF)	1.000		•		•	
449	Volume Switch Filter Enable or disable a filter on the switch inputs. Enabling the filter prevents very short (unwanted) pulses from being counted.	0 / 1	Disable / Enable	•		•	
451	P2 Press High Alarm Alarm is set when value of Item 420 exceeds configurable limit per Item 455. Manually clear unless in RBX mode.	0 / 1	No / Yes	•		•	
	P3 Press High Alarm Alarm is set when value of Item 420 exceeds configurable limit per Item 455. Manually clear unless in RBX mode.	0 / 1	No / Yes				•
452	P2 Press Low Alarm Alarm is set when value of Item 420 exceeds configurable limit per Item 456. Manually clear unless in RBX mode.	0 / 1	No / Yes	•		•	
	P3 Press Low Alarm Alarm is set when value of Item 420 exceeds configurable limit per Item 456. Manually clear unless in RBX mode.	0 / 1	No / Yes				•
453	P3 Day High Press Highest P3 Pressure (501) for the current Gas Day – EC350	-1.0				•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Highest P3 Pressure (420) for the current Gas Day – ERX350						
454	P3 Day Low Press Lowest P3 Pressure (501) for the current Gas Day – EC350 Lowest P3 Pressure (420) for the current Gas Day – ERX350	99999.99				•	•
455	P2 High Alarm Limit P2 Pressure High Alarm set point for tripping Alarm Item 451.	99999.99		•	•		
	P3 High Alarm Limit P3 Pressure High Alarm set point for tripping Alarm Item 451.	9999.99					•
456	P2 Low Alarm Limit P2 Pressure Low Alarm set point for tripping Alarm Item 452.	-1.0		•	•		
	P3 Low Alarm Limit P3 Pressure Low Alarm set point for tripping Alarm Item 452.	-1.0					•
457	P3 Day High P Time Time for Item 453	00 00 00				•	•
458	P3 Day High P Date Date for Item 453	01 01 01				•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
459	RBX Dead Band: P2 Press Hysteresis band that's applied when resetting the RBX alarm for P2 pressure (high / low).	5.0	(PSI)	•	•	•	•
461	Flow Rate Low Alarm Low Flow Alarm indicator	0 / 1	No / Yes	•		•	
462	Battery Low Alarm Time Time of Item 099 Alarm	00 00 00		•	•	•	•
463	Battery Low Alarm Date Date of Item 099 Alarm	01 01 01		•	•	•	•
464	Vol Sensor-1 Alarm Time Time of Item 102 Alarm	00 00 00		•		•	
465	Vol Sensor-1 Alarm Date Date of Item 102 Alarm	01 01 01		•		•	
466	Vol Sensor-2 Alarm Time Time of Item 103 Alarm	00 00 00		•		•	
467	Vol Sensor-2 Alarm Date Date of Item 103 Alarm	01 01 01		•		•	
468	System Alarm Time Time of Item 104 Alarm	00 00 00		•	•	•	•
469	System Alarm Date Date of Item 104 Alarm	01 01 01		•	•	•	•
470	P1 Pressure Low Alarm Time	00 00 00		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Time of Item 143 Alarm						
471	P1 Pressure Low Alarm Date Date of Item 143 Alarm	01 01 01		•	•	•	•
472	P1 Press High Alarm Time Time of Item 145 Alarm	00 00 00		•	•	•	•
473	P1 Press High Alarm Date Date of Item 145 Alarm	01 01 01		•	•	•	•
474	Temp Low Alarm Time Time of Item 144 Alarm	00 00 00		•	•	•	•
475	Temp Low Alarm Date Date of Item 144 Alarm	01 01 01		•	•	•	•
476	Temp High Alarm Time Time of Item 146 Alarm	00 00 00		•	•	•	•
477	Temp High Alarm Date Date of Item 146 Alarm	01 01 01		•	•	•	•
478	Daily CorVol Alarm Time Time of Item 222 Alarm	00 00 00		•		•	
479	Daily CorVol Alarm Date Date of Item 222 Alarm	01 01 01		•		•	
480	Flow High Alarm Time Time of Item 163 Alarm	00 00 00		•		•	
481	Flow High Alarm Date	01 01 01		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Date of Item 163 Alarm						
482	LCD Default Display Item displayed on the LCD when the instrument is in Corrector Mode. Typically Item 0 – but can be any valid item.	0	CorVol	•		•	
486	Modem AT Call Enable Selection for how Call-In connects with Host System. Options are: Normal AT Command mode (send AT Init and/ Dial strings) or 'Always Connected' call-in mode for certain modems that do not need AT dial commands (skip the dial phase). Note: in the 350 series products, option codes 0 and 1 have the same functionality (enable AT Command mode). To disable Call-In completely – see Item 333.	0 / 1 2	Normal AT Command mode Always Connected – No Dial required	• •	• •	• •	• •
487	Call-In Keep Alive Time Amount of Time (in minutes) the instrument keeps the Modem powered up after a successful Call-in, to allow a host unit to call back for a follow-up call. For 3 rd party Modems – this requires use of the Power Distribution Board (Modem Power Control). CloudLink modem uses ATD command to enter in to a 'Server Mode' – PD Board is not used. '0' indicates disabled (off). See Item 790 for ERX 350	0	0 – 1440 min	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
488	<p>Call Out 1 Repeat Intrv The time interval between the start of a new Call Out Window (i.e., how often Call Out Window 1 repeats within the limits set by Items 1231 and 1232 (Call Out Start / Stop times).</p> <p>Example: 60 indicates start a Call Window every 60 minutes. For 3rd party Modems – this requires the Power Distribution Board (Modem Power Control). CloudLink modem uses ATD command to enter in to a 'Server Mode' – PD Board not used.</p> <p>0 = disabled</p>	0	0 – 1440 min	•	•	•	•
489	<p>Call Out 1 Keep Alive The time duration the Modem should be On and able to take an incoming call. Duration of active server mode. 0 = disabled.</p> <p>For 3rd party Modems – this requires the Power Distribution Board (Modem Power Control). CloudLink modem uses ATD command to enter in to a 'Server Mode' – PD Board not used.</p>	0	0 – 1440 min	•	•	•	•
491	<p>Modem Init String Initialization string sent to the instrument modem at beginning of Call-in.</p>	ATE0V0	30 Characters max	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
492	Modem Dial String AT-command sent to the modem to initiate Dialing.	ATDT	20 Characters max	•		•	
493	Alarm Call-In Number 1 First Internet/Phone # to use for Alarm Call-In. If both Alarm Numbers are used, each is called in an alternating manor (i.e. Number 1 then 2) until each is successful. Once a number is successful – that number stops call retries. Blank means disabled.	blank	50 Characters max		•	•	
494	Modem Hangup String AT-command sent to the modem to Hang up.	ATH0	4 Characters max	•		•	
495	Modem Retry-A Interval Primary call-in retry period, in minutes.	10 min	0 - 1440	•		•	
496	Modem Retry-B Interval Secondary call-in retry period, in minutes.	1260 (21 Hrs.)	0 - 1440	•		•	
497	Modem Retry-A Count Number of Call-In retries using Retry-A Interval timing (per Item 495) attempted before switching to Retry-B Interval timing (per Item 496). Once Retry-A count is exceeded – system will continue to use Retry-B Interval timing until Call-In ends or a new Call scenario is initiated.	3	0 - 99	•		•	
498	P3 Day Low P Time Time for Item 454	00 00 00				•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
499	P3 Day Low P Date Date for Item 454	01 01 01				•	•
500	P1 Gas Pressure Pressure from the P1 pressure transducer.	0.0			•		•
501	P2 Gas Pressure Pressure from the P2 pressure transducer.	0.0			•		•
	P3 Gas Pressure Pressure from the P3 pressure transducer.	0.0				•	
502	T1 Gas Temperature Temperature from temperature probe.	0.0			•		•
503	Case Temperature Temperature from inside case.	32.0			•		•
504	Case Temp Maximum Max value of Item 503 since last reset	-40.0			•		•
505	Case Temp Minimum Min value of Item 503 since last reset	158.0			•		•
506	P1 Calibration Zero Amount of offset required for the P1 transducer to obtain zero reading at zero pressure	0.0			•		•
507	Cal Prev-1 P1-Zero Previous value of Item 506	0.0			•		•
508	Calibration P1-Span	1.0			•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	The span (gain factor) for the P1 Pressure transducer during the most recent P1 Pressure Span calibration.						
509	Cal Prev-1 P1-Span Previous value of Item 508	1.0			•		•
510	Calibration P2-Zero Amount of offset required for the P2 transducer to obtain zero reading at zero pressure	0.0			•		•
	Calibration P3-Zero Amount of offset required for the P3 transducer to obtain zero reading at zero pressure	0.0				•	
511	Cal Prev-1 P2-Zero Previous value of Item 510	0.0			•		•
	Cal Prev-1 P3-Zero Previous value of Item 510	0.0				•	
512	Calibration P2-Span Amount of gain required for the P2 transducer to obtain correct readings at higher pressures	1.0			•		•
	Calibration P3-Span Amount of gain required for the P3 transducer to obtain correct readings at higher pressures	1.0				•	
513	Cal Prev-1 P2-Span Previous value of Item 512	1.0			•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Cal Prev-1 P3-Span Previous value of Item 512	1.0				•	
514	Calibration T-Zero Amount of offset required for the Temperature Probe to obtain zero degree reading at zero Temperature (assuming Deg F or C)	0.0			•		•
515	Cal Prev-1 T-Zero Previous value of Item 514	0.0			•		•
516	Calibration Span Amount of gain required for correct reading at higher temperatures.	1.0	1		•		•
517	Cal Prev-1 Temp-Span Previous value of Item 516	1.0			•		•
518	Calibration Date P1 Press Date P1 was last calibrated	01 01 01			•		•
519	Calibration Date P2 Press Date P2 was last calibrated	01 01 01			•		•
	Calibration Date P3 Press Date P3 was last calibrated	01 01 01				•	
520	Calibration Date Temp Date Temperature probe was last calibrated	01 01 01			•		•
521	Battery Voltage Reading		New Alkaline Packs are 6 V		•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Measured voltage from the main Battery. Update rate is 10 minutes. Three consecutive low reading will trip a Battery Low Alarm condition (Item 565)	6	New Lithium Packs are 7.2 V				
522	Battery Low Volt Limit Battery Voltage Low Alarm set point (see Item 565)	4.6	Alkaline Packs	•		•	
		5.8	Lithium Battery Pack – should increase value to 6.0	•		•	
523	Shutdown Voltage Limit Low limit for Item 528 at which Instrument may enter dormant mode of operations to help preserve any volatile Instrument data. See Item 050.	4.0	Alkaline Battery Packs use value: 4.0 Lithium Battery Packs use value: 5.7	•		•	
526	Battery Usage Cycles Battery Usage Cycle for tracking remaining life of Lithium Battery pack – see Item 527, 1001, and 1002 (same function as Item 59).	8	Max Alkaline Battery cycles = 43200000000. Max Lithium Battery cycles = 66600000000. Item 526 display resolution limited to: 999999999	•		•	
527	Battery Months Remain Alarm Limit Alarm threshold for Lithium Battery Usage Cycle (same function as Item 060)	8 mos.	0 – 60	•		•	
530	Scroll List Item 1	580	Site ID# Part 1	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)		Any Valid Item Number				
531	Scroll List Item 2 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	582	Time Any Valid Item Number	•			•
532	Scroll List Item 3 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	583	Date Any Valid Item Number	•			•
533	Scroll List Item 4 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	500	P1 Gas Pressure Any Valid Item Number	•			•
534	Scroll List Item 5 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	521	Battery Voltage Any Valid Item Number	•			•
535	Scroll List Item 6 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	631	P1 Max Pressure Any Valid Item Number	•			•
537	Scroll List Item 7 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	637	P1 Max Pressure Time Any Valid Item Number	•			•
538	Scroll List Item 8 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	638	P1 Max Pressure Date Any Valid Item Number	•			•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/1350 (EC 350)	MIW/1350 (ERX 350)
539	Scroll List Item 9 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	632	P1 Min Pressure Any Valid Item Number	•			•
540	Scroll List Item 10 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	639	P1 Min Pressure Time Any Valid Item Number	•			•
541	Scroll List Item 11 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	640	P1 Min Pressure Date Any Valid Item Number	•			•
542	Scroll List Item 12 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	651	P1 Interval Low Press Any Valid Item Number	•			•
543	Scroll List Item 13 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	650	P1 Interval High Press Any Valid Item Number	•			•
544	Scroll List Item 14 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	649	P1 Interval Avg Press Any Valid Item Number	•			•
545	Scroll List Item 15 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	651	P1 Interval Low Press Any Valid Item Number	•			•
546	Scroll List Item 16	255	Not Assigned Any Valid Item Number	•			•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)						
547	Scroll List Item 17 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	255	Not Assigned Any Valid Item Number	•			•
548	Scroll List Item 18 Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	255	Not Assigned Any Valid Item Number	•			•
549	P1 Pressure Units Unit of measure for P1 Pressure related Items.	0	PSI	•			•
		1	kPa	•			•
		2	mPa	•			•
		3	Bar	•			•
		4	mBar	•			•
		5	KGcm2	•			•
		6	in WC	•			•
		7	in HG	•			•
		8	mm HG	•			•
		9	Ounces	•			•
550	P2 Pressure Units	0	PSI	•			•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Unit of measure for P2 Pressure related Items.	1	kPa	•		•	
		2	mPa	•		•	
		3	Bar	•		•	
		4	mBar	•		•	
		5	KGcm2	•		•	
		6	in WC	•		•	
		7	in HG	•		•	
		8	mm HG	•		•	
		9	Ounces	•		•	
550	P3 Pressure Units Unit of measure for P3 Pressure related Items.	0	PSI			•	
		1	kPa			•	
		2	mPa			•	
		3	Bar			•	
		4	mBar			•	
		5	KGcm2			•	
		6	in WC			•	
		7	in HG			•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
551	T1 Temperature Units Unit of measure for Gas Temperature related Items	8	mm HG			•	
		9	Ounces			•	
		0	Fahrenheit	•		•	
		1	Celsius	•		•	
		2	Rankine	•		•	
		3	Kelvin	•		•	
552	# of Dec for P1 Press Number of digits displayed to the right of the decimal point for P1 pressure display.	0	XXXXXXX.	•		•	
		1	XXXXXXX.X	•		•	
		2	XXXXXX.XX	•		•	
		3	XXXX.XXXX	•		•	
		4	XXX.XXXXX	•		•	
553	# of Dec for P3 Press Number of digits displayed to the right of the decimal point for P3 pressure display.	0	XXXXXXXX			•	
		1	XXXXXXX.X			•	
		2	XXXXXX.XX			•	
		3	XXXX.XXXX			•	
		4	XXX.XXXXX			•	
553	P1 High Alarm Limit P1 High Alarm set point	99999.99			•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
554	P1 Low Alarm Limit P1 Low Alarm set point	-1.0			•		•
555	P2 High Alarm Limit P2 High Alarm set point	99999.99			•		•
	P3 High Alarm Limit P3 High Alarm set point	99999.99				•	
556	P2 Low Alarm Limit P2 Low Alarm set point	-1.0			•		•
	P3 Low Alarm Limit P3 Low Alarm set point	-1.0				•	
557	Gas Temp High Alarm Limit Temperature High Alarm set point	165.0			•		•
558	Gas Temp Low Alarm Limit Temperature Low Alarm set point	-35.0			•		•
559	P1 High Pressure Alarm (same function as Item 145)	0 / 1	No / Yes		•		•
560	P1 Low Pressure Alarm (same function as Item 143)	0 / 1	No / Yes		•		•
561	P2 High Pressure Alarm (same function as Item 451)	0 / 1	No / Yes		•		•
	P3 Press High Alarm	0 / 1	No / Yes			•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Alarm is set when value of Item 501 exceeds configurable limit per Item 555. Manually clear unless in RBX mode						
562	P2 Low Pressure Alarm (same function as Item 452)	0 / 1	No / Yes	•			•
	P3 Press Low Alarm Alarm is set when value of Item 501 exceeds configurable limit per Item 556. Manually clear unless in RBX mode	0 / 1	No / Yes		•		
563	T1 High Temp Alarm (same function as Item 146)	0 / 1	No / Yes	•			•
564	T1 Low Temp Alarm (same function as Item 144)	0 / 1	No / Yes	•			•
565	Battery Low Volt Alarm (same function as Item 099)	0 / 1	No / Yes	•			•
566	Battery High Cycles Usage Alarm (same function as Item 100)	0 / 1	No / Yes	•			•
568	Alarm Output (Master Alarm Status) Main Alarm Indicator Item – set active '1' if any Alarm is active. (same function as Item 108)	0 / 1	No / Yes	•			•
569	P1 Pressure Transducer Type same function as Item 112	0	Gauge	•			•
		1	Absolute	•			•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	P3 Pressure Transducer Type Type of transducer installed. Affects how Pressure factor is calculated. Note: value comes directly from the P3 PnPPT Transducer and value is not configurable (R-O)	0	Gauge			•	
		1	Absolute			•	
		2	None			•	
570	P1 Pressure Range PSI P1 Pressure range always specified in PSI	30.0			•		•
571	P2 Pressure Range PSI P2 Pressure range always specified in PSI	30.0			•		•
	P3 Press Range User Pressure range of transducer, scaled to Pressure units per Item 408. Note: Range value comes directly from the P3 PnPPT Transducer and value is not configurable (R-O).	30.0	Range value is provided by the installed pressure transducer			•	
572	P1 Pressure Range User P1 Transducer range converted to the selected pressure units	30.0			•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Read-Only – the value supplied is based on transducer installed.						
573	P2 Pressure Range User P2 Transducer range converted to the selected pressure units Read-Only – the value supplied is based on transducer installed.	30.0		•			•
	P3 Press Range (PSI) P3 Transducer range converted to the selected pressure units Read-Only – the value supplied is based on transducer installed.	30.0	Range depends on Transducer Type		•		
574	P1 Transducer S/N Programmed at the factory to match P1 Transducer S/N label	00000000	20 Character Alpha-numeric string	•		•	
575	P2 Transducer S/N Programmed at the factory to match P2 Transducer S/N label	00000000	20 Character Alpha-numeric string	•			•
	P3 Transducer S/N Programmed at the factory to match P3 Transducer S/N label	00000000	20 Character Alpha-numeric string		•		
577	Unit Serial Number	00000000	1-20 Alpha-numeric characters	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Programmed at the factory to match the serial number label.						
578	Firmware Version Current installed version of Firmware (<i>same function as Item 122</i>)	1.xxxx	Number is product dependent (e.g. 1.2102)	•			•
580	Site ID # Part 1 Configurable ID number – used by software as the main search criteria. – <i>same function as Item 200</i>	00000000	8 Digit Numeric value	•			•
581	Site ID # Part 2 Configurable ID number 2 – used by software as the main search criteria. – <i>same function as Item 201</i>	00000000	8 Digit Numeric value	•			•
582	Time Instrument's internal Clock time. 24-hour clock (HH:MM:SS)	00 00 00	00:00:00 – 23:59:59	•			•
583	Date Instrument's date. 6-digit Calendar Date. Format selected using Item 584. Note: LCD (HMI) displays Year as 4-digits	01-01-01		•			•
584	Date Format Format in which the Item Date (583) will be entered and displayed. Note: LCD (HMI) displays Year as 4-digits	0	MM-DD-YY	•			•
		1	DD-MM-YY	•			•
		2	YY-MM-DD	•			•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
585	AT Group-1 Interval Time period to determine how often TIME records are placed in Audit Trail Log 1 memory. Statistical Items are not computed per this Item – see Item 1178	0	24 Hours	•		•	
		1	60 Minutes	•		•	
		2	30 Minutes	•		•	
		3	15 Minutes	•		•	
		4	5 Minutes	•		•	
		5	1 Minute	•		•	
		6	10 Minutes	•		•	
586	Sample Interval Configurable number of seconds between measurement cycles. Each Sample measures connected Pressure and Temperature transducers (e.g. P1, P2, T1, and Case Temp). Note: Faster Sample rates reduce Battery Life (30 sec is default) Note: Battery Voltage is not measured at this rate.	0	60 Seconds	•	•	•	•
		1	30 Seconds	•	•	•	•
		2	15 Seconds	•	•	•	•
		3	10 Seconds	•	•	•	•
		4	5 Seconds	•	•	•	•
		5	2 Seconds	•	•	•	•
		6	1 Second	•	•	•	•
587	Recorder's Start Time User-assigned begin Time for 'Measurement Day'	09:00:00	00:00:00 – 23:59:00	•			•
588	Serial Baud Rate	0	9600	•			•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
589	Baud rate for the instrument's Serial port (TB4) for RS-232 or RS-485	1	4800	•		•	
		2	2400	•		•	
		3	1200	•		•	
		4	19200	•		•	
		5	38400	•		•	
		6	57600	•		•	
		7	115200	•		•	
590	AT Group-1 Item-1	500	P1 Gas Pressure	•		•	
	AT Group-1 Item-11	255	Not Assigned	•		•	
591	AT Group-1 Item-2	651	P1 Interval Low Press	•		•	
	AT Group-1 Item-12	255	Not Assigned	•		•	
592	AT Group-1 Item-3	650	P1 Interval High Press	•		•	
	AT Group-1 Item-13	255	Not Assigned	•		•	
593	AT Group-1 Item-4	649	P1 Interval Avg Press	•		•	
	AT Group-1 Item-14	255	Not Assigned	•		•	
	AT Group-1 Item-5	501	P2 Gas Pressure	•		•	
	AT Group-1 Item-15	255	Not Assigned	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
594	AT Group-1 Item-6	654	P2 Interval Low Press		•		•
	AT Group-1 Item-16	255	Not Assigned	•	•		
595	AT Group-1 Item-7	653	P2 Interval High Press		•		•
	AT Group-1 Item-17	255	Not Assigned	•	•		
596	AT Group-1 Item-8	652	P2 Interval Avg Press		•		•
	AT Group-1 Item-18	255	Not Assigned	•	•		
597	AT Group-1 Item-9	503	Case Temperature		•		•
	AT Group-1 Item-19	255	Not Assigned	•	•		
598	AT Group-1 Item-10	521	Battery Voltage		•		•
	AT Group-1 Item-20	255	Not Assigned	•	•		
631	P1 Max Pressure Highest value for Item 500	0.0			•		•
632	P1 Min Pressure Lowest value for Item 500	99999.99			•		•
633	P2 Max Pressure Highest value for Item 501	0.0			•		•
	P3 Max Pressure Highest value for Item 501	0.0				•	
634	P2 Min Pressure	99999.99			•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Lowest value for Item 501 P3 Min Pressure Lowest value for Item 501	99999.99				•	
635	T1 Max Gas Temperature Highest value for Item 502	-40.0		•		•	
636	T1 Min Gas Temperature Lowest value for Item 502	158.0		•		•	
637	P1 Max Pressure Time Time for Item 631	00 00 00		•		•	
638	P1 Max Pressure Date Date for Item 631	01 01 01		•		•	
639	P1 Min Pressure Time Time for Item 632	00 00 00		•		•	
640	P1 Min Pressure Date Date for Item 632	01 01 01		•		•	
641	P2 Max Pressure Time Time for Item 633	00 00 00		•		•	
	P3 Max Pressure Time Time for Item 633	00 00 00			•		
642	P2 Max Pressure Date Date for Item 633	01 01 01		•		•	
	P3 Max Pressure Date Date for Item 633	01 01 01			•		

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Date for Item 633						
643	P2 Min Pressure Time Time for Item 634	00 00 00			•		•
	P3 Min Pressure Time Time for Item 634	00 00 00				•	
644	P2 Min Pressure Date Date for Item 634	01 01 01			•		•
	P3 Min Pressure Date Date for Item 634	01 01 01				•	
645	T1 Max Gas Temperature Time Time for Item 635	00 00 00			•		•
646	T1 Max Gas Temperature Date Date for Item 635	01 01 01			•		•
647	T1 Min Gas Temperature Time Time for Item 636	00 00 00			•		•
648	T1 Min Temperature Date Date for Item 636	01 01 01			•		•
649	P1 Interval Avg Press Average of all samples of Item 500 during the interval of Item 1178.	0.0			•		•
650	P1 Interval High Press Highest value of P1 during the interval of Item 1178.	0.0			•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
651	P1 Interval Low Press Lowest value of P1 during the interval of Item 1178.	99999.99		•			•
652	P2 Interval Avg Press Average of all samples of Item 501 during the interval of Item 1178.	0.0		•			•
	P3 Interval Avg Press Average of all samples of Item 501 during the interval of Item 1178.	0.0				•	
653	P2 Interval High Press Highest value of P2 during the interval	0.0		•			•
	P3 Interval High Press Highest value of P3 during the interval	0.0				•	
654	P2 Interval Low Press Lowest value of P2 during the interval	99999.99		•			•
	P3 Interval Low Press Lowest value of P3 during the interval	99999.99				•	
655	T1 Interval Avg Gas Temp Average of all samples of Item 502 during the interval of Item 1178.	0.0		•			•
656	T1 Interval High Gas Temp Highest value of Temperature during the interval of Item 1178.	-40.0		•			•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
657	T1 Interval Low Gas Temp Lowest Value of Temperature during the interval of Item 1178.	158			•		•
658	P1 Intrv High P Time Time for Item 650	00 00 00		•	•	•	•
659	P1 Intrv High P Date Date for Item 650	01 01 01		•	•	•	•
660	P1 Intrv Low P Time Time for Item 651	00 00 00		•	•	•	•
661	P1 Intrv Low P Date Date for Item 651	01 01 01		•	•	•	•
662	P2 Intrv High P Time Time for Item 653	00 00 00		•	•	•	•
663	P2 Intrv High P Date Date for Item 653	01 01 01		•	•	•	•
664	P2 Intrv Low P Time Time for Item 654	00 00 00		•	•	•	•
665	P2 Intrv Low P Date Date for Item 654	01 01 01		•	•	•	•
666	T Intrv High T Time Time for Item 656	00 00 00			•		•
667	T1 Intrv High T Date	01 01 01			•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Date for Item 656						
668	T1 Intrv Low T Time Time for Item 657	00 00 00			•		•
669	T1 Intrv Low T Date Date for Item 657	01 01 01			•		•
670	P1 Daily Average Press Average of all samples of Item 500 for the current Gas Day	0.0			•		•
671	P1 Day High Press Highest P1 Pressure (500) for the current Gas Day	0.0			•		•
672	P1 Day Low Press Lowest P1 Pressure (500) for the current Gas Day	99999.99			•		•
673	P2 Daily Average Press Average of all samples of Item 501 for the current Gas Day	0.0			•		•
	P3 Daily Average Press Average of all samples of Item 501 for the current Gas Day	0.0				•	
674	P2 Day High Press Highest P2 Pressure (501) for the current Gas Day	-1.0		•	•	•	•
675	P2 Day Low Press Lowest P1 Pressure (500) for the current Gas Day	99999.99		•	•	•	•
676	T1 Daily Average Temp Average of all samples of Item 502 during the current Gas Day.	0.0			•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
677	T1 Day High Temp Highest T1 Temperature (502) for the current Gas Day	0.0			•		•
678	T1 Day Low Temp Lowest T1 Temperature (502) for the current Gas Day	99999.99			•		•
679	P1 Day High P Time Time for Item 671	00 00 00			•		•
680	P1 Day High P Date Date for Item 671	01 01 01			•		•
681	P1 Day Low P Time Time for Item 672	00 00 00			•		•
682	P1 Day Low P Date Date for Item 672	01 01 01			•		•
683	P2 Day High Time Time for Item 674	00 00 00		•	•	•	•
684	P2 Day High Date Date for Item 674	01 01 01		•	•	•	•
685	P2 Day Low Time Time for Item 675	00 00 00		•	•	•	•
686	P2 Day Low Date Date for Item 675	01 01 01		•	•	•	•
687	T1 Day High Time Time for Item 677	00 00 00			•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
688	T1 Day High Date Date for Item 677	01 01 01			•		•
689	T1 Day Low Time Time for Item 678	00 00 00			•		•
690	T1 Day Low Date Time for Item 678	01 01 01			•		•
691	P1 Prev Day Avg Press Average of all samples of Item 500 for the previous Gas Day.	0.0			•		•
692	P1 Prev Day High Press Highest P1 Pressure (500) for the previous Gas Day	0.0			•		•
693	P1 Prev Day Low Press Lowest P1 Pressure (500) for the previous Gas Day	99999.99			•		•
694	P2 Prev Daily Average Press Average of all samples of Item 501 for the previous Gas Day.	0.0			•		•
	P3 Prev Daily Avg Press Average of all samples of Item 501 for the previous Gas Day.	0.0				•	
695	P2 Prev Day High Press Highest P2 Pressure (501) for the previous Gas Day	-1.0		•	•	•	•
696	P2 Prev Day Low Press	99999.99		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Lowest P2 Pressure (501) for the previous Gas Day						
697	T1 Prev Day Average Temperature Average of all samples of Item 502 for the previous Gas Day.	0.0			•		•
698	T1 Prev Day High Temp Highest T1 Temperature (502) for the previous Gas Day	0.0			•		•
699	T1 Prev Day Low Temp Lowest T1 Temperature (502) for the previous Gas Day	99999.99			•		•
700	P1 Prev Day High P Time Time for Item 692	00 00 00			•		•
701	P1 Prev Day High P Date Date for Item 692	01 01 01			•		•
702	P1 Prev Day Low P Time Time for Item 693	00 00 00			•		•
703	P1 Prev Day Low P Date Time for Item 693	01 01 01			•		•
704	P2 Prev Day High P Time Time for Item 695	00 00 00		•	•	•	•
705	P2 Prev Day High P Date Date for Item 695	01 01 01		•	•	•	•
706	P2 Prev Day Low P Time Time for Item 696	00 00 00		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
707	P2 Prev Day Low P Date Date for Item 696	01 01 01		•	•	•	•
708	T1 Prev Day High T Time Time for Item 698	00 00 00			•		•
709	T1 Prev Day High T Date Date for Item 698	01 01 01			•		•
710	T1 Prev Day Low T Time Time for Item 699	00 00 00			•		•
711	T1 Prev Day Low T Date Date for Item 699	01 01 01			•		•
762	Digital Input 1 Enable Selection of which switch state (Open or Closed) to trip Alarm Item 766. ERX350: Connections made at (SW1) TB2 pins +1 & -1. EC 350: Connections made at (SW3) TB3 pins +3 & -3.	0	Input Disabled	•	•	•	•
		1	Closed Switch Input	•	•	•	•
		2	Open Switch Input	•	•	•	•
763	Digital Input 2 Enable Selection of which switch state (Open or Closed) to trip Alarm Item 767. ERX350: Connections made at (SW2) TB2 pins +2 & -2. EC 350: Connections made at (SW4) TB3 pins +4 & -4.	0	Input Disabled	•	•	•	•
		1	Closed Switch Input	•	•	•	•
		2	Open Switch Input	•	•	•	•
764	Digital Input 3 Enable	0	Input Disabled		•		•
		1	Closed Switch Input		•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Selection of which switch state (Open or Closed) to trip Alarm Item 768. ERX350: Connections made at (SW3) TB3 pins +3 & -3.	2	Open Switch Input	•			•
766	Digital Input 1 Alarm Indicators for Digital Input 1. Alarm will trip if input matches Item 762 setting. Must manually clear Alarm or enable RBX Mode.	0 / 1	No / Yes	•	•	•	•
767	Digital Input 2 Alarm Indicators for Digital Input 2. Alarm will trip if input matches Item 763 setting. Must manually clear Alarm or enable RBX Mode.	0 / 1	No / Yes	•	•	•	•
768	Digital Input 3 Alarm Indicators for Digital Input 3. Alarm will trip if input matches Item 764 setting. Must manually clear Alarm or enable RBX Mode.	0 / 1	No / Yes	•			•
769	RBX Function Enable Enables RBX, which will auto-clear alarm when conditions return to normal.	0	No				
	Alarms that support RBX mode: Battery Voltage, Digital Inputs 1-3, Flowrate High and Low, Pressure P1 High and Low, P2 High and Low, T1 High and Low.	1	Yes (enable RBX mode)	•			•
770	RBX Dead Band: P1 Press P1 hysteresis band used by RBX	5.00 PSI		•			•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
771	RBX Dead Band: Temp Temperature hysteresis band used by RBX	10.00 F		•			•
774	Protocol Code A (same function as Item 170)	0	Standard	•			•
		1	No Timeout	•			•
775	ENQ Timeout Delay (same function as Item 171)	25	1 – 60 seconds	•			•
776	Sign-On Timeout Delay (same function as Item 172)	25	1 – 60 seconds	•			•
777	RBX Alarm Event Status of RBX activity when RBX mode is enabled	0	No RBX activity since last interrogation.	•			•
		1	RBX activity since last interrogation, intended to be reset to zero after each read.	•			•
779	Calibration Mode Set by MasterLink to put Instrument in to mode where P / T Calibrations do not affect Alarms and Statistical Items.	0	No Calibration	•	•	•	•
		1	P1 Calibration	•	•	•	•
		2	T1 Calibration	•	•	•	•
		3	P2 Calibration	•	•	•	•
780	Modem Init String (same function as Item 491)	ATE0Q0V0	30 Characters max	•			•
781	Modem Dial String (same function as Item 492)	ATDT	20 Characters max	•			•
782	Modem Hangup String	ATH0	10 Characters max	•			•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	(same function as Item 494)						
783	Call-Out Stop Time (same function as Item 485)	23 59 00	00:00:00 – 23:59:00	•			•
784	Alarm Call-In Number 2 Second Internet/Phone # to use for Alarm Call-In. If both Alarm Numbers are used, each is called in an alternating manor (i.e. Number 1 then 2) until each is successful. Once a Number is successful – this number stops call retries. Blank means disabled.	blank	50 Characters max		•		•
785	Alarm Call-In Number 1 First Internet/Phone # to use for Alarm Call-In. If both Alarm Numbers are used, each is called in an alternating manor (i.e. Number 1 then 2) until each is successful. Once a Number is successful – this number stops call retries. Blank means disabled.	blank	50 Characters max	•		•	
786	Modem Retry-A Interval (same function as Item 495)	10	0 – 9999 minutes	•			•
787	Modem Retry-B Interval (same function as Item 496)	1440 (24 Hrs.)	0 – 9999 minutes		•		•
788	Modem Retry-A Count (same function as Item 497)	3	0 – 255		•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
789	Modem AT Call Enable (same function as Item 486)	0	Enables AT Commands	•		•	
		1	Enables AT Commands	•		•	
		2	Always Connected – No Dial Required (UDP mode)	•		•	
790	Call-In Keep Alive Time (same function as Item 487)	0	0 – 1440 minutes	•		•	
791	Call-Out Start Time (same function as Item 490)	00 00 00	00:00:00 – 23:59:00				
792	Call-Out Repeat Interval (same function as Item 488)	0	0 – 1440 minutes				
793	Call-Out Keep Alive Time (same function as Item 489)	0	0 – 1440 minutes				
795	External Supply Low Limit Low limit voltage set point for Item 796 Set to -1.0 when not using External Supply (disables Alarm)	-1.0	-1.0 to 20.0 Volts	•	•	•	•
796	Extern Supply Low Alarm Alarm sets when the External Supply voltage input drops below the configurable low limit set at Item 795.	0 / 1	No / Yes	•	•	•	•
805	Auxiliary Meter Factor Additional overall meter scaling factor provided for any adjustments needed to <u>both</u> UncVol and CorVol.	1.000		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Similar to Item 046 – but applies to both UncVol and CorVol. A method to adjust overall meter scaling when Item 114 is 'locked' (mostly for Rotary meter options). Generally, not needed – but offered to handle special cases where Meter input rate needs tweaking (typically only in Rotary meters)						
806	<p>"+++clr alms" Response Timeout The number of seconds the Instrument waits for '+++' clralms' string from Host System during a Call-In before sending a retry of the SITE ID string.</p> <p>Multiple attempts are made (sending SITE ID string and waiting for the: +++clralms response) before failing Call-In.</p>	15 sec	1 – 90 seconds	•	•	•	•
807	<p>P3 High/High Alarm Limit P3 Pressure High/High Alarm set point.</p>	99999.99				•	•
808	<p>P3 Low/Low Alarm Limit P3 Low/Low Alarm set point.</p>	-1.0				•	•
809	<p>P3 Press High/High Alarm Alarm is set when value of Item 501 exceeds configurable limit per Item 807. Manually clear unless in RBX mode- EC350</p>	0 / 1	No / Yes			•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Alarm is set when value of Item 420 exceeds configurable limit per Item 807. Manually clear unless in RBX mode – ERX350						
810	P3 Press Low/Low Alarm Alarm is set when value of Item 501 exceeds configurable limit per Item 808. Manually clear unless in RBX mode- EC350 Alarm is set when value of Item 420 exceeds configurable limit per Item 808. Manually clear unless in RBX mode – ERX350	0 / 1	No / Yes			•	•
811	RBX Dead Band: P3 Press Hysteresis band that's applied when resetting the RBX alarm for P3 pressure (high / low).	5.0	PSI			•	•
812	LCD Default Display	0			•		•
813	P1 High/High Alarm Limit (FW 1.32) P1 Pressure High Alarm set point.	99999.99		•	•	•	•
814	P1 Low/Low Alarm Limit (FW 1.32) P1 Low Alarm set point	-1.0		•	•	•	•
815	P1 Press High/High Alarm (FW 1.32) Alarm is set when value of Item 008 exceeds configurable limit per Item 813. Manually clear unless in RBX mode.	0 / 1	No / Yes	•	•	•	•
816	P1 Press Low/Low Alarm (FW 1.32)	0 / 1	No / Yes	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Alarm is set when value of Item 008 drops below configurable limit per Item 814. Manually clear unless in RBX mode.						
817	P2 High/High Alarm Limit (FW 1.32) P2 Pressure High/High Alarm set point.	99999.99		•	•	•	•
818	P2 Low/Low Alarm Limit (FW 1.32) P2 Low/Low Alarm set point	-1.0		•	•	•	•
819	P2 Press High/High Alarm (FW 1.32) Alarm is set when value of Item 420 exceeds configurable limit per Item 817. Manually clear unless in RBX mode.	0 / 1	No / Yes	•	•	•	•
820	P2 Press Low/Low Alarm (FW 1.32) Alarm is set when value of Item 008 exceeds configurable limit per Item 818. Manually clear unless in RBX mode.	0 / 1	No / Yes	•	•	•	•
821	Modem Init Delay (Displayed in 1/10s of a second) Mainly used for Non-Mercury brand Modems like RV-50 to allow the Modem time to power up and prepare for a cellular call. Note: Not needed when using CloudLink Modems as it does not try to connect to cellular network until receiving an ATD dial command. For CloudLink Modems – use Item 1406 (Dial Command Timeout) which should be set to typically 90 sec and leave Item 821 at the default value of 50 (5 sec)	50 (5 sec)	0 – 6000 (600 sec)	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
843	Sched Call-In Failures Count of all Scheduled Call-In failures until reset manually	0		•	•	•	•
844	Last Sched Call-In Time Time of last Sched Call-in.	09 00 00		•	•	•	•
845	Last Sched Call-In Date Date of last Sched Call-in.	01 01 01		•	•	•	•
846	Next Sched Call-In Time Time of next Call-in – takes in to account any pending Call retries	09 00 00		•	•	•	•
847	Next Sched Call-In Date Date of next Call-in – takes in to account any pending Call retries	01 01 01		•	•	•	•
891	Prev Hour Unc Vol Uncorrected Vol (002) from previous hour	0		•		•	
892	High Resolution Unc Vol Uncorrected Vol (002) displayed to 4 th decimal place	0.0000		•		•	
896	Forward Cor Vol Totalized corrected volume for the Forward direction only Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)	0	00000000 – 99999999	•		•	
897	Incremental Fwrd Cor Vol	0		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Corrected forward only volume for the interval per Item 1178. Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)						
898	Forward Unc Vol Totalized uncorrected volume for the Forward direction only Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)	0	00000000 – 99999999	•	•		
899	Incremental Fwrd Unc Vol Uncorrected forward only volume for the interval of Item 1178. Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)	0		•	•		
900	Net Corrected Vol Net CorVol = Forward CorVol minus Reverse CorVol Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)	0	00000000 – 99999999	•	•		
901	Incremental Net Cor Vol Net corrected volume for the interval (Item 897 minus Item 903). Interval rate per Item 1178. Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4).	0		•	•		
902	Reverse Cor Vol Totalized corrected volume for the Reverse direction only	0	00000000 – 99999999	•	•		

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)						
903	Incremental Rev Cor Vol Corrected volume in the reverse direction only for the interval of Item 1178. Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4).	0		•		•	
904	Net Uncorrected Vol Net UncVol = Forward UncVol minus Reverse UncVol Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)	0	00000000 – 99999999	•		•	
905	Incremental Net Unc Vol Net Uncorrected volume for the interval (Item 899 minus Item 907). Interval rate per Item 1178 for the interval of Item 1178. Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4).	0		•		•	
906	Reverse Unc Vol Uncorrected volume in the reverse direction only Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3/4)	0	00000000 – 99999999	•		•	
907	Incremental Rev Unc Vol Uncorrected volume in the reverse direction only for the interval of Item 1178	0		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
914	Registers Offset by One When enabled, adds "1" to the starting register number supplied in the Host system's query msg to account for traditional reference to '0' addressing schemes. Needed for systems that subtract "1" from the starting register Address just prior to sending query. Example: User request starting register value: 7000, but Host SCADA system changes this value to 6999. Offset by one makes the inbound start register value 7000 as the User would expect.	0	No	•	•	•	•
		1	Yes	•	•	•	•
915	Modbus Protocol Type Selection of MODBUS protocol type Note – enable MODBUS using Item 934	0	ASCII	•	•	•	•
		1	RTU	•	•	•	•
930	Modbus Read-Only Mode Used to prevent MODBUS write commands – function codes 5, 6, 15, and 16 become blocked when enabled. Some Users do not want MODBUS systems to change Item values.	0	Disabled (allow writes via MODBUS)	•	•	•	•
		1	Enabled (block MODBUS func codes 5, 6, 15, and 16)	•	•	•	•
932	Modbus Register Data Format Selects data size of a Modbus Register (32 bits or 16 bits)	0	32 bits MSB	•	•	•	•
		1	16 bits MSB	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	When 16-bit size is used – Host system must concatenate the two adjacent registers to form a 32-bit end resulting value.	2	16 bits LSB	•	•	•	•
934	Modbus Protocol Enable Enable or disable the use of Modbus protocol	0	Disabled	•	•	•	•
		1	Enabled	•	•	•	•
935	Modbus Float Mapping Enable Float Item mapping See Items 940–979 block	0	Disabled	•	•	•	•
		1	Enabled	•	•	•	•
936	Modbus Boolean Mapping Enable Boolean Item mapping (see Items 1500–1539)	0	Disabled	•	•	•	•
		1	Enabled	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
940 – 979	<p>Modbus Float 7000 Item – 7039 Item</p> <p>Items 940 – 979 are configurable map locations corresponding to MODBUS Registers: 7000 – 7039. This register range is used for obtaining data points in Floating Point format. Item 940 maps to Register 7000, Item 979 maps to register 7039). User configures Items starting at Item 940 (register 7000) with desired data point (e.g. Item 000, 008, etc.) and continues with next Item 941... 942, etc. until all data points are mapped. This allows Host to read one continuous register range (e.g. 7000 – 7009) to obtain desired data via a single query poll.</p> <p>Values read from Register 7000 – 7999 are formatted in floating point. This is true for Time, Date, and Volumes – as well as Pressures and Temperatures and Meter Rates Items.</p>	255	Any Valid Item Number (typically, Items like: 000, 002, 008, 026, 048, 209)	•	•	•	•
993	<p>Modbus Device Address</p> <p>Slave Devices address (Slave ID for Host Modbus system)</p>	1	1–255	•	•	•	•
998	<p>Modbus Cmd Inactivity Timeout</p> <p>Timeout period (in sec.) to waits for Host SCADA System to send subsequent Modbus query commands before returning to sleep</p>	5	1 – 90	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1001	Remain Battery Months Battery usage tracking – months remaining indication Based on 'Usage Cycles' counts – not Battery voltage	60	Alkaline packs – 60 Months life 2-Cell Lithium pack - 60 Months – but actual battery life is approx. 100 months. Notice: 2-Cell Lithium pack - FWs 1.33 and older default to 60 months even though the usable lifespan is 100 months. Accordingly, the 60 months value is scaled to 100 so it will decrement slower at a ratio of 60 : 100 per month – thus not going to 0 until after 100 months of normal usage.	•	•	•	•
1002	Battery Percent Remain Battery usage tracking – percent remaining indication Based on 'Usage Cycles' counts – not Battery voltage	100	0 – 100%	•	•	•	•
1003	Battery AmpHrs Override To override preset constant values while calculating battery life. Effective on a non-zero value.	0	When item value is zero, it has no effect. But, when it is a non-zero value then, it will override the preset constants.	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1009	LCD Default Contrast Higher values = more contrast of LCD (darker segments). Generally, does not need to be modified.	25	1 – 32	•	•	•	•
1010	Case Temp Zero Point Factory calibration of Case Temperature	0.0		•	•	•	•
1014	Ch-A Pulse On/Off Output Times AMR pulse On-time and Off-time (in ms.) to obtain optimal performance. Note: Closed time values are exact, but Open time values are at least the amount shown or longer (a minimum value) – subject to rate of input volume.	0	Closed 10 ms – Open 20+ ms	•		•	
		1	Closed 20 ms – Open 40+ ms	•		•	
		2	Closed 30 ms – Open 60+ ms	•		•	
		3	Closed 50 ms – Open 100+ ms	•		•	
		4	Closed 75 ms – Open 150+ ms	•		•	
		5	Closed 100 ms – Open 200+ ms	•		•	
		6	Closed 200 ms – Open 400+ ms	•		•	
		7	Closed 500 ms – Open 1000 ms	•		•	
		8	Closed 50 ms – Open 250+ ms	•		•	
		9	Badger: Closed 10 ms – Open 400+ ms	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
		10	Cellnet / Hunt: Closed 25 ms – Open 100+ ms	•		•	
		11	Aclara 501-7712: Closed 15 ms – Open 400+ ms	•		•	
		12	Closed 10ms – Open 400+ ms	•		•	
		13	Itron ERTs 40/100/150, Aclara 332X: Closed 30 ms – Open 400+ ms	•		•	
		14	Mercury PA (449 Filter Off) Closed 50 ms – Open 80+ ms	•		•	
		15	Mercury / Melbourne SIP/CPA/IMU-II: Closed 50 ms – Open 80+ ms	•		•	
		16	Mercury / Melbourne SIP-CB Closed 25 ms Open 25+ ms	•		•	
		17	Closed 50 ms – Open 50+ ms	•		•	
		18	Closed 50 ms – Open 150+ ms	•		•	
		19	Closed 50 ms – Open 500+ ms	•		•	
		20	Closed 150 ms – Open 150+ ms	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1015	Ch-B Pulse On/Off Times Channel B timing. Same selections as Item 1014	8	Closed 50 ms – Open 250+ ms	•		•	
1016	Alarm Channel Pulse Timing Value selection in seconds	10	1 – 65534 seconds	•	•	•	•
1018	Flow Rate Low Alarm Value Low Flow Value for tripping Alarm Item 461	0.00		•		•	
1019	Main Board S/N Factory set – used to identify product hardware	00000000		•	•	•	•
1021	Reversing Flow Alarm Time Time for Item 438	00 00 00		•		•	
1022	Reversing Flow Alarm Date Date for Item 438	01 01 01		•		•	
1023	Alarm Items Disable Allows User to completely disable particular Alarm Item(s) so it does not trip (become active) – thus not generating an Alarm indication. Bit coded Item – same coded values as used for Item 1396 (Alarm Mask)	8 (Reverse Flow Alarm disabled)	See User Manual for codes to disable Alarm Item(s)	•	•	•	•
1024	Ch-C Pulse On/Off Times Channel C timing. Same selections as Items 1014 / 1015	8	Closed 50 ms Open 250+ ms	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1025	Super Compress Alarm Indicates an issue with the Supercompress calculations – most likely an issue with out-of-range Temperature values or if Pressure Transducer not connected.	0		•		•	
1026	P1 Xdcr Comp Temp Temperature as seen inside Pressure Transducer – used to help perform precision characterization of pressure.	0.0		•	•	•	•
1027	Supercompress Min ms Minimum time taken for calculating super compressibility factor in millisecond (per item 043)	2		•		•	
1028	Supercompress Max ms Maximum time taken for calculating super compressibility factor in millisecond (per item 043)	2		•		•	
1029	Supercompress Avg ms Average time taken for calculating super compressibility factor in millisecond (per item 043)	2		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1030	Sched Call-In Number-2 Second Internet/Phone # to use for Scheduled Call-In. Number 2 is called after Number 1 (Item 339). If both Sched Numbers are used, each is called in an alternating manor (i.e. Number 1 then 2) until each is successful. Blank means disabled (don't use second Call #). Only supporting Item 1230 with selection = 'Both' (where each Call Number operates independently with respect to call failure retries).	blank	50 Characters max	•	•	•	•
1032	System Alarm Mask Mask out any of the 'System Alarm' conditions (bit coded)	0	Slow CPU Clock + Audit Write Error	•	•	•	•
1033	Temp Board Coef Zero Factory set – zero point for Temperature Probe. Do not	0.0		•	•	•	•
1034	Temp Board Coef Span Factory set – span factor for Temperature Probe. Do not	1.0		•	•	•	•
1035	Metro Cnfg Change Alarm Indicates if Metrological Configuration type Items have had values unexpectedly changed . The coded alarms are based on Metrological protection classification type.	0	No	•	•	•	•
		1	Sealed Items	•	•	•	•
		2	Event Items	•	•	•	•
		3	Event & Sealed Items	•	•	•	•
1042	AT Group-1 Enable	0	No	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Enable usage of AT Log 1	1	Yes	•	•	•	•
1043	AT Group-1 Allocation Amount of memory space allocated to AT Log 1 – Percent	100	0 – 100 %	•	•	•	•
1044	Board Version Indicates the hardware version of the processor board (CDMA)	CDMA -E	Revs A – M (Rev-E is current version)	•	•	•	•
1046	Extern Supply Volts External supply voltage as measured by the Instrument. Update rate is 10 minutes Three consecutive low reading (defined by Item 1320) will trip an Extern Supply Low Alarm condition (Item 796)	0.0	5 – 15 Volts DC	•	•	•	•
1050	Raw Sensor 3 Counts (Honeywell Diagnostics) Unscaled counts of input pulses seen from Sensor 3. Zero this Item at start when using for testing purposes	0		•		•	
1051	Raw Sensor 4 Counts (Honeywell Diagnostics) Unscaled counts of input pulses seen from Sensor 4. Zero this Item at start when using for testing purposes	0		•		•	
1052	P1 Transducer Enable	0	No	•	•	•	•
		1	Yes	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Enable or disable P1 Pressure Transducer measurements. To save Battery Power and possible Alarm conditions – disable if P1 Pressure is not used. For Fixed Factor mode – disable this Item if P1 Transducer is not being connected to instrument. If Item 1052 is enabled – Instrument will attempt to measure P1 pressure regardless of Item 109 configuration (Live or Fixed).						
1053	P2 Transducer Enable Enable or disable P2 Pressure Transducer measurements. To save Battery Power and possible Alarm conditions – disable if P2 Pressure is not used.	0	No	•	•	•	•
		1	Yes	•	•	•	•
1054	P3 Transducer Enable Enable or disable P3 Pressure Transducer measurements. To save Battery Power and possible Alarm conditions – disable if P3 Pressure is not used	0	No			•	•
		1	Yes			•	•
1055	T1 Temp Probe Enable Enable or disable Temperature measurements. To save Battery Power and possible Alarm conditions – disable Temperature Probe if it is not used	0	No	•	•	•	•
		1	Yes	•	•	•	•
1056	LCD Display On Time Time when LCD will become turn on and be active (visible) Configurable only to within minutes (not seconds)	00 00 00	00:00:00 – 23:59:00	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1057	LCD Display Off Time Time when LCD will become turn off and be inactive Configurable only to within minutes (not seconds)	00 00 00	00:00:00 – 23:59:00	•	•	•	•
1058	P1 Transducer Alarm Bit coded Alarm – values greater 0 indicate a particular error with Press Transducer: most common error code is '8' indicating the Transducer is not connected as expected.	0	No Alarm Bits 1 – 13 set indicate some sort of internal PnPPT Error. Code '8' indicates The PnPPT is disconnected.	•	•	•	•
1059	P2 Transducer Alarm Bit coded Alarm – values greater 0 indicate a particular error with Press Transducer: most common error code is '8' indicating the Transducer is not connected as expected.	0	No Alarm Bits 1 – 13 set indicate some sort of internal PnPPT Error. Code '8' indicates The PnPPT is disconnected.	•	•	•	•
1060	P3 Transducer Alarm Bit coded Alarm – values greater 0 indicate a particular error with Press Transducer: most common error code is '8' indicating the Transducer is not connected as expected.	0	No Alarm Bits 1 – 13 set indicate some sort of internal PnPPT Error. Code '8' indicates The PnPPT is disconnected.			•	•
1061	Battery Pack Type Configuration Item for Battery Pack Type, which is used by the system for proper battery life usage tracking and Low Battery Alarming. Note: When using an External Supply (AC or Solar), the supply voltage >= 9 VDC if a Lithium Battery pack is being used as the 'back-up' battery.	0	Alkaline 4 Cell pack	•	•	•	•
		1	Lithium 2 Cell pack	•	•	•	•
		2	Lithium 2x 2 Cell packs → two packs used to power only the Instrument to extend (double) battery life vs. a single 2 cell Lithium pack.	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1062	Door Status (open / closed) See Item 107 – Door Alarm (gives condition of Tamper Switch state).	0	Door Closed	•	•	•	•
		1	Door Open	•	•	•	•
1063	Extern Supply Alarm Time Time of Item 796 (since last Alarm clear)	00 00 00		•	•	•	•
1064	Extern Supply Alarm Date Date of Item 796 (since last Alarm clear)	01 01 01		•	•	•	•
1065	AT Group-2 Interval Logging interval for AT Log 2	1	1 Minute	•	•	•	•
		5	5 Minutes	•	•	•	•
		10	10 Minutes	•	•	•	•
		15	15 Minutes	•	•	•	•
		30	30 Minutes	•	•	•	•
		60	60 Minutes	•	•	•	•
		24	Daily	•	•	•	•
		31	Monthly	•	•	•	•
1066	AT Group-2 Enable Enable logging for log 2.	0	No	•	•	•	•
		1	Yes	•	•	•	•
1067	AT Group-2 Allocation Amount of memory allocated to AT Log 2.	0.0	0 – 100%	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1069	AT Group-2 Item-1	225	P1 Gas Pressure	•		•	
		255			•		•
1070	AT Group-2 Item-2	226	P1 Interval Low Press	•		•	
		255			•		•
1071	AT Group-2 Item-3	206	P1 Interval High Press	•		•	
		255			•		•
1072	AT Group-2 Item-4	207	P1 Interval Avg Press	•		•	
		255			•		•
1073	AT Group-2 Item-5	48	P2 Gas Pressure	•		•	
		255			•		•
1074	AT Group-2 Item-6	0	P2 Interval Low Press	•		•	
		255			•		•
1075	AT Group-2 Item-7	255	P2 Interval High Press	•		•	
		255			•		•
1076	AT Group-2 Item-8	8	P2 Interval Avg Press	•		•	
		255			•		•
1077	AT Group-2 Item-9	26	Case Temperature	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
		255			•		•
1078	AT Group-2 Item-10	31	Battery Voltage	•		•	
		255			•		•
1079	AT Group-2 Item-11	255	P1 Gas Pressure	•	•	•	•
1080	AT Group-2 Item-12	255	P1 Interval Low Press	•	•	•	•
1081	AT Group-2 Item-13	255	P1 Interval High Press	•	•	•	•
1082	AT Group-2 Item-14	255	P1 Interval Avg Press	•	•	•	•
1083	AT Group-2 Item-15	255	P2 Gas Pressure	•	•	•	•
1084	AT Group-2 Item-16	255	P2 Interval Low Press	•	•	•	•
1085	AT Group-2 Item-17	255	P2 Interval High Press	•	•	•	•
1086	AT Group-2 Item-18	255	P2 Interval Avg Press	•	•	•	•
1087	AT Group-2 Item-19	255	Case Temperature	•	•	•	•
1088	AT Group-2 Item-20	255	Battery Voltage	•	•	•	•
1089	AT Group-3 Interval Logging interval for AT Log 3.	1	1 Minute	•	•	•	•
		5	5 Minutes	•	•	•	•
		10	10 Minutes	•	•	•	•
		15	15 Minutes	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
		30	30 Minutes	•	•	•	•
		60	60 Minutes	•	•	•	•
		24	Daily	•	•	•	•
		31	Monthly	•	•	•	•
1090	AT Group-3 Enable Enable logging data into AT Log 3.	0	No	•	•	•	•
		1	Yes	•	•	•	•
1091	AT Group-3 Allocation Amount of memory to be used by AT Log 3.	0.0	0 – 100%	•	•	•	•
1093	AT Group-3 Item-1	225	P1 Gas Pressure	•	•		
		255			•		•
1094	AT Group-3 Item-2	226	P1 Interval Low Press	•	•		
		255			•		•
1095	AT Group-3 Item-3	206	P1 Interval High Press	•	•		
		255			•		•
1096	AT Group-3 Item-4	207	P1 Interval Avg Press	•	•		
		255			•		•
1097	AT Group-3 Item-5	48	P2 Gas Pressure	•	•		
		255			•		•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1098	AT Group-3 Item-6	0	P2 Interval Low Press	•		•	
		255			•		•
1099	AT Group-3 Item-7	2	P2 Interval High Press	•		•	
		255			•		•
1100	AT Group-3 Item-8	8	P2 Interval Avg Press	•		•	
		255			•		•
1101	AT Group-3 Item-9	26	Case Temperature	•		•	
		255			•		•
1102	AT Group-3 Item-10	31	Battery Voltage	•		•	
		255			•		•
1103	AT Group-3 Item-11	255	P1 Gas Pressure	•	•	•	•
1104	AT Group-3 Item-12	255	P1 Interval Low Press	•	•	•	•
1105	AT Group-3 Item-13	255	P1 Interval High Press	•	•	•	•
1106	AT Group-3 Item-14	255	P1 Interval Avg Press	•	•	•	•
1107	AT Group-3 Item-15	255	P2 Gas Pressure	•	•	•	•
1108	AT Group-3 Item-16	255	P2 Interval Low Press	•	•	•	•
1109	AT Group-3 Item-17	255	P2 Interval High Press	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1110	AT Group-3 Item-18	255	P2 Interval Avg Press	•	•	•	•
1111	AT Group-3 Item-19	255	Case Temperature	•	•	•	•
1112	AT Group-3 Item-20	255	Battery Voltage	•	•	•	•
1113	AT Group-4 Interval Logging interval for AT log 4	1	1 Minute	•	•	•	•
		5	5 Minutes	•	•	•	•
		10	10 Minutes	•	•	•	•
		15	15 Minutes	•	•	•	•
		30	30 Minutes	•	•	•	•
		60	60 Minutes	•	•	•	•
		24	Daily	•	•	•	•
		31	Monthly	•	•	•	•
1114	AT Group-4 Enable Enables Logging values into AT Log 4.	0	No	•	•	•	•
		1	Yes	•	•	•	•
1115	AT Group-4 Allocation Memory allocated to Log 4	0.0	0 – 100%	•	•	•	•
1117	AT Group-4 Item-1	225	P1 Gas Pressure	•	•	•	•
		255		•	•	•	•
1118	AT Group-4 Item-2	226	P1 Interval Low Press	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
		255			•		•
1119	AT Group-4 Item-3	206	P1 Interval High Press	•		•	
		255			•		•
		207	P1 Interval Avg Press	•		•	
1120	AT Group-4 Item-4	255			•		•
		48	P2 Gas Pressure	•		•	
1121	AT Group-4 Item-5	255			•		•
		0	P2 Interval Low Press	•		•	
		255			•		•
1122	AT Group-4 Item-6	2	P2 Interval High Press	•		•	
		255			•		•
		8	P2 Interval Avg Press	•		•	
1124	AT Group-4 Item-8	255			•		•
		26	Case Temperature	•		•	
		255			•		•
1125	AT Group-4 Item-9	31	Battery Voltage	•		•	
		255			•		•
1126	AT Group-4 Item-10						

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1127	AT Group-4 Item-11	255	P1 Gas Pressure	•	•	•	•
1128	AT Group-4 Item-12	255	P1 Interval Low Press	•	•	•	•
1129	AT Group-4 Item-13	255	P1 Interval High Press	•	•	•	•
1130	AT Group-4 Item-14	255	P1 Interval Avg Press	•	•	•	•
1131	AT Group-4 Item-15	255	P2 Gas Pressure	•	•	•	•
1132	AT Group-4 Item-16	255	P2 Interval Low Press	•	•	•	•
1133	AT Group-4 Item-17	255	P2 Interval High Press	•	•	•	•
1134	AT Group-4 Item-18	255	P2 Interval Avg Press	•	•	•	•
1135	AT Group-4 Item-19	255	Case Temperature	•	•	•	•
1136	AT Group-4 Item-20	255	Battery Voltage	•	•	•	•
1137	AT Group-5 Interval Logging interval for AT Log 5	1	1 Minute	•	•	•	•
		5	5 Minutes	•	•	•	•
		10	10 Minutes	•	•	•	•
		15	15 Minutes	•	•	•	•
		30	30 Minutes	•	•	•	•
		60	60 Minutes	•	•	•	•
		24	Daily	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/1350 (EC 350)	MIW/1350 (ERX 350)
		31	Monthly	•	•	•	•
1138	AT Group-5 Enable Enables Logging values into Log 5.	0	No	•	•	•	•
		1	Yes	•	•	•	•
		0.0	0 – 100%	•	•	•	•
1139	AT Group-5 Allocation Memory to be allocated to AT Log 5.	225	P1 Gas Pressure	•		•	
1141	AT Group-5 Item-1	255			•		•
1142		226	P1 Interval Low Press	•		•	
1143	AT Group-5 Item-3	255			•		•
1144	AT Group-5 Item-4	206	P1 Interval High Press	•		•	
1145		255			•		•
1146	AT Group-5 Item-6	207	P1 Interval Avg Press	•		•	
1147		255			•		•
1145	AT Group-5 Item-5	48	P2 Gas Pressure	•		•	
1146	255			•		•	
1146	AT Group-5 Item-6	0	P2 Interval Low Press	•		•	
1147		255			•		•
1147	AT Group-5 Item-7	2	P2 Interval High Press	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
		255			•		•
1148	AT Group-5 Item-8	8	P2 Interval Avg Press	•		•	
		255			•		•
1149	AT Group-5 Item-9	26	Case Temperature	•		•	
		255			•		•
1150	AT Group-5 Item-10	31	Battery Voltage	•		•	
		255			•		•
1151	AT Group-5 Item-11	255	P1 Gas Pressure	•	•	•	•
1152	AT Group-5 Item-12	255	P1 Interval Low Press	•	•	•	•
1153	AT Group-5 Item-13	255	P1 Interval High Press	•	•	•	•
1154	AT Group-5 Item-14	255	P1 Interval Avg Press	•	•	•	•
1155	AT Group-5 Item-15	255	P2 Gas Pressure	•	•	•	•
1156	AT Group-5 Item-16	255	P2 Interval Low Press	•	•	•	•
1157	AT Group-5 Item-17	255	P2 Interval High Press	•	•	•	•
1158	AT Group-5 Item-18	255	P2 Interval Avg Press	•	•	•	•
1159	AT Group-5 Item-19	255	Case Temperature	•	•	•	•
1160	AT Group-5 Item-20	255	Battery Voltage	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1161	P1 Fixed Pressure Value Pressure value to use for calculation of the Pressure Factor (Item 044) when instrument is configured as Fixed Pressure per Item 109. Do not set Item 008 or 044 for fixed mode.	0.0		•		•	
1162	Fixed Temperature Value Temperature value to use for calculation of the Temperature Factor (Item 045) when instrument is configured as Fixed Temperature per Item 111. Do not set Item 026 or 045 for fixed mode.	60.0		•		•	
1163	Access Jumper Status Metrological protection jumper plug status (R-O)	0	Disconnected	•	•	•	•
		1	Connected	•	•	•	•
1164	Prod Test Config (Honeywell Test Item)	0		•	•	•	•
1166	Raw Sensor 1 Counts (Honeywell Diagnostics) Unscaled counts of input seen by Volume input Sensor 1 Zero this Item at start when using for testing purposes	0		•		•	
1167	Raw Sensor 2 Counts (Honeywell Diagnostics) Unscaled counts of input seen by Volume input Sensor 2.	0		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Zero this Item at start when using for testing purposes						
1168	Battery Low Alarm Value Value of Item 048 at which the low battery alarm (099) was detected	6.0		•	•	•	•
1169	P1 High Alarm Value Value of Item 008 at which the high pressure alarm (145) was detected	0.0		•	•	•	•
1170	P1 Low Alarm Value Value of Item 008 at which the low pressure alarm (143) was detected	0.0		•	•	•	•
1171	Temp High Alarm Value Value of Item 026 at which the high temperature alarm (146) was detected	0.0		•	•	•	•
1172	Temp Low Alarm Value Value of Item 026 at which the low temperature alarm (144) was detected	0.0		•	•	•	•
1173	Daily CorVol Alarm Value Value of Item 000 at which the Daily CorVol alarm (222) was detected	0		•		•	
1174	Flow Rate Hi Alarm Value Value of Item 208 at which the flow rate high alarm (163) was detected	0.0		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1175	Firmware CRC Calculated CRC of the main application firmware used to authenticate the firmware.	0		•	•	•	•
1176	Loader CRC Calculated CRC of the Boot-Loader firmware used to authenticate the firmware.	0		•	•	•	•
1177	Loader Version Boot-Loader's firmware version (read only)	3.1		•	•	•	•
1178	Interval for Statistics Value defines what interval for calculating statistical data. Note that EC/ERX 350 has 5 AT Logs – so Item 1178 now controls the interval rate for all statistical Item calculations.	1	1 Minute	•	•	•	•
		5	5 Minutes	•	•	•	•
		10	10 Minutes	•	•	•	•
		15	15 Minutes	•	•	•	•
		30	30 Minutes	•	•	•	•
		60	Hourly	•	•	•	•
		1440	Daily	•	•	•	•
		44640	Monthly	•	•	•	•
1185	T1 Temp Probe Type Shows the type of probe used (Read Only)	0	Thermistor NTC	•	•	•	•
1186	T1 Temp Probe Range	0	-40 to 158 (F)	•	•	•	•
		1	-40 to 70 (C)	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Shows the specified operating range of the Temperature Probe – based on Temp Units per Item 089. Read Only	2	420 to 618 (R)	•	•	•	•
		3	233 to 343 (K)	•	•	•	•
1187	T1 Temp Probe S/N Temperature probe serial number assigned by factory.	00000000	20 Characters max	•	•	•	•
1188	Vol Conversion Method (Status) Reports the status of PTZ correction being used based on the following Items: 109 (fixed / live pressure), 111 (fixed / live temperature), and 147 (super compressibility). Read-Only (not a configuration option)	0	None (Fixed)	•		•	
		1	Press	•		•	
		2	Temp	•		•	
		3	Press + Temp	•		•	
		4	Super	•		•	
		5	Press + Super	•		•	
		6	Temp + Super	•		•	
		7	Press + Temp + Super	•		•	
1189	RABO Meter Transmission Factor J2/J1 Gear Ratio value – typically set by Factory. Value can be obtained by RABO Calibration certificate and RABO Transmission table chart. Users should not adjust this value – unless performing a meter retrofit in the field.	1.2500		•		•	
1190	Meter S/N	00000000	20 Characters max	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	User can enter the serial number of the meter into the corrector for traceability						
1191	Battery Usage Alarm Time Time when battery usage alarm first occurred (since last Alarm clear).	00 00 00		•	•	•	•
1192	Battery Usage Alarm Date Date when battery usage alarm first occurred (since last Alarm clear).	01 01 01		•	•	•	•
1193	Ch-A Pulse Output Value Channel A pulse weighting / scaling	0	1 CF	•		•	
		1	10 CF	•		•	
		2	100 CF	•		•	
		3	1000 CF	•		•	
		4	10000 CF	•		•	
		5	0.1 m ³	•		•	
		6	1 m ³	•		•	
		7	10 m ³	•		•	
		8	100 m ³	•		•	
		9	1000 m ³	•		•	
1194	Ch-B Pulse Output Value	0	1 CF	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Channel B pulse weighting / scaling	1	10 CF	•		•	
		2	100 CF	•		•	
		3	1000 CF	•		•	
		4	10000 CF	•		•	
		5	0.1 m ³	•		•	
		6	1 m ³	•		•	
		7	10 m ³	•		•	
		8	100 m ³	•		•	
		9	1000 m ³	•		•	
1195	Ch-C Pulse Output Value Channel C pulse weighting / scaling	0	1 CF	•		•	
		1	10 CF	•		•	
		2	100 CF	•		•	
		3	1000 CF	•		•	
		4	10000 CF	•		•	
		5	0.1 m ³	•		•	
		6	1 m ³	•		•	
		7	10 m ³	•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
		8	100 m3	•		•	
		9	1000 m3	•		•	
1196-1200	AT Log 1 Name – AT Log 5 Name User can give each audit trail Log a descriptive name of up to 20 characters. Used as reference for assisting the user to determine the correct information before downloading the data or to makes it easier to sort the data once it is on their computer.	1-5	One Two Three Four Five	•	•	•	•
1211	P2 Press Low Alarm Time Time of Item 452 (since last Alarm clear).	00 00 00		•	•	•	•
1212	P2 Press Low Alarm Date Date of Item 452 (since last Alarm clear)	01 01 01		•	•	•	•
1213	P2 Press High Alarm Time Time of Item 451 (since last Alarm clear)	00 00 00		•	•	•	•
1214	P2 Press High Alarm Date Date of Item 451 (since last Alarm clear)	01 01 01		•	•	•	•
1215	P2 High Alarm Value Value recorded for Item 420 when P2 High Alarm first occurred (since last Alarm clear)	0.00		•	•	•	•
1216	P2 Low Alarm Value	0.00		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Value recorded for Item 420 when P2 Low Alarm first occurred (since last Alarm clear)						
1217	P2 Xdcr Comp Temp The pressure transducer internal temperature associated with the most recent P2 pressure reading. Used for high precision characterization of pressure readings.	0.00		•	•	•	•
1220	Serial Port Type Selects interface type for Serial Port TB4 on the I/O board (RS-232 or RS-485). Note: I/O Board Jumper sections at JP1 and JP2 must match the selected RS-232/485 serial protocol type to operate properly. CloudLink modem serial port defaults to RS-232 upon "factory reset" shorting P1 pins.	0 1	RS-232 RS-485	• •	• •	• •	• •
1222	P1 Xdcr Alarm Time Time of P2 Press Transducer Alarm first occurred (since last Alarm clear).	00 00 00		• •	• •	• •	• •
1223	P1 Xdcr Alarm Date Date of P1 Press Transducer Alarm first occurred (since last Alarm clear).	01 01 01		• •	• •	• •	• •
1224	P2 Xdcr Alarm Time Time of P2 Pressure Transducer Alarm first occurred (since last Alarm clear).	00 00 00		• •	• •	• •	• •

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1225	P2 Xdcr Alarm Date Date of P2 Press Transducer Alarm first occurred (since last Alarm clear).	01 01 01		•	•	•	•
1226	P3 Xdcr Alarm Time Time of P3 Pressure Transducer Alarm first occurred (since last Alarm clear).	00 00 00				•	•
1227	P3 Xdcr Alarm Date Date of P3 Pressure Transducer Alarm first occurred (since last Alarm clear).	01 01 01				•	•
1228	Modbus Map Integer Mapping Enable	0	No	•	•	•	•
	Enable the use of Registers 3000 – 3999 to access short value Integer data (Items). Typically, not used.	1	Yes				
1229	Modbus Map Long Mapping Enable Enable the use of Registers 5000 – 5999 to access long value Integer data (Items) such as Volumes (000.002, 140, etc.) Choice to use the MODBUS registers 5000 – 5999 is customer application dependent. High majority of MODDBUS systems use only register range 7000 – 7999 (floating point).	0	No	•	•	•	•
		1	Yes	•	•	•	•
1230	Call In Sequence Applies when using two phone #s for the same purpose (i.e. two Alarm #s or two Sched #s)	0	Priority (Call retries stop when either one of the two phone #s calls are successful – only one	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	<p>Priority mode: When using two phone #'s calls – only one of the two phone #'s needs to be successful to complete the overall call-in process and end or prevent call retries. This mode is designed to work with the systems that use a backup phone number concept so that only one phone # is typically called. In this mode, the two phone #'s work together in the process to have a successful Alarm/Sched call-in. Items 1235 and 1382 control which phone # to call first in Priority mode when initiating a 'new' Alarm or Scheduled call.</p> <p>Both mode: The two Alarm and/or Scheduled phone #'s operate independently of each other. Phone # 1 is always called first when initiating a 'new' Alarm or Scheduled call. Phone #2 then follows after call to phone #1 in an alternating manor (1-2-1-2...). In this mode - both phone #'s must be independently successful. Each phone number will continue to retry calls if it is not successful (Ex. If phone # 1 is successful – it stops call retries, but # 2 would continue to retry calls until it is also successful).</p> <p>Note: Item 1235 and 1380 do not apply in this mode.</p>	1	phone # needs be successful to end call failure retries. Both				
1231	Call Out 1 Start Time			•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Call Out Window 1 starts at this time of day. (Seconds are always assumed to be 00 – Item can only be configured it in minutes).	00 00 00	00:00 – 23:59				
1232	Call Out 1 Stop Time Call Out Window 1 ends at this time of day. Call out window is disabled if Stop Time equals Start Time. (Seconds are always assumed to be 00 – Item can only be configured in minutes).	00 00 00	00:00 – 23:59	•	•	•	•
1233	Call Out 2 Start Time Second call out window starts at this time of day. (Seconds field is ignored – can only schedule it in minutes.)	00 00 00	00:00:00 – 23:59:00	•	•	•	•
1234	Call Out 2 Stop Time Second call out window ends at this time of day. This call out window disabled if Stop Time equals Start Time. (Seconds field is ignored – can only schedule it in minutes.)	00 00 00	00:00:00 – 23:59:00	•	•	•	•
1235	Alarm Call Priority Number Selects the phone # to call first (#1 or #2) upon the event of a new Alarm call-in. Only applies if Item 1230 is in 'Priority' mode setting.	1	1 = Call Alarm Tel Number 1 First 2 = Call Alarm Tel Number 2 First	•	•	•	•
1236	Port Active during Call Out Window Enable RS232/485 port will be active during a call out window so incoming characters are missed. Only needed	0	Off	•	•	•	•
	1	On	•	•	•	•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	for Modbus (not MI Protocol). Consumes more battery power.						
1237	Super Calc Alarm Time Time of Super Compress Calculation error Alarm first occurred (since last Alarm clear).	00 00 00		•		•	
1238	Super Calc Alarm Date Date of Super Compress Calculation error Alarm first occurred (since last Alarm clear).	01 01 01		•		•	
1239	Meteorological Config Mode Used to temporarily disable metrological calculations during configuration changes (especially when making multiple changes). Enable it before making changes and disable it when done to return to normal operation.	0	No	•		•	
		1	Yes	•		•	
1240 – 1279	Modbus Map Short 3000 Item –3039 Item Mapping of Instrument's Items to MODBUS Short Integer type Registers (typically not used). <ul style="list-style-type: none">• Item 1240 maps to Register 3000• Item 1241 maps to register 3001• Item 1279 maps to register 3039	255	Valid Item Numbers. Typically, not used.	•	•	•	•
1280 – 1319	Modbus Map Long 5000 Item – 5039 Item			•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Mapping of Instrument's Items to MODBUS Long Integer type Registers (typically not used). <ul style="list-style-type: none"> • Item 1280 maps to Register 5000 • Item 1281 maps to register 5001 • Item 1319 maps to register 5039 	255	Valid Item Numbers. Typically, Volume type Items (000, 002, 140, etc.).				
1320	Extern Supply Alarm Value Value of Item 1046 External supply voltage when a low external voltage alarm (Item 796) occurs	0.0		•		•	
		6.0			•		•
1335	Temperature Probe Alarms Multiple bit-mapped Item used to indicate temperature probe malfunction conditions.	0	No Errors – valid measurement	•	•	•	•
		2	Hardware error – ADC values invalid to use.				
		4	Temperature is > 10 deg C outside of the low range Specifications.				
		8	Temperature is > 10 deg C outside of the high range Specifications.				
		16	Temperature is <= 10 deg C outside of the low range Specifications		•	•	•
		32	Temperature is <= 10 deg C outside of the high range Specifications				
		64	Temperature computed is not a valid number and cannot be used (corrupted data)				

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1336	Temp Probe Alarm Time Time of Item 1335 (since last Alarm clear)	00 00 00		•	•	•	•
1337	Temp Probe Alarm Date Date of Item 1335 (since last Alarm clear)	01 01 01		•	•	•	•
1338	Metrological Sealed Item CRC Integrity Checksum of all Metrological 'Sealed' Configuration Items.	0	32-bit value dependent on values of all Items under this integrity check.	•		•	
1339	Metrological Event Item CRC Integrity Checksum of all Metrological 'Event Logged' Configuration Items.	0	32-bit value dependent on values of all Items under this integrity check.	•		•	
1340	Error Volume Enable Controls whether to redirect volume under error conditions to separate Error Volume Items when Instrument is a Metrological fault condition.	0	No	•		•	
		1	Yes (enable use of Error Volume registers)	•		•	
1376	HMI Level 1 Spcl Access Allows User to use specific HMI Level 1 operations that are normally only available in the more secure Level-2/3 menus. Enabling this Items puts security concerns on to the User	0	0 = No Special Access allowed (most secure mode for Level-1 HMI) 1 = Allow Level-1 access to Force Call-Ins (Alarm/Sched) 2 = Allow Level-1 access to enter Meter Proving modes	•	•	•	•
1378	Corrected Error Vol CorVol accumulated under Metrological Error conditions – if Item 1340 is enabled.	0		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1379	Uncorrected Error Vol UncVol accumulated under Metrological Error conditions – if Item 1340 is enabled.	0		•		•	
1380	P1 Press Range Low Minimum pressure to operate within a total volume correction error less than 1% (based on % of reading calculations, not % full scale). Not applicable for ERX mode but still available.	0	Values dependent of Transducer Type and Range	•		•	
1382	Sched Call Priority Number Selects the phone # to call first (#1 or #2) upon the event of a new Scheduled call-in. Only applies if Item 1230 is in 'Priority' mode setting.	1	1 = Call Sched Tel Number 1 First 2 = Call Sched Tel Number 2 First	•	•	•	•
1383	Recent Flow Direction Indicates the most recent direction of volume flow when Bidirectional mode is enabled per Item 433.	0	0 = Direction Unknown 1 = Forward Direction 2= Reverse Direction	•		•	
1384	Forward Cor Error Vol Forward CorVol accumulated under Metrological Error conditions – if Item 1340 is enabled and in Bidirectional mode.	0		•		•	
1385	Reverse Cor Error Vol Reverse CorVol accumulated under Metrological Error conditions – if Item 1340 is enabled and in Bidirectional mode.	0		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1386	Forward Unc Error Vol Forward UncVol accumulated under Metrological Error conditions – if Item 1340 is enabled and in Bidirectional mode.	0		•		•	
1387	Reverse Unc Error Vol Reverse UncVol accumulated under Metrological Error conditions – if Item 1340 is enabled and in Bidirectional mode.	0		•		•	
1388	Comms Login Alarm Activated when a wrong passcode is entered when attempting to connect through IRDA, RS-232, or RS-485 (requires 3 consecutive failed attempts).	0 / 1	No / Yes	•	•	•	•
1389	Comms Login Failure Count Count of Serial / IrDA Access denials (due to passcode)	0		•	•	•	•
1390	Comms Login Alarm Time Time of Item 1388 (since last Alarm clear)	00 00 00		•	•	•	•
1391	Comms Login Alarm Date Date of Item 1388 (since last Alarm clear)	01 01 01		•	•	•	•
1392	HMI Login Alarm Alarm is activated when a wrong HMI passcode is entered. (Requires 3 consecutive failed attempts).	0	No / Yes	•	•	•	•
1393	HMI Login Failure Count Count of HMI Access denials (due to passcode)	0		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1394	HMI Login Alarm Time Time of Item 1392 (since last Alarm clear)	00 00 00		•	•	•	•
1395	HMI Login Alarm Date Date of Item 1392 (since last Alarm clear)	01 01 01		•	•	•	•
1396	Alarm Mask Mask out any of the 'Alarm' conditions (bit coded)	8		•	•	•	•
1397	Compress Z Base Compressibility factor at base conditions Zb .	1.0		•		•	
1398	Compress Z Flow Compressibility factor at flowing conditions Zf .	1.0		•		•	
1399	Metrological Config Chng Alarm Time Time of Item 1035 (since last Alarm clear).	00 00 00		•		•	
1400	Metrological Config Chng Alarm Date Date of Item 1035 (since last Alarm clear).	01 01 01		•		•	
1403	Low Flow Alarm Time Time of Item 461 Alarm	00 00 00		•		•	
1404	Low Flow Alarm Date Date of Item 461 Alarm	01 01 01		•		•	
1405	Serial Comms Format Data Bits / Parity / Stop Bits used for Serial comms port. Applies only to MODBUS (not Mi Protocol).	0	8 / N / 1	•	•	•	•
		1	7 / E / 1	•	•	•	•
		2	7 / O / 1	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
		3	8 / E / 1	•	•	•	•
		4	8 / O / 1	•	•	•	•
1406	Dial Cmd Resp Timeout Configurable time period to wait for modem to respond back to ATDT dial command string (i.e. wait for connect). Suggested range limits: 60 – 120 seconds. Max 120 seconds.	90		•	•	•	•
1409	Alarm Log Record Alarm	0 / 1	No / Yes	•	•	•	•
1410	Event Log Record Alarm	0 / 1	No / Yes	•	•	•	•
1411	Audit Log Record Alarm	0 / 1	No / Yes	•	•	•	•
1412	Alarm Record Alarm Time Time when Item 1409 Alarm first occurred (since last Alarm clear).	00 00 00		•	•	•	•
1413	Alarm Record Alarm Date Date when Item 1409 Alarm first occurred (since last Alarm clear).	01 01 01		•	•	•	•
1414	Event Record Alarm Time Time when Item 1410 Alarm first occurred (since last Alarm clear).	00 00 00		•	•	•	•
1415	Event Record Alarm Date	01 01 01		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Date when Item 1410 Alarm first occurred (since last Alarm clear).						
1416	Audit Record Alarm Time Time when Item 1411 Alarm first occurred (since last Alarm clear).	00 00 00		•	•	•	•
1417	Audit Record Alarm Date Time when Item 1411 Alarm first occurred (since last Alarm clear).	01 01 01		•	•	•	•
1424	Vol Sensor-3 Alarm Volume Input Sensor-3 fault alarm (switch found to be missing from sequential pattern expected per meter rotations). Only applies when using Bidirectional modes per Item 433	0 / 1	No / Yes	•		•	
1425	Vol Sensor-4 Alarm Volume Input Sensor-4 fault alarm (switch found to be missing from sequential pattern expected per meter rotations). Only applies when using Bidirectional modes per Item 433	0 / 1	No / Yes	•		•	
1426	Vol Sensor-3 Alarm Time Time when Item 1424 Alarm first occurred (since last Alarm clear)	00 00 00		•		•	
1427	Vol Sensor-3 Alarm Date Date of Item 1424 (since last Alarm clear)	01 01 01		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1428	Vol Sensor-4 Alarm Time Time of Item 1425 (since last Alarm clear)	00 00 00		•		•	
1429	Vol Sensor-4 Alarm Date Date of Item 1425 (since last Alarm clear)	01 01 01		•		•	
1430	Bi-Directional Errors Bidirectional volume input error status (Switch Alarm status). Applies only when using Bidirectional Volume input mode via Item 433 (Reverse Flow). Note – 4 switch inputs used for Bidirectional volume mode (TB2 and TB3 terminals – LF input)	0	No Errors	•		•	
		16	SW1 Fault	•		•	
		32	SW2 Fault	•		•	
		64	SW3 Fault	•		•	
		128	SW4 Fault	•		•	
1457	Fixed Unsquared Super Factor Value to use for calculating Super Factor (Items 047 and 116) when Item 147 is set to Fixed Super (code 0). See Item 147 for options to compute Super Factor	1.0	0.50 – 2.00	•		•	
1458	Modem Type Selects which Modem is used for communications. Must be properly selected to ensure full Modem type functionality (e.g. Modem Power Control, or Daily Vol Backup, etc.). Non-Mercury modems are 'third party' modems (e.g. RV-50)	0	No Modem	•	•	•	•
		1	CNI-2	•	•	•	•
		2	CloudLink Modem	•	•	•	•
		3	Messenger	•	•	•	•
		4	Non-Mercury Modems				

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Note: Modem Type setting remains intact after a FW Upgrade or forcing basic defaults.		(e.g. RV-50 or other 3 rd party modems – consume high power requiring Modem Power Control)	•	•	•	•
			5 CloudLink 5G	•	•	•	•
1459	CldLnk Read Reg Errors It is a diagnostic item which gives the error count on CloudLink reading items.	0		•	•	•	•
1460	CldLnk Last Read Reg This holds the item number in the last CloudLink item read error	0		•	•	•	•
1461	CldLnk Last Error Code This gives error code associated in last CloudLink item read error	0	0= MICELL_NO_ERROR, 1=MICELL_RESOURCE_ERROR 2=MICELL_RESOURCE_TIMEOUT, 3=MICELL_PORT_CLAIM_FAILURE, 4=MICELL_NO_RESPONSE 5=MICELL_REPLYED_WITH_ERROR_MSG, 6=MICELL_IS_BUSY_ERROR 7=MICELL_WRITE_S_REG_ERROR	•	•	•	•
1462	CloudLink Super Cap Charge Limit (seconds)	0	Leave at value 0 – not currently supported by CloudLink	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Range 0 – 7200 seconds specifying a max time limit of CloudLink ability to make a call while running on its Super-Cap.						
1463	Backup Volume Alarm Limit Used with CloudLink 'Pulse Input' option for volume backup tracking. Threshold limit for tripping Alarm Item 435 when difference between Items 002 and 434 exceeds Item 1463 limit. To use this feature (Volume backup) – CloudLink must be configured for Pulse Input counting and wired to EC350. See Items 434 and 435.	0	0 = disable the Alarm notification of Item 435 1 – n = values > 0 enable the Alarm ability and set the threshold for difference.	•		•	
1464	Tamper Alarm Time Time of Item 107 (since last Alarm clear)	00 00 00		•	•	•	•
1465	Tamper Alarm Date Date of Item 107 (since last Alarm clear)	01 01 01		•	•	•	•
1467	Firmware Download State (Honeywell Diagnostic Item)	0	Idle	•	•	•	•
		1	Sleeping				
		2	FW loading				
		3	Load complete				
		4	Validating				
		5	FW Load Error				

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1468	Firmware Download Packet Size	1024	Fixed at 1024	•	•	•	•
1469	Last FW Download Sequence Number Used by software to know the last packet sent during upgrades	0		•	•	•	•
1478	Call-In Current State Indicates current state of the Call-In process. Mainly added for Production support. Item can be read any time during Call to see what stage the Call is in. Item returns an enumerated code for status. Not to be used as a Pass/Fail status – for that – see Item 337. Read – Only Item.	0	Call Idle	•	•	•	•
		1	Waking Modem				
		2	Modem Init phase				
		4	Modem Dialing				
		6	Modems Connected				
		7	Waiting for +-+clramps				
		8	Received +-+clramps				
		9	Sent OK Response				
		10	Host Link phase				
		0	Disables diagnostic information				
1480	HMI Diagnostics Enable Enables HMI (LCD) to show all various diagnostic information for things like Communications, Call-In, Callout Window status information.	1	Enables diagnostic information	•	•	•	•
1484	Digi In 1 Alarm Time Time of the item 766.	0:00:00		•	•	•	•
1485	Digi In 1 Alarm Date Date of the item 766.	1/1/2001		•	•	•	•
1486	Digi In 2 Alarm Time	0:00:00		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Time of the item 767.						
1487	Digi In 2 Alarm Date Date of the item 767.	1/1/2001		•	•	•	•
1488	Digi In 3 Alarm Time Time of the item 768	0:00:00			•		•
1489	Digi In 3 Alarm Date Date of the item 768	1/1/2001			•		•
1490	Comm Port Reset Interval Minutes Selects the interval in minutes to reset the serial comm port (Rs-232 / 485 interface). Controls a feature for automatic recovery from some communications issues. Default of 0 disables this feature. If non-zero, communications will be automatically reset if there are no valid communication packets within this number of minutes. Generally used with periodic polling (where this would be set to something longer than the polling interval, so it only resets communications if expected activity has ceased).	46	0 – 65535 (minutes) 0 = disabled (off) 4 minutes is lowest / min value	•	•	•	•
1491	Modbus Archive 1 Size Selects Archive capacity when reading Register 702 via MODBUS protocol. Register 702 is assigned to AT Log 1 . See: EC350_MODBUS_Interface_Specifications.docx	840 (35 days of hourly)	0 – 4380 (6 months hourly records).	•	•	•	•
1492	Modbus Archive 2 Size	35	0 – 4380 (6 months hourly records)	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Selects Archive capacity when reading Register 703 via MODBUS protocol. Register 702 is assigned to AT Log 2 . See: EC350_MODBUS_Interface_Specifications.docx						
1493	Modbus Archive 3 Size Selects Archive capacity when reading Register 704 via MODBUS protocol. Register 702 is assigned to AT Log 3 . See: EC350_MODBUS_Interface_Specifications.docx	840 (35 days of hourly)	0 – 4380 (6 months hourly records)	•	•	•	•
1494	Modbus Archive 4 Size Selects Archive capacity when reading Register 705 via MODBUS protocol. Register 702 is assigned to AT Log 4 . See: EC350_MODBUS_Interface_Specifications.docx	35	0 – 4380 (6 months hourly records)	•	•	•	•
1495	Modbus Archive 5 Size Selects Archive capacity when reading Register 706 via MODBUS protocol. Register 702 is assigned to AT Log 5 . See: EC350_MODBUS_Interface_Specifications.docx	840 (35 days of hourly)	0 – 4380 (6 months hourly records)	•	•	•	•
1496	Modbus Archive Data Native Format Selects if Archive data (AT Log records) are returned in either only floating point format – or – in long integer / floating point formats based on their associated data type. See: EC350_MODBUS_Interface_Specifications.docx	0	Return all Archive (AT Log) data in floating point format. Note: Volume data can lose resolution when values become very large (> 7 digits).	•	•	•	•
		1	Return Archive (AT Log) data in its natural format: long integer formats for Volumes, and floating point for measurement values like Press, Temp, Super, Battery, etc. Keeps				

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
			Volume data in its normal integer format so there is no resolution loss when values become very large (> 7 digits).				
1500 – 1539	Modbus Map Boolean 1000 – 1039 Item Mapping of Instrument's Items to MODBUS BOOLEAN type Registers (Alarms: 0/1) <ul style="list-style-type: none"> • Item 1500 maps to Register 1000 • Item 1501 maps to register 1001 • Item 1539 maps to register 1039 	255		•	•	•	•
1540	P1 Press High/High Alarm Value Value at which P1 high/high pressure alarm (815) was detected	0.0		•	•	•	•
1541	P1 Press Low/Low Alarm Value Value at which P1 low/low pressure alarm (816) was detected	0.0		•	•	•	•
1542	P2 Press High/High Alarm Value Value at which P2 high/high pressure alarm (819) was detected	0.0		•	•	•	•
1543	P2 Press Low/Low Alarm Value Value at which P2 low/low pressure alarm (820) was detected	0.0		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1544	P1 Press High/High Alarm Time Time at which P1 high/high pressure alarm (815) was detected	00 00 00		•	•	•	•
1545	P1 Press High/High Alarm Date Time at which P1 high/high pressure alarm (815) was detected	01 01 01		•	•	•	•
1546	P1 Press Low/Low Alarm Time Time at which P1 low/low pressure alarm (816) was detected	00 00 00		•	•	•	•
1547	P1 Press Low/Low Alarm Date Time at which P1 low/low pressure alarm (816) was detected	01 01 01		•	•	•	•
1548	P2 Press High/High Alarm Time Time at which P2 high/high pressure alarm (819) was detected	00 00 00		•	•	•	•
1549	P2 Press High/High Alarm Date Time at which P2 high/high pressure alarm (819) was detected	01 01 01		•	•	•	•
1550	P2 Press Low/Low Alarm Time Time at which P2 low/low pressure alarm (820) was detected	00 00 00		•	•	•	•
1551	P2 Press Low/Low Alarm Date	01 01 01		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	Time at which P2 low/low pressure alarm (820) was detected						
1553	Comm Port Reset Diagnostic Bits Identifies type of communication issue found by item 1490 communications reset feature.	0	0 = no issue 1 = Wake-Up IRQ not set 2= Control var for wake-up not set	•	•	•	•
1554	Comm Port Reset Run Count Count of number of times the item 1490 communication reset inactivity time-out has occurred.	0	0 – 99999999	•	•	•	•
1555	Comm Port Reset Fix Count Count of number of times the item 1490 communication reset found communication settings requiring reset (see item 1553 for issue(s) found).	0	0 – 99999999	•	•	•	•
1578	External Supply Type	0	None	•	•	•	•
		1	DC Supply				
		2	SLA Battery 7AH				
		3	Alkaline Quad pack				
		4	Alkaline Dual Pack				
		5	SLA Battery 21AH				
1582	P3 Press High Alarm Time					•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Time of Item 561 (since last Alarm clear) – EC350 Time of Item 451 (since last Alarm clear) – ERX350	00 00 00					
1583	P3 Press High Alarm Date Date of Item 561 (since last Alarm clear) – EC350 Date of Item 451 (since last Alarm clear) – ERX350	01 01 01				•	•
1584	P3 High Alarm Value Value recorded for Item 501 when P3 High Alarm first occurred (since last Alarm clear) – EC350 Value recorded for Item 420 when P3 High Alarm first occurred (since last Alarm clear) – ERX350	0.0				•	•
1585	P3 Press High/High Alarm Time Time at which P3 high/high pressure alarm Item 809 was detected	00 00 00				•	•
1586	P3 Press High/High Alarm Date Date at which P3 high/high pressure alarm Item 809 was detected	01 01 01				•	•
1587	P3 High/High Alarm Value Value at which P3 high/high pressure alarm (809) was detected	0.0				•	•
1588	P3 Press Low Alarm Time Time of Item 562 (since last Alarm clear) – EC350 Time of Item 452 (since last Alarm clear) – ERX350	00 00 00				•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1589	P3 Press Low Alarm Date Date of Item 562 (since last Alarm clear) – EC350 Date of Item 452 (since last Alarm clear) – ERX350	01 01 01				•	•
1590	P3 Low Alarm Value Value recorded for Item 501 when P3 Low Alarm first occurred (since last Alarm clear) – EC350 Value recorded for Item 420 when P3 Low Alarm first occurred (since last Alarm clear) – ERX350	0.0				•	•
1591	P3 Press Low/Low Alarm Time Time at which P3 low/low pressure alarm Item 810 was detected	00 00 00				•	•
1592	P3 Press Low/Low Alarm Date Date at which P3 low/low pressure alarm Item 810 was detected	01 01 01				•	•
1593	P3 Low/Low Alarm Value Value at which P3 low/low pressure alarm (810) was detected	0.0				•	•
1594	P3 Prev Day High Press Highest P3 Pressure (501) for the previous Gas Day – EC350 Highest P3 Pressure (420) for the previous Gas Day – ERX350	-1.0				•	•
1595	P3 Prev Day High P Time Time for Item 1594	00 00 00				•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1596	P3 Prev Day High P Date Date for Item 1594	01 01 01				•	•
1597	P3 Prev Day Low Press Lowest P3 Pressure (501) for the previous Gas Day – EC350 Lowest P3 Pressure (420) for the previous Gas Day – ERX350	99999.99				•	•
1598	P3 Prev Day Low P Time Time for Item 1597	00 00 00				•	•
1599	P3 Prev Day Low P Date Date for Item 1597	01 01 01				•	•
1602	Press used at P3-Span The pressure value used during the most recent P3 Pressure Span calibration	0.0				•	•
1603	Press used at P3-Zero The pressure value used during the most recent P3 Pressure Zero calibration	0.0				•	•
1604	PnPPT Expansion Status Indicates the Pressure expansion board (for P3 configuration) connection status on the device	0 / 1	Not connected / Connected			•	•
1605	SLA Last Charged Tm This item gives last charged time of SLA battery	00 00 00				•	•
1606	SLA Last Charged Dt	01 01 01				•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW1350 (EC 350)	MIW1350 (ERX 350)
	This item gives last charged date of SLA battery						
1607	SLA Not Charging Alarm Days This item indicates the number of days that the user can configure. For example, if the user configures it as 2 then the device will alarm the user if the solar panel does not charge the SLA battery continuously for 2 days.	0	0 – 255 days (0 means alarm will be disabled)			•	•
1608	SLA Not Charging Alarm This item indicates whether the alarm is active or not, based on item 1607	0	Inactive			•	•
1609	SLA Not Charging Alarm Time The time recorded when the alarm is raised	00 00 00				•	•
1610	SLA Not Charging Alarm Date The date recorded when the alarm is raised	01 01 01				•	•
1612	SLA Charging Status For every 30 minutes the charging status is monitored which indicates whether the SLA is charging or not charging	0	Not Charging			•	•
1613	As-Shipped Config Storage Status If an "as-shipped configuration" has been saved (i.e. can be retrieved), this item will have a value of 21214888 . If not, this will be zero.	0	Not Available	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1614	SLA Not charging alarm counter Gives the days' count on battery not charging status	0 (days)		•	•	•	•
1617	LCD refresh rate This item refreshes the LCD screen on configured interval. Ex: 1,2,...min	0	Disable	•	•	•	•
1624	CloudLink Last Read Time This item will populate with the last successful CloudLink items read time that are configured in 350S audit trail log.	00 00 00		•	•	•	•
1625	CloudLink Last Read Date This item will populate with the last successful CloudLink items read date that are configured in 350S audit trail log.	01 01 01		•	•	•	•
1627	Active Alarms A List of alarms by using each bit in the item value	0	First bit – 0 (battery low) Second bit – 1 (battery usage cycles alarm) • • • • • 25		•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
			ENSURE THAT U ADD THE RESPECTIVE ITEM DESCRIPTIONS FROM HERE AS GIVEN IN THE WORD DOC				
1628	SAME AS ABOVE FOR ALARMS B			•	•	•	•
1629	Alarm Call Keep Alive Mode Used to configure Keep Alive feature in Standard or extended modes	0/1 0	0- Standard (current settings) 1- Extended (will be in active unless and until the alarm is cleared).	•	•	•	•
1630	Last Call-In Failure Gives the last call-in failure reason	0	0 – No Failure 1 – Telephone Number error 2 – Comm Port in Use 3 – Modem Init Failed 4 – Dial failed 5 – +-+clralarms failed 6 – Link state SF (Sign out) failure	•	•	•	•
1631	P4 Transducer Enable Enable or disable P4 Pressure Transducer measurements. To save Battery Power and possible Alarm conditions – disable if P4 Pressure is not used.	0	Disable	•	•	•	•
		1	P1-P2	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
	For Fixed Factor mode – disable this Item if P4 Transducer is not being connected to instrument.	2	P1-P3	•	•	•	•
		3	P2-P1	•	•	•	•
		4	P2-P3	•	•	•	•
		5	P3-P1	•	•	•	•
		6	P3-P2	•	•	•	•
1632	P4 Gas Pressure Pressure from the P4 pressure transducer. (Read only).	0		•	•	•	•
1634	P4 High Alarm Limit P4 High Alarm set point.	99999.99		•	•	•	•
1635	P4 Low Alarm Limit P4 Low Alarm set point.	-1		•	•	•	•
1636	P4 Pressure Units Unit of measure for P4 Pressure related Items.	0	PSI	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
		1	kPa	•	•	•	•
		2	MPa	•	•	•	•
		3	Bar	•	•	•	•
		4	mBar	•	•	•	•
		5	KGcm2	•	•	•	•
		6	in WC	•	•	•	•
		7	in HG	•	•	•	•
		8	mm HG	•	•	•	•
		9	Ounces	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1637	# of Dec for P4 Press Number of digits displayed to the right of the decimal point for P4 pressure display.	0	X X X X X X X X	•	•	•	•
		1	X X X X X X . X	•	•	•	•
		2	X X X X X . X X	•	•	•	•
		3	X X X X . X X X	•	•	•	•
		4	X X X . X X X X	•	•	•	•
1638	P4 Press High Alarm Alarm is set when value of Item 1632 exceeds configurable limit per Item 1634. Manually clear unless in RBX mode.	00000000	No	•	•	•	•
		11111111	Yes	•	•	•	•
1639	P4 Press Low Alarm Alarm is set when value of Item 1632 drops configurable limit per Item 1635. Manually clear unless in RBX mode.	00000000	No	•	•	•	•
		11111111	Yes	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1640	RBX Deadband:P4 Press Hysteresis band that's applied when resetting the RBX alarm for P4 pressure (high / low).	5		•	•	•	•
1641	P4 Interval Avg Press Average of all samples of Item 1632 during the interval of Item 1178.	0		•	•	•	•
1642	P4 Daily Average Press Average of P4 Pressure (1632) for the Gas Day	0		•	•	•	•
1643	P4 Prev Daily Avg Press Average of P4 Pressure (1632) for the previous Gas Day	0		•	•	•	•
1644	P4 Max Pressure Highest value for Item 1632	0		•	•	•	•
1645	P4 Max Pressure Time Time for the item 1644	00 00 00		•	•	•	•
1646	P4 Max Pressure Date Date for the item 1644	01 01 01		•	•	•	•
1647	P4 Min Pressure Lowest value for Item 1632	99999.99		•	•	•	•
1648	P4 Min Pressure Time Time for the item 1647	00 00 00		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1649	P4 Min Pressure Date Date for the item 1647	01 01 01		•	•	•	•
1650	P4 Interval High Press Highest value of P4 Pressure (1632) measured within interval period set by Item 1178.	0		•	•	•	•
1651	P4 Intrv High P Time Time for the item 1650	00 00 00		•	•	•	•
1652	P4 Intrv High P Date Date for the item 1650	01 01 01		•	•	•	•
1653	P4 Interval Low Press Highest value of P4 Pressure (1632) measured within interval period set by Item 1178.	99999.99		•	•	•	•
1654	P4 Intrv Low P Time Time for the item 1653	00 00 00		•	•	•	•
1655	P4 Intrv Low P Date Date for the item 1653	01 01 01		•	•	•	•
1656	P4 Day High Press Highest P4 Pressure (1632) for the current Gas Day.	-1		•	•	•	•
1657	P4 Day High P Time Time for the item 1656.	00 00 00		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1658	P4 Day High P Date Date for the item 1656.	01 01 01		•	•	•	•
1659	P4 Day Low Press Lowest P4 Pressure (1632) for the current Gas Day.	99999.99		•	•	•	•
1660	P4 Day Low P Time Time for the item 1659.	00 00 00		•	•	•	•
1661	P4 Day Low P Date Date for the item 1659.	01 01 01		•	•	•	•
1662	P4 Prev Day High Press Highest P4 Pressure (1632) for the previous Gas Day.	-1		•	•	•	•
1663	P4 Prev Day High P Time Time for the item 1662.	00 00 00		•	•	•	•
1664	P4 Prev Day High P Date Date for the item 1662.	01 01 01		•	•	•	•
1665	P4 Prev Day Low Press Lowest P4 Pressure (1632) for the previous Gas Day.	99999.99		•	•	•	•
1666	P4 Prev Day Low P Time Time for the item 1665.	00 00 00		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1667	P4 Prev Day Low P Date Date for the item 1665.	01 01 01		•	•	•	•
1668	P4 Press High Alarm Time Time for the item 1638.	00 00 00		•	•	•	•
1669	P4 Press High Alarm Date Date for the item 1638.	01 01 01		•	•	•	•
1670	P4 Press Low Alarm Time Time for the item 1639.	00 00 00		•	•	•	•
1671	P4 Press Low Alarm Date Date for the item 1639.	01 01 01		•	•	•	•
1672	P4 High/High Alarm Limit P4 Pressure High/High Alarm set point.	99999.99		•	•	•	•
1673	P4 Low/Low Alarm Limit P4 Pressure Low/Low Alarm set point.	-1		•	•	•	•
1674	P4 Press High/High Alarm Alarm is set when value of Item 1632 exceeds configurable limit per Item 1672. Manually clear unless in RBX mode.	00000000	No	•	•	•	•
		11111111	Yes	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1675	P4 Press High/High Alarm Time Time for the item 1674.	00 00 00		•	•	•	•
1676	P4 Press High/High Alarm Date Date for the item 1674.	01 01 01		•	•	•	•
1677	P4 Press Low/Low Alarm Alarm is set when value of Item 1632 drops below configurable limit per Item 1673. Manually clear unless in RBX mode.	00000000	No	•	•	•	•
		11111111	Yes	•	•	•	•
1678	P4 Press Low/Low Alarm Time Time for the item 1677.	00 00 00		•	•	•	•
1679	P4 Press Low/Low Alarm Date Date for the item 1677.	01 01 01		•	•	•	•
1680	P4 Transducer Alarm Any error occurs while calculating P4 gas pressure (1632) this alarm will set.	00000000	No	•	•	•	•
		11111111	Yes	•	•	•	•
1681	P4 Xdcr Alarm Time Time of P4 Press Transducer Alarm (1680) first occurred (since last Alarm clear).	00 00 00		•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1682	P4 Xdcr Alarm Date Date of P4 Press Transducer Alarm (1680) first occurred (since last Alarm clear).	01 01 01		•	•	•	•
1683	P4 High Alarm Value Value of Item 1632 at which the high pressure alarm (1638) was detected.	0		•	•	•	•
1684	P4 Low Alarm Value Value of Item 1632 at which the high pressure alarm (1639) was detected.	0		•	•	•	•
1685	P4 High/High Alarm Value Value of Item 1632 at which the high pressure alarm (1674) was detected.	0		•	•	•	•
1686	P4 Low/Low Alarm Value Value of Item 1632 at which the high pressure alarm (1677) was detected.	0		•	•	•	•
1687	P4 Transducer Error Config Value Error value to populate in item 1632 if any errors occurs while calculating P4 pressure (1632).	9999		•	•	•	•
1690	Flow Time Seconds It shows the number of seconds the instrument is not in a "no flow" state with is the statistic interval.	0		•		•	

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIW/350 (EC 350)	MIW/350 (ERX 350)
1691	Flow Time Cutoff rate If the flow is equal to or above the threshold, the Flow Time value advances. If the flow is less than the threshold, the Flow Time stops.	0		•		•	
1693	Forced Schedule Call-In Time If the Force Schedule Call (1693) is configured and enabled, and the device does not attempt Schedule Call In (i1693) in configured time for various reasons, the Force Schedule Call Initiates Call In with the server.	2160		•	•	•	•
1694	Forced Schedule Call-In Time After FW Update This item is for remote firmware update. After firmware is updated and there is no configuration in item 1694 the device initiates forced schedule call to the server. It will load the previous/backup item values.	10 min	0=Disable	•	•	•	•
1696	Public Key Version This item is used to provide a public key version that is installed on the device. The purpose of the public key is to authenticate whether new firmware is from a trusted source and is not tampered while performing firmware updates.	100000		•	•	•	•
1697	Is Public Key Available This item is used to inform the user whether a public key is available or not in the device.	0	0 = No				
			1 = Yes	•	•	•	•

MI 350 Series Item Reference Guide

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1698	Encrypted Sign On If the user wants to use an encrypted sign-on mechanism then the user should enable this item.	0	0 = Disable	•	•	•	•
			1 = Enable				
1699	Modem Connected to IO Board If the user wants to use CloudLink 5G modem as Other then the user should set this item to "True".	0	0 = False	•	•	•	•
			1 = True				