

WON-G1D100

WON-G1D100 series single-phase din rail energy meter is designed to collect, analyze and measure power parameters.

WON-G1D100 series single-phase din rail energy meter can support the measurement and analysis of various power parameters, such as voltage, current, four-quadrant power parameters, power factor, bi-directional active and reactive power etc.

This series of products have RS485 communication interface, the highest baud rate support 9600 bps, support Modbus, can easily realize remote data reading. Meanwhile, it adopts LCD display, which can view and set various measurement parameters locally, and the product has password protection function to ensure the data security of the product.

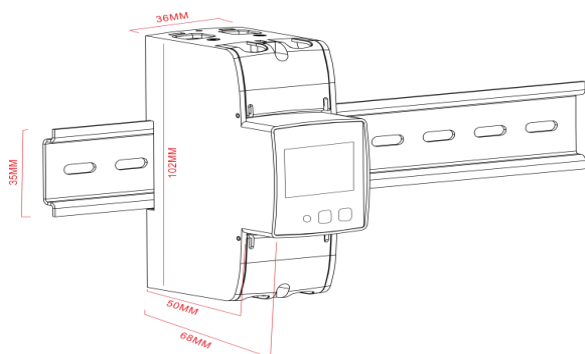


Product Features

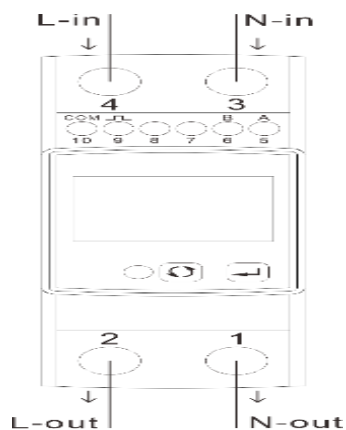
- Up to 100A direct Connected
- Standard 2-module width, TH35-7.5 type din rail mount
- Touch key design
- Multi-functional parameter measurement
- Supports bi-directional power metering
- Supports 1-channel passive pulse output
- Supports 1-channel RS485 communication
- LCD full-view display, white backlight, backlight lighting time adjustable
- LCD display refresh time: 1 second
- Supports manual page turning and automatic display rotation (can be set to switch)

Measurements and Display Content	Parameters to be set
• Voltage • Frequency • Current and current demand • Power, maximum power demand, and power factor • Import and export active energy • Import and export reactive power	• System password • Demand statistics time • Reset demand option • Pulse parameters

Dimensions



Wiring Diagram



Technical Specification

Technical Parameters		
Access type		Direct Connected
Rated voltage		230V
Voltage range		176~276V AC
Current rating		10A
Maximum current		100A
Minimum current		0.5A
Starting current		0.4% times of the rated current
Power consumption		<2W/10VA
Frequency		50/60Hz
Pressure-resistant		4KV/1 min
Pulse withstand voltage		6KV-1.2us
Overload		30 times the maximum current - 0.01s
Pulse output		1000imp/kWh (default)
		1000/100/10/1 imp/kWh/kVar(configurable)
Display		LCD
Precision	Voltage	±0.5%
	Current	±0.5%
	Frequency	±0.2%
	Factor	±1%
	Active power	±1%
	Reactive power	±1%
	Apparent power	±1%
	Active Electrical Energy	IEC52053-21
		Class B EN50470-3
	Reactive electrical energy	±1%
Operation Environment	Operating temperature	-25°C~+55°C
	Storage temperature	-40°C~+75°C
	Reference temperature	23°C±2°C
	Relative humidity	0~95%RH, no condensation
	Rlevation	250m or more
	Warm-up time	10s
	Vibration	10Hz~50Hz, IEC 60068-2-6,2g

LCD Display on the Screen

1	2	3	4	5	6	7	8	9	0	A	B
1	2	3	4	5	6	7	8	9	0	A	b
C	D	E	F	G	H	I	J	K	L	M	N
C	d	E	F	G	H	I	J	K	L	M	N
O	P	Q	R	S	T	U	V	W	X	Y	Z
O	P	Q	R	S	T	U	V	W	X	Y	Z

Startup Screen

The meter is power on, and the LCD interface is fully displayed for 1s.



Scrolling

After the system initialization is completed, the meter displays the measuring power value, and the total active energy is displayed by default.

Press  the key to display the content in the following order. Total active energy → input active energy → output active energy → total reactive energy → input reactive energy → output reactive energy → maximum power demand voltage → current → active power → reactive power → apparent power → power factor → frequency → pulse → communication address → baud rate → continuous operation time.

Display Settings

	Total Active energy Example: 70.00kWh
	import Active energy Example: 50.00kWh
	Exporting Active energy Example: 20.00kWh
	Total resettable Active Energy
	Total reactive energy KVarh
	Import reactive energy +KVarh
	Export reactive energy -KVarh

	Total resettable Reactive energy KVarh
	Total maximum power demand W
	Baud rate
	Voltage V
	Curent A
	Active power W
	Reactive power Var

	Apparent power Va
	Power Factor
	Frequency Hz
	Pulse constant Example: 1000
	Device Address
	Hour Run Timer Continuous running time

Setting Mode

Press the "Enter" key  and hold for 3s to enter the meter setting mode.

	Good	Displayed when setting is correct
	Err	Displayed off the input information is incorrect

	Password To enter the setup mode, the system needs to enter the login password. Default password: 1000
	CommunicationPort The default comm. port is:001. Setting range: 001~247 Press the "Enter" key and the first digit flashes. Press "Scroll" to change the value of the blink digit.
	Baud rate - Default value: 9600bps Setting range: 1200, 2400, 4800, 9600bps. Press the "Enter" key, the number flashes when it appears, press the "Scroll" key to change the setting value. Confirm that the changes are complete press the "Enter" key to confirm the settings
	Check digit Parity-Default: None Set range: None, Even, Odd Press the "Enter" key, the number flashes when it appears, press the "Scroll" key to change the setting value. Confirm that the changes are complete press the "Enter" key to confirm the settings.
	Pulse output Default: Export kWh Set Range: kWh / KVarh / Imp. Kwh / Exp.kWh / Imp.kVarh / Exp.kVarh Press the "Enter" key, the - number flashes when it appears,press the "Scroll" key to change the setting value. Confirm that the changes are complete press the "Enter" key to confirm the settings. Pulse settings Default: 1000 Setting range: 1000 / 100 / 10 / 1 Press the "Enter" key, the - number flashes when it appears, press the "Scroll" key to change the setting value. Confirm that the changes are complete press the "Enter" key to confirm the settings
	Pulse Width setting Default: 100mS Setup range: 200 / 100 / 60ms Press the "Enter" key, the - number flashes when it appears, press the "Scroll" key to change the setting valueConfirm that the changes are complete press the "Enter" key to confirm the settings.
	Demand time Default:15 minutes Setting Range: 0 / 5 / 10 / 15 / 30 / 60 Press the "Enter" key, the - number flashes when it appears, press the "Scroll" key to change the setting value. Confirm that the changes are complete press the "Enter" key to confirm the settings.
	The rolling display interval Default: 0S SETTING RANGE: 0 ~30S Press the "Enter" key, the - number flashes when it appears, press the "Scroll" key to change the setting value. Confirm that the changes are complete press the "Enter" key to confirm the settings.
	Backlight hold time Default: 60 min Set Range: 0 (OFF)/5/10/20/30/60 Press the "Enter" key, the - number flashes when it appears, press the "Scroll" key to change the setting value. Confirm that the changes are complete press the "Enter" key to confirm the settings

	Electricity Zeroing Press and hold "Enter" to enter the clearing interface Demand zeroing Press and hold "Enter" to enter the clearing interface Resettable energy zeroing Press and hold "Enter" to enter the clearing interface.
	Password settings Default: 1000 Press the "Enter" key, the - number flashes when it appears, press the "Scroll" key to change the setting value. Confirm that the changes are complete press the "Enter" key to confirm the settings

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