



Industrial Data Logger 4G LTE

ORDER CODE: RDL838

Features:

- 12 x isolated Analog Input Channel 0-10V , 0-24v , 4-20mA.16 Bit Resolution and 860SPS
- 4x isolated Digital input 24V
- 3x Isolated digital output / PWM 24v
- 1x Relay (NO & C)
- 1x Isolated RS485 for MODBUS RTU communication
- 1x Isolated Ethernet 10/100Mbps MODBUS TCP Communication
- 1x USB-device interface for configuring, monitoring and download
- 1x WiFi / 2G / 4G / LTE wireless communication
- Configure and Read Multiple Slave IDs, Selectable Input Register Holding Register & Coil.
- Configurable Data type and Conversion method (INT ,Long INT , FLOAT , Double Float & RawHex)
- Configurable Scaling factor enabling option for Analog channel.
- Configurable WiFi / GPRS / 4G / LTE Interface
- Configurable data transferring protocol JSON / MQTT and FTP
- Support secure communication SSL
- Custom Configurable polling interval
- Custom Configurable 32 bit counter input
- 8 GB inbuilt storage
- Data Logs and stores its CSV file during network failure
- Logger Sends offline data once Network and Server Connected
- Configurable Live / Schedule upload offline data
- Remote control / Activating Relay / Digital output
- Configurable Alarm
- OTA (Over The Air) Firmware upgrade for WiFi devices.
- LED indicators to indicate Power, Network availability, status & Fault.
- Auto Maintain socket / server connection
- Easy configurable connectivity for cloud platform AWS / Azure / Google / Oracle / Things board

Application:

- Production and process monitoring
- Utilities monitoring
- Condition monitoring
- Environment monitoring
- Industrial Smart grid
- Solar grid
- Cold storage monitoring
- Green House
- District metering
- Water treatment
- Generator monitoring
- Laboratory and R&D Lab
- Calibration and Testing Lab

Specification:

Isolated Digital inputs	
Number of digital inputs	4
Type of digital input	Isolated with Interrupted , WET / DRY connection supported
Max Input voltage range	0-28V
Logic HIGH trigger voltage	>12V
Logic LOW trigger voltage	<10V
Maximum trigger frequency	5Khz
Protection of digital outputs	ESD , Transient
Isolated Digital outputs	
Number of digital outputs	3
Type of digital output	Isolated / PWM
Output voltage range	Open collector output 24V
Maximum current per output	100 mA
Maximum switching frequency	5Khz
Protection of digital outputs	ESD , Transient
Isolated Switchable Analog inputs	
Number of analog inputs	4
Type of analog inputs	Isolated 3700 Vrms
Range of voltage measurement	0-10v
Range of current measurement	0-20mA / 4-20mA
Switching of voltage / current mode	Software controlled
Resolution/Sampling	16 bit/860 SPS
Protection of analog inputs	ESD , Transient
Isolated Analog input 0-24V	
Number of analog inputs	4
Type of analog inputs	Isolated 3700 Vrms
Range of voltage measurement	0-24v
Resolution/Sampling	16 bit/860 SPS
Protection of analog inputs	ESD , Transient
Isolated Analog input 0-20mA	
Number of analog inputs	4
Type of analog inputs	Isolated 3700 Vrms
Range of current measurement	0-20mA / 4-20mA
Resolution/Sampling	16 bit/860 SPS
Protection of analog inputs	ESD , Transient
Processor	
Arm® Cortex®-M	32 bit
Clock Frequency	240 MHz
STM32 Family	32 Bit
Wireless Communication	
Wi-Fi	802.11 b/g/n/e/I (802.11n @ up to 150 Mbit/s)

Bluetooth	V4.2 Bluetooth low Energy (BLE)
2G / 4G / LTE	UMTS/HSPA(+) and GSM/GPRS/EDGE / MIMO
Data Speed	
4G/LTE	Max 150Mbps Down link / Max 50 Mbps Uplink
Edge	Max 256kbps Down link / Max 236.8 kbps Uplink
GPRS	Max 107kbps Down link / Max 85.6 kbps Uplink
Protocol	TCP / IP, JSON , MQTT , SSL , FTP, RESTful
Security	WFA,WPA/WPA2 and WAPI
Wired Communication	
Isolated RS485	
Isolation	2500 Vrms
Duplex type / Protocol	Half Duplex / MODBUS RTU
Number of receivers on bus	32
Data rate	115 Kbps
Connector type	Screw connector A, B , GND
Ethernet 10/100 Mbps	
Isolation	1500 Vrms
Protocol	MODBUS TCP
Connector Type	RJ45
USB	
Chipset	FTDI
Baud rate	115kbps
Connector Type	USB B
Relay	
No of Relay	1 x
Power Rating	5 Amps 250v
Zero Crossing Input	
No of Channel	1 x
Frequency	50/60 Hz
Max Voltage AC	250V
Memory FRAM	
Memory	25Kb
Write Cycle	1 Trillion
Memory SDCARD	
Memory	8 GB
DATA Storing Format	CSV
Real Time Location (GPS)*	
GPS Type	Multi – Constellation GNS GPS Receiver
Antenna mode	Active
Antenna Type	External Antenna
RTC	
Battery Backup	3.3V
Accuracy	+/- 3.5ppm From -40 to +85 degree C



Supply voltage	
Supply Input Voltage	12V / 24V
Permissible range, lower limit (DC)	9V
Permissible range, Upper limit (DC)	36V
Installation	
Mounting	Wall / DIN Rail
Enclosure	IP20
Dimensions	
Length	110 mm
Height	72.5 mm
width	110 mm
Weight	150 g