TECHNICAL SPECIFICATION



Modbus RTU gateway with LTE and GSM

AG-801



Features

- LTE + GSM and Ethernet connectivity
- Opto-isolated Modbus RTU interface
- · 2 digital inputs with SMS alert option
- Inbuilt website for configuration
- Configuration by SMS, website or server
- Support PoE
- · Wide power supply range
- GSM signal strength level indicator
- RX/TX indicators
- TCP/IP and JSON string format
- Modbus data archive in internal memory
- DIN rail mounting

The AG-801 is a Modbus RTU Gateway dedicated to work with remote monitoring systems. It support two-way communication with server trough LTE/GSM or Ethernet. Gateway has isolated Modbus RTU interface to communicate with energy meters, PLCs and other Modbus devices. Can be configured by: internal website, SMS, string from server and configuration file loaded in predefine URL.

Gateway can be use to data acquisition from any Modbus RTU device – parameter measurement, energy meters, consumption measurements, PLC, and remote control of any device like: PLC's, remote pumping system, irrigation equipment, agricultural controls etc.

The AG-801 has advance alert option with 10 mobile number list for SMS alerts. In superCap models there is power backup with power loss alert facility.

Description	Parameter			
Serial Interface				
Interface Type	RS485			
Data Rate	1200bps ~ 460800bps			
Signals	A and B			
Data Length	7, 8 bits			
Parity	Odd, Even, None			
Stop Bits	1, 1.5, 2			
Flow Control	None			
Connector	Pluggable screw socket			
Protection	Opto-isolated 2.5kV RMS per UL 1577			
	IEC 61000-4-2 level 4: - 15 kV (air discharge) - 8 kV (contact discharge) MIL STD 883C-Method 3015-6:			

Description	Parameter			
Serial Interface				
	class 3. (human body model)			
	Fail-safe receiver for bus open, short and idle			
LTE/GSM Interface				
LTE band FDD	B1/ B3/ B5/ B7/ B8			
LTE band TDD	B34/B38/B39/B40/B41			
GSM band	Dual-band 900/1800MHz			
Slot	GPRS multi-slot class 12/10			
Link	LTE FDD: Max 10Mbps/5Mbps			
	LTE-TDD: Max. 8.96Mbps/3.1 Mbps			
	GPRS: Max 107Kbps/85.6Kbps (downlink/uplink max)			

Description	Parameter			
Power	Compliant to GSM phase 2/2+ - Class 3 (23dBm±2dB) for LTE - Class 4 (2 W 900MHz) - Class 1 (1 W 1900MHz)			
SIM card	MicroSIM, push-pull type holder 3V/1.8V			
Antenna Connector	SMA female			
Ethernet ¹				
Number	1			
Туре	10/100M ports			
PoE	PoE (spare pare)			
Data to Server Protocol				
Protocol type	TCP/IP and JSON			
Authorisation	By authorisation key			
	Dual way by TCP/IP			
Communication type	One way in JSON (Gateway to			
server) Digital Inputs				
Input number	2			
Input type	Opto-isolated 2.5kV			
Voltage range	30V _{max}			
High level	4.5V to V _{max}			
Configuration	4.5V to V _{max} Separate IN-GND			
Connector	Pluggable screw socket			
	unctions Indicators			
- System 1	PWR – power indicator			
	ACT – activity			
	TXD - data indicator			
Indicators	RXD - data indicator			
	GSM level indicator in 4 LED			
	Digital input active indicator			
Software				
	Soπware			
OS support	Any latest internet browser			
	Any latest internet browser ower supply 3 pin (+, -, earthing)			
Connector	Any latest internet browser ower supply			
Po	Any latest internet browser ower supply 3 pin (+, -, earthing) Pluggable screw socket			
Connector Power Voltage range Power consumption	Any latest internet browser ower supply 3 pin (+, -, earthing) Pluggable screw socket 8-36V DC			
Connector Power Voltage range	Any latest internet browser ower supply 3 pin (+, -, earthing) Pluggable screw socket 8-36V DC 3W average			
Connector Power Voltage range Power consumption Protection	Any latest internet browser ower supply 3 pin (+, -, earthing) Pluggable screw socket 8-36V DC 3W average Reverse polarity			
Connector Power Voltage range Power consumption Protection	Any latest internet browser ower supply 3 pin (+, -, earthing) Pluggable screw socket 8-36V DC 3W average Reverse polarity Over voltage			
Connector Power Voltage range Power consumption Protection Supe	Any latest internet browser ower supply 3 pin (+, -, earthing) Pluggable screw socket 8-36V DC 3W average Reverse polarity Over voltage erCAP backup ²			
Connector Power Voltage range Power consumption Protection Supe Backup time Charging time	Any latest internet browser ower supply 3 pin (+, -, earthing) Pluggable screw socket 8-36V DC 3W average Reverse polarity Over voltage erCAP backup ² 30 second			

Description	Parameter			
Housing	Aluminium			
Weight	260g			
Dimensions (W x H x D)	88mm x 35mm x 87mm			
Environmental Specification				
Operating Temp.	-25 ~ 75°C (-13 ~ 167°F)			
Storage Temp.	-40 ~ 85°C (-40 ~ 185°F)			
Ambient RH	5% to 95% (non-condensing)			

¹ On Ethernet SSL is not available

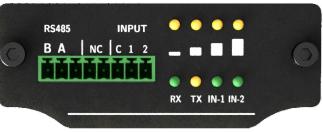
² Selected SC models only

Model selection chart

Ordering model selection chart

Models	Hardware Options		
Model	Mobile		Backup
AG-801	GPRS	LTE	SuperCAP
AG-801-GS	√		
AG-801-LT		√	
AG-801-LT-SC		√	√









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