TECHNICAL SPECIFICATION

ATREYO®
SOLUTIONS THAT SIMPLIFY

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
Type	10/100M ports
PoE	PoE (spare pare)
Data to Server Protocol	
Protocol type	TCP/IP and JSON
Authorisation	By authorisation key
Communication type	Dual way by TCP/IP
	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	Separate IN-GND
Connector	Pluggable screw socket
System Functions Indicators	
Indicators	PWR – power indicator
	ACT – activity
	TXD – data indicator
	RXD – data indicator
	GSM level indicator in 4 LED
	Digital input active indicator
Software	
OS support	Any latest internet browser
Power supply	
Connector	3 pin (+, -, earthing) Pluggable screw socket
Power Voltage range	8-36V DC
Power consumption	3W average
Protection	Reverse polarity
	Over voltage
SuperCAP backup[2]	
Backup time	30 second
Charging time	10 minute (approx)
Physical Characteristics	
Installation	DIN-Rail

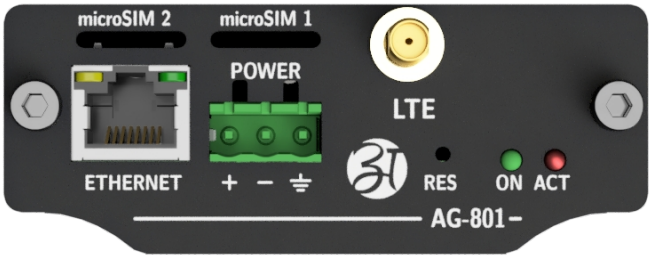
Description	Parameter
Housing	Aluminium
Weight	260g
Dimensions (W x H x D)	88mm x 35mm x 87mm
Environmental Specification	
Operating Temp.	-25 ~ 75°C (-13 ~ 167°F)
Storage Temp.	-40 ~ 85°C (-40 ~ 185°F)
Ambient RH	5% to 95% (non-condensing)

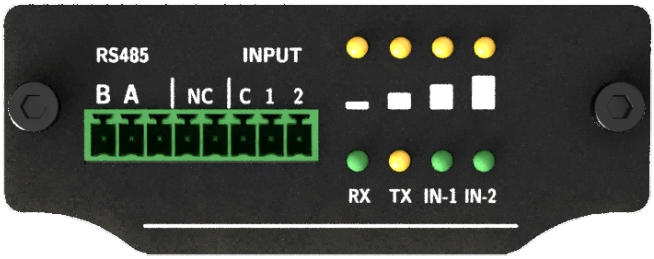
1 On Ethernet SSL is not available
2 Selected SC models only

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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