

# TECHNICAL SPECIFICATION

## Modbus Gateway With Ethernet Connectivity

## AG-501



### Features

- Opto-isolated Modbus RTU interface
- 2 digital isolated inputs
- Inbuilt website for configuration
- Configuration by website or from server
- Support PoE
- Wide power supply range
- RX/TX indicators
- TCP/IP and JSON string format
- Modbus data archive in internal memory
- DIN rail mounting

The AG-501 is an industrial gateway for remote control of Modbus RTU devices. Gateway is working Ethernet network and support two-way communication. Opto-isolation on Modbus interface make device more safe and protect from surges. In addition Gateway has 2 opto-isolated digital inputs with alert support.

Internal website for configuration make implementation easy and quick. Compact design of AG-501 from aluminium make it very easy to install and service. Standard DIN rail clamp make installation in panel boxes more convenient.

Description	Parameter
Serial Interface	
Interface Type	RS485
Data Rate	1200bps ~ 921600bps
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: class 3. (human body model)
	Fail-safe receiver for bus open, short and idle

Description	Parameter
Ethernet	
Number	1
Type	10/100M port
PoE	PoE class A (spare pare)
Data to Server Protocol	
Protocol type	TCP/IP and JSON
Authorisation	By authorisation key
Communication type	Dual way by TCP/IP
	MQTT (under development)
Encryption support	One way in JSON (Gateway to server)
	SSL on LTE and GSM, (TLS1.2)
System Functions Indicators	
Indicators	PWR – power indicator
	ACT – activity

Description	Parameter
	TXD – data indicator
	RXD – data indicator
	Digital input active indicator
<b>Configuration and System</b>	
<b>Configuration method</b>	Internal website
	String from TCP/IP server
	Remote or local configuration file
<b>Access authorisation</b>	Password protection
<b>System protection</b>	Watchdog, and configurable guard
<b>OS support</b>	Any latest internet browser
<b>Power Supply</b>	
<b>Connector</b>	3 pin (+, -, earthing) Pluggable screw socket
<b>Power Voltage range</b>	10-36V DC (12-36 in BAT models)
<b>Power consumption</b>	3W average
<b>Protection</b>	Reverse polarity
	Over voltage
<b>SuperCAP backup<sup>1</sup></b>	
<b>Backup time</b>	30 second
<b>Charging time</b>	10 minute (approx)
<b>Physical Characteristics</b>	
<b>Installation</b>	DIN-Rail
<b>Housing</b>	Aluminium
<b>Weight</b>	~ 0.5kg
<b>Dimensions</b>	88mm x 92mm x 32mm?
<b>Environmental Specification</b>	
<b>Operating Temp.</b>	-25 ~ 70°C (-13 ~ 158°F)
<b>Storage Temp.</b>	-40 ~ 85°C (-40 ~ 176°F)
<b>Ambient RH</b>	5% to 95% (non-condensing)

<sup>1</sup> Selected SC models only

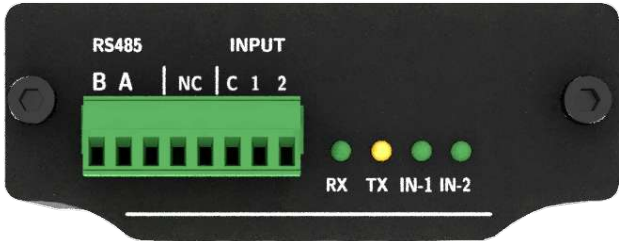
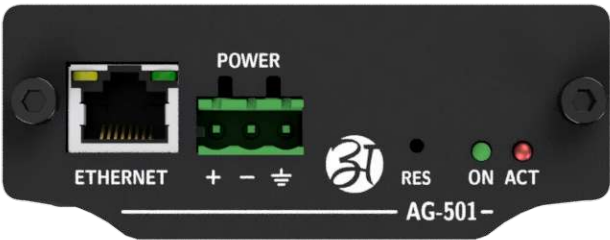
Ordering model selection chart

Models	Hardware Options
Model	Backup
AG-811	SuperCAP
AG-501	
AG-501-SC	✓

AG-501

AG-501-SC

✓



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