



Features

- LTE and GSM connectivity
- 3 independent relay outputs
- Opto-isolated Modbus RTU
- 2 opto-isolated digital inputs with SMS alert
- Astronomical timer
- GNSS for accurate time and location
- Internal website for configuration
- LAN with PoE
- Output control from server and by SMS
- Modbus archive data in internal memory
- Aluminium compact size casing
- DIN rail mounting

The AG-831 is a Gateway dedicated to work with central controlling and monitoring systems. It supports two-way communication with server through LTE/GSM or Ethernet. It has inbuilt timer with 10 ON/OFF schedule within 24h, auto configurable sunrise/sunset timer based on geolocation and has 3 independent relay outputs. Every output can be controlled by separate time schedule. 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 predefined URL. For accurate time and location it has GPS and RTC.

Gateway is for use in street light control panels and other applications where it is needed to control accurate ON/OFF time with support of Modbus devices. It can be controlled remotely from server or via SMS or also work in stand alone mode.

The AG-831 has advanced 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)

Description	Parameter
	MIL STD 883C-method 3015-6: class 3. (human body model) Fail-safe receiver for bus open, short and idle
LTE/GSM Interface¹	
Band LTE FDD	B1/B3/B5/B8
Band LTE TDD	B34/B38/B39/B40/B41
Band GSM	900/1800MHz
GPRS slot	Multi-slot class 12/10
Link	GPRS class 12: max. 85.6 kbps (downlink/uplink)

¹ LTE/GSM Bands are mentioned for IN version of LTE modem. For EU and GL please contact support.

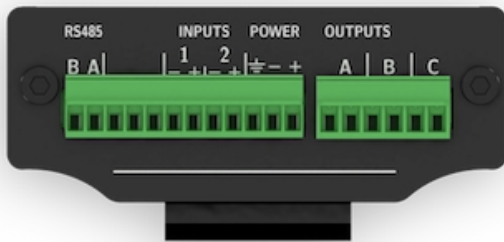
Description	Parameter
LTE/GSM Interface	
Power	Compliant to GSM phase 2/2+ - Class 4 (2 W 900MHz) - Class 1 (1 W 1800MHz)
SIM card	MicroSIM, push-pull type holder 3V/1.8V
Antenna connector	SMA female
GNSS	
GNSS systems	GPS, BDS, Galileo, GLONASS, QZSS
Ethernet²	
Number	1
Type	10/100M port
PoE	PoE class A (spare pare)
Data to Server Protocol	
Protocol type	TCP/IP and JSON
Authorisation	By authorisation key
Communication type	Dual way by TCP/IP One way in JSON (Gateway to server)
Encryption support	SSL on LTE and GSM, (TLS1.2)
Digital Inputs	
Input number	2
Input type	Opto-isolated 2.5kV
Configuration	Separate IN-GND
Connector	Pluggable screw socket
Relay Outputs	
Output number	3
Output type	NO
Load_{max}	3A 230V AC or 3A 30V DC
Connector	Pluggable screw socket
System Functions Indicators	
Indicators	PWR - power indicator ACT - activity TXD - data indicator RXD - data indicator Digital output indicators Digital input active indicator
Configuration and System	
Configuration method	SMS specific commands Internal website String from TCP/IP server Remote or local configuration file
Access authorisation	Password protection
System protection	Watchdog, and configurable guard

² The current firmware version does not support SSL over Ethernet

Description	Parameter
OS support	Any latest internet browser
Power Supply	
Connector	Pluggable screw socket
Power Voltage range	8-36V DC
Power consumption	3W average
Protection	Reverse polarity Over Voltage
SuperCAP backup³	
Backup time	30 second
Charging time	10 minute (approx)
Physical Characteristics	
Installation	DIN-Rail
Housing	Aluminium
Weight	270g
Dimensions	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)

³ SC models only

Gateway



Selected model list

Models	Hardware Options	
A-831	Mobile LTE	Backup SuperCAP
AG-831-LT-IN	√	
AG-831-LT-EU	√	
AG-831-LT-GL	√	
AG-831-LT-IN-SC	√	√
AG-831-LT-EU-SC	√	√
AG-831-LT-GL-SC	√	√

Table with model structure for ordering

Model structure			
Model structure example	AG-831-	LT-	EU-SC
Base model name			
AG-831			
Cellular communication modem			
LT (LTE communication module present)			
LTE/GSM module regional information			
IN (certification of LTE module for India)			
EU (certification of LTE module for Europe)			
GL (global certification of LTE module)			
SuperCAP backup			
SC (for last message on power loss)			

For more details
scan or click on
QR code



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