



Features

- OpenWRT system
- LTE, GSM, WiFi and dual Ethernet
- 2 opto-isolated digital inputs
- 1 potential free relay output
- Opto-isolated RS485
- USB host with storage support
- LTE Signal strength indicator
- Wide power supply range up to 36V
- DIN rail mounting
- Aluminium enclosure

The AG-701 is multipurpose Industrial IoT Gateway with OpenWRT system. The internal memory can be easily extended by microSD card. The LTE module is in standard mini PCIe type and can be changed according to customer needs.

AG-701 has opto-isolated RS485, two digital inputs and one relay output. Support Modbus RTU and Modbus TCP/IP.

Dual Ethernet, isolated interfaces wide power supply range up to 36V and extended temperature range from -25°C up to +85°C is perfect choice for industrial control systems.

Description	Parameter
Processor	
ARM	MIPS 580MHz
RAM	
Memory size	128MB DDR2
Memory speed	1066max
Storage	
MicroSD card	Up to 32Gb
Internal flash	32Mb
USB	
USB port number	1
USB	USB 2.0
Connector	USB type A (vertical)
Protection	IEC 61000-4-2 level 4: - 15 kV (air discharge) - 8 kV (contact discharge)
USB overload	500mA
Serial RS485	

Description	Parameter
Port number	1
Interface Type	RS485
Data Rate	1200bps ~ 921600bps
Signals	A and B
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
LTE/GSM Interface	
Band LTE FTD	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)
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, BAIDOU
Antenna Connector	SMA female
Digital Inputs	
Input number	2
Input type	Opto-isolated 2.5kV
Configuration	Common IN-GND
Connector	Pluggable screw socket
Max Vin	30V DC
Logic 1 Voltage range	3.5V to max V_{in}
Relay Outputs	
Output number	1
Output type	NO
Load _{max}	3A 230V AC or 3A 30V DC
Connector	Pluggable screw socket

Description	Parameter
System Functions Indicators	
Indicators	ACT - activity
	LTE signal level - 4 LED
	RX
	TX
	Out Enable
	LTE Enable
	Connected
System	
Operating systems	OpenWRT
Booting source	Flash memory
Power Supply	
Power Voltage range	8-36V DC
Power consumption	4W average
Connector	3 pin (+, -, earthing) pluggable screw socket
Protection	Reverse polarity, over voltage
Physical Characteristics	
Installation	DIN-Rail, clamp
Housing	Aluminium
Weight	270g
Dimensions	88mm x 35mm x 87mm
Environmental Specification	
Operating Temp.	-25 ~ 85°C (-13 ~ 158°F)
Storage Temp.	-40 ~ 85°C (-40 ~ 176°F)
Ambient RH	5% to 95% (non-condensing)

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