TECHNICAL SPECIFICATION

Programmable OpenWRT LTE IoT gateway with RS485 and digital inputs	AG-207

Features

- **OpenWRT system**
- **Expanded memory for applications**
- **LTE, GSM, WiFi and ethernet**
- **GNSS**
- **2 opto-isolated digital inputs**
- **RS485**
- **USB host with storage support**
- **Wide power supply range up to 36V**
- **DIN rail mounting**
- **Aluminium enclosure**

Industrial IoT Gateway AG-207 powered by the OpenWRT system. With OpenWRT, you gain access to an expansive repository of over 6000 ready-to-use applications, along with the freedom to integrate your own custom solutions. This cutting-edge gateway, AG-207 features RS485 and two digital inputs. Boasting enhanced built-in memory and RAM, the Gateway unlocks limitless programming potential, empowering your projects like never before.

Description	Parameter
Processor	
MIPS	MIPS24KEc 580MHz
RAM	
Memory size	256MB DDR2
Memory speed	1066max
Storage	
Internal flash	32MB+512MB ExtRoot support (overlay)
USB	
USB port number	1
USB type	USB 2.0, host with storage support
Connector	USB type A
Protection	IEC 61000-4-2 level 4: – 15 kV (air discharge) – 8 kV (contact discharge)
USB overload	500mA
Serial RS485	
Port number	1

Description	Parameter
Interface Type	RS485
Data Rate	600 – 460800 bps
Signals	A and B
Connector	Pluggable screw
Protection	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
Ethernet	
Number	1
Type	10/100M port with spare pare PoE
Ethernet connector	RJ45 with LED indicators
WiFi	
WiFi type	2.4GHz
WiFi standard	IEEE 802.11/a/b/g/n
Antenna connector	SMA female

Description	Parameter
Cellular[1]	
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 3V/1.8V
Antenna connector	SMA female
GNSS[2]	
GNSS systems	GPS, BDS, Galileo, GLONASS, QZSS
Antenna connector	SMA female
Digital Inputs	
Input number	2
Input type	Opto-isolated 2.5kV
Configuration	Common IN-GND
Connector	Pluggable screw
Max $_{Vin}$	30V DC
Logic 1 Voltage range	3.5V to max $_{Vin}$
System Functions Indicators	
Indicators	ACT – activity RS485 (or custom use) Cellular WiFi IN-1 and IN-2
System	
Operating systems	OpenWRT 23.05, Kernel 5.15.71, Atreyo Environment V1.01.02
Booting source	Flash memory
Power Supply	
Power Voltage range	8-36V DC
Power consumption	1.6W (24V without LTE on)
Connector	Pluggable screw (+, -, earthing)
Protection	Reverse polarity, over voltage
Physical Characteristics	
Installation	DIN-Rail, clamp
Housing	Aluminium

Description	Parameter
Weight	220g approx
Dimensions	88mm x 65mm x 35mm
Environmental Specification	
Operating temp.	-20 ~ 65℃ (-13 ~ 131°F)
Storage temp.	-40 ~ 85℃ (-40 ~ 176°F)
Ambient RH	5% to 95% (non-condensing)

1 Apply to LT models. Refer model selection chart. LTE/GSM Bands are mentioned for IN version of LTE modem. For EU and GL please contact support.
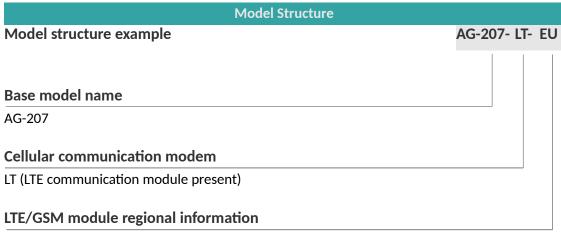2 Apply to LT models. Refer ordering chart.

Gateway

Selected model list

Models	Hardware Options				More Info
Model		**Cellular Network**		**GNSS**	
AG-207	**GPRS**	**3G**	**LTE**		
AG-207					Without LTE module
AG-207-LT-IN	√		√	√	Standard model for India
AG-207-LT-EU	√		√	√	Model for EU
AG-207-LT-GL	√	√	√	√	Global model

Table with model structure for ordering

Model Structure
Model structure example   **AG-207- LT- EU**

Base model name

AG-207

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)

For more details scan or click on QR code

Disclaimer

- All dimensions mentioned in the drawings are not to scale and may vary/differ due to construction contingencies and site conditions which are subject to change as may be decided by the company.
- The specifications and amenities mentioned in this document and promotional documents are only representational and informative. The descriptions in this specification are based on the default configuration of your device.
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