TECHNICAL SPECIFICATION

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Industrial LTE/GSM Modem with GNSS and DIV antenna

AM-201

Features

- **4G LTE CAT1 with fallback to 3G and GPRS**
- **GNSS optional**
- **SMS support**
- **USB, RS232, RS485 interfaces**
- **USB drivers for Linux and Windows systems**
- **Wide power supply range up to 36V**
- **DIN rail mounting**
- **Aluminium enclosure**

This is 4G LTE Cat1 modem for use in industrial environment. It communicate to host by USB, RS485 and RS23. The modem has diversional and GNSS antenna options. For use in IoT systems, industrial control systems, electrical panels and distribution systems, public display controllers, remote monitoring for agriculture and industrial IoT.

Description	Parameter
Cellular specification	
Cellular bands	Refer Cellular specification chart
SIM card	3V/1.8V
SIM card holder	MicroSIM, push-pull type holder
Antenna Connector	SMA female
DIV antenna	SMA female[1]
USB	
USB port number	1
USB	2USB 2.0
Connector	USB type B
Protection	IEC 61000-4-2 level 4: – 15 kV (air discharge) – 8 kV (contact discharge)
Serial RS485	
Port number	1
Interface Type	RS485
Data Rate	4800, 9600, 19200, 38400, 57600, 115200, 230400, 460800 and 921600 bps baud rates The default is 115200 bps
Signals	A, B and common ground
Connector	Pluggable screw socket
Protection	IEC 61000-4-2 level 4: – 15 kV (air discharge) – 8 kV (contact discharge)
Serial RS232	
Port number	1
Data Rate	4800, 9600, 19200, 38400, 57600, 115200, 230400, 460800 and 921600 bps baud rates, The default is 115200 bps
Signals	RX, TX and common ground
Connector	Pluggable screw socket
Protection	ESD Protection Exceeds ±15 kV Using Human-Body Model (HBM)
GNSS[2]	
GNSS Systems	GPS, BAIDOU (GPS / GLONASS /

1 GL model only

Description	Parameter
GNSS	
	BDS / Galileo)
Antenna Connector	SMA female
Antenna type	Active 3.3V antenna support
System Functions Indicators	
Indicators	ON, ACT, LTE (GNSS antenna power in GL version)
System	
To work on USB	Linux, Windows
To work by serial	All systems by AT commands
Power Supply	
Power Voltage range	8-36V DC
Power consumption	1W average
Connector	2 pin (+, -) pluggable screw socket
Protection	Reverse polarity, surge
Physical Characteristics	
Installation	DIN-Rail, clamp
Housing	Aluminium
Weight	190g
Dimensions	88mm x 65mm x 35mm
Environmental Specification	
Operating temp.	-20 ~ 65°C (-4 ~ 149°F)
Storage temp.	-40 ~ 85°C (-40 ~ 185°F)
Ambient RH	5% to 95% (non-condensing)

2 GL model only

Cellular specification of IN (India) version of Modem

EU version of gateway	Cellular network interface details	
Band LTE FTD	B1/B3/B5/B8	
Band LTE TDD	B34/B38/B39/B40/B41	
WCDMA	B1/B5/B8	
Band GSM/EDGE	B3/B8	
GPRS slot	Multi-slot class 12/10	
Bandwidth	1.4/ 3/ 5/ 10/ 15/ 20 MHz	
Output power	LTE-FDD	Class 3 (23 dBm ±2 dB)
	LTE-TDD	Class 3 (23 dBm ±2 dB)
	EGSM900	Class 4 (33 dBm ±2 dB)
	DCS1800	Class 1 (30 dBm ±2 dB)
Maximum data rate LTE	LTE-FDD	150 Mbps (DL)/Max. 50 Mbps (UL)
	LTE-TDD	130 Mbps (DL)/Max. 30 Mbps (UL)
Maximum data rate UMTS	DC-HSDPA	21 Mbps (DL)/ 5.76 Mbps (UL)
	WCDMA	384 kbps (DL)/Max. 384 kbps (UL)
Maximum data rate GSM	EDGE	236.8kbps (DL)/Max. 236.8 kbps (UL)
	GPRS	85.6 kbps (DL)/Max. 85.6 kbps (UL)
Power	Compliant to GSM phase 2/2+	
	– Class 4 (2 W 900MHz)	
	– Class 1 (1 W 1800MHz)	

Cellular specification of GL (global) version of Modem

GL version of gateway	Cellular network interface details	
Band LTE FTD	B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28	
Band LTE TDD	B38/B39/B40/B41	
Band WCDMA	B1/B2/B4/B5/B6/B8/B19	
Band GSM	B2/B3/B5/B8	
Output power	GSM850	Class 4 (33 dBm ±2 dB)
	EGSM900	Class 4 (33 dBm ±2 dB)
	DCS1800	Class 1 (30 dBm ±2 dB)
	PCS1900	Class 1 (30 dBm ±2 dB)
	GSM850 8-PSK	Class E2 (27 dBm ±3 dB)
	EGSM900 8-PSK	Class E2 (27 dBm ±3 dB)
	DCS1800 8-PSK	Class E2 (26 dBm ±3 dB)
	PCS1900 8-PSK	Class E2 (26 dBm ±3 dB)
	WCDMA	Class 3 (24 dBm +1/-3 dB)
	LTE-FDD	Class 3 (23 dBm ±2 dB)
	LTE-TDD	Class 3 (23 dBm ±2 dB)
Maximum data rate LTE	LTE-FDD	150 Mbps (DL)/Max. 50 Mbps (UL)
	LTE-TDD	130 Mbps (DL)/Max. 30 Mbps (UL)
Maximum data rate UMTS	DC-HSDPA	42 Mbps (DL)
	HSUPA	5.76 Mbps (UL)
	WCDMA	384 kbps (DL)/Max. 384 kbps (UL)
Maximum data rate GSM	EDGE	296 kbps (DL)/Max. 236.8 kbps (UL)
	GPRS	107 kbps (DL)/Max. 85.6 kbps (UL)

Standard model list

Model	Hardware Options				More information
AM-201	Cellular Network			GNSS	
	GPRS	3G	LTE		
AM-201-IN	✓	✓	✓		
AM-201-GL	✓	✓	✓	✓	

For more details scan or click on QR code

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