



Features

- Cortex-A7 quad core
- LTE, LAN and connectivity
- GNSS
- Support of Linux: Debian, Ubuntu, Yocto etc.
- 2 opto-isolated digital inputs
- 1 potential free output
- Opto-isolated RS485 and RS232
- USB host
- HDMI display support
- Wide power supply range up to 36V
- DIN rail mounting
- Aluminium enclosure

The AG-1621 is multipurpose Industrial Computer / IoT Gateway based on four core ARM processor. Support many distribution of Linux systems. 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-1621 has opto-isolated RS485, RS232, two digital inputs and one relay output.

This gateway can run Raspberian, Debian, Yocto Linux and many other Linux distributions. The powerful processor, 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.

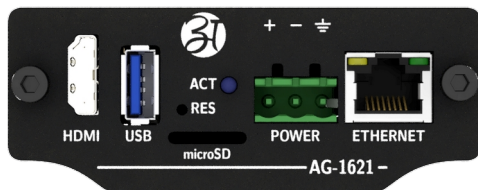
Description	Parameter
Processor	
ARM	Cortex-A7 quad core
L1 cache	32KB for data, 32KB for instruction
L2 cache	512KB, 8 ways
Target frequency	960MHz
Multimedia processing	NEON engine with SIMDv2/VFPv4 ISA support
RAM	
Memory size	512MB DDR3
Memory speed	1066max
Graphics	
HDMI	TX 1.4, resolution up to 720P
Storage	
MicroSD card	Up to 356Gb

Description	Parameter
eMMC	8Gb (optional 4, 16 and 32Gb)
USB	
USB port number	1
USB	2x USB 2.0
UVC	Support USB video class (UVC)
Connector	USB type A (vertical)
Protection	IEC 61000-4-2 level 4: - 15 kV (air discharge) - 8 kV (contact discharge)
USB overload	1.6A common to 2 port.
Serial RS232	
Port number	1
Data Rate	1200bps ~ 921600bps
Signals	RX, TX, RTS, CTS
Type	Opto-isolated (common with RS485)

Description	Parameter
Serial RS232	
Connector	Pluggable screw socket
Protection	Opto-isolated 2.5kV RMS per UL 1577
Serial RS485	
Port number	1
Interface Type	RS485
Data Rate	600bps ~ 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
LTE/GSM Interface¹	
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 (GPS / GLONASS / BDS / Galileo ²)
Antenna Connector	SMA female
Ethernet	
Number	2
Type	10/100M port
PoE	PoE (spare pare)
Ethernet Connector	RJ45 with LED indicators
Digital Inputs	
Input number	2
Input type	Opto-isolated 2.5kV

¹ basic model specifications. For EU and GL models please contact support.
² GL and EU models only

Description	Parameter
Configuration	Common IN-GND
Connector	Pluggable screw socket
Max Vin	30V DC
Logic 1 Voltage range	3.5V to max _{vin}
Relay Outputs	
Output number	1
Output type	NO
Load _{max}	3A 230V AC or 3A 30V DC
Connector	Pluggable screw socket
System Functions Indicators	
Indicators	ACT - activity - dual colour
System	
Operating systems	Debian Linux, Raspberry Pi OS, Ubuntu Linux etc.
Booting source	eMMC, microSD
Power Supply	
Power Voltage range	8-36V DC
Power consumption	6W average
Connector	3 pin (+, -, earthing) pluggable screw socket
Protection	Reverse polarity, surge
Physical Characteristics	
Installation	DIN-Rail, clamp
Housing	Aluminium
Weight	240g
Dimensions	88mm x 35mm x 87mm (W x H x D)
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)



Ordering information

Models	Hardware Options				Software		
Model	Cellular Network		GNSS	Internal Memory		System	
AG-1621	GPRS	3G	LTE	8GB	16GB	Linux	OpenWRT
AG-1621-8G				✓		✓	
AG-1621-8G-LT-IN	✓		✓	✓		✓	
AG-1621-8G-LT-EU	✓		✓	✓		✓	
AG-1621-8G-LT-GL	✓	✓	✓	✓		✓	
AG-1621-8G-WRT				✓			✓
AG-1621-8G-LT-IN-WRT	✓		✓	✓			✓
AG-1621-8G-LT-EU-WRT	✓		✓	✓			✓
AG-1621-8G-LT-GL-WRT	✓	✓	✓	✓			✓

Model structure example

AG-1621- 8G-LT- EU- WRT

Base model name

AG-1621

Internal memory

8G, 16G, 32G, 64G (size of internal eMMC)

Communication modem

LT (LTE communication module present)

LTE/GSM module regional information

IN (certification of LTE module for India and China)

EU (certification of LTE module for Europe)

GL (global certification of LTE module)

Operating system

WRT (pre-installed openWRT system)

empty (pre-installed Raspberry PI system)

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