

AG-1629

Programmable industrial IoT Gateway working on Linux systems. It provides the ability to install custom scripts and use ready-made scripts. Under the control of the NodeRED it gives unlimited possibilities for easy creation of gateway operation logic. It also has an cellular modem with support for 2 SIM cards. It has two LAN, to isolated RS485 interfaces and four opto-isolated I/Os.

Please read carefully before starting. Also read the product [safety information](#).

- [General information](#)
- [Safety information](#)

General information

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| Download technical specification | Technical Specification |
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The AG-1629 is a Quad-core, highly effective ARM-based compact-size multipurpose industrial computer with IoT gateway functionality. It is designed for edge computing. It supports of Linux Debian. The computer has a built-in independent watchdog and a USB interface for debugging.

Model Selection

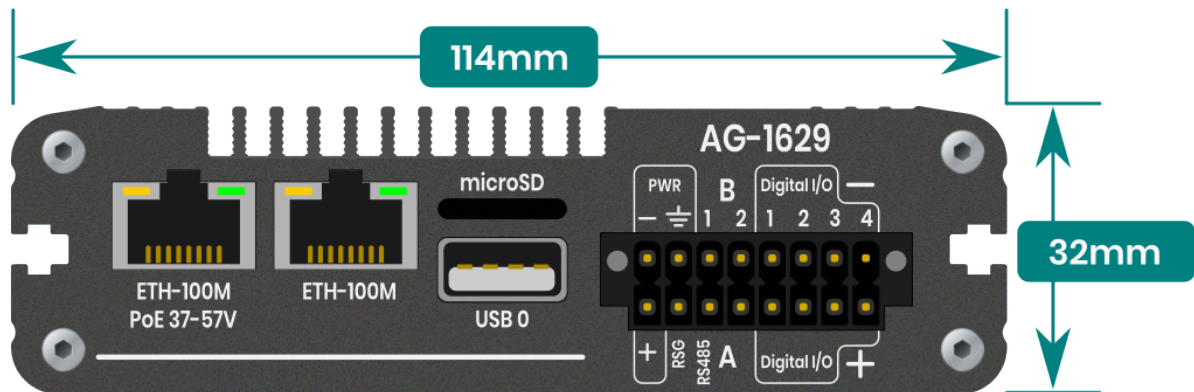
Atreyo manufactures several versions of the AG-1629 with respect to components and modules used in it.

| AG-1629 | Memory | | Hardware Options | | | | | | | | More information |
|-------------------|--------|-----|------------------|----|--------|------|------|------------|-------------|--------|------------------|
| | eMMC | RAM | Cellular Network | | | GNSS | WiFi | Digital In | Digital Out | Supply | |
| | GB | GB | GPRS | 3G | 4G LTE | | | | | V | |
| AG-1629 | 8 | 512 | | | | | | 4 | 4 | 7-48 | Without cellular |
| AG-1629-LT-EU | 8 | 512 | √ | | √ | √ | | 4 | 4 | 7-48 | For India and EU |
| AG-1629-LT-EU-WL3 | 8 | 512 | √ | | √ | √ | √ | 4 | 4 | 7-48 | For India and EU |
| AG-1629-LT-GL | 8 | 512 | √ | √ | √ | √ | | 4 | 4 | 7-48 | Global model |
| AG-1629-LT-GL-WL3 | 8 | 512 | √ | √ | √ | √ | √ | 4 | 4 | 7-48 | Global model |

Hardware

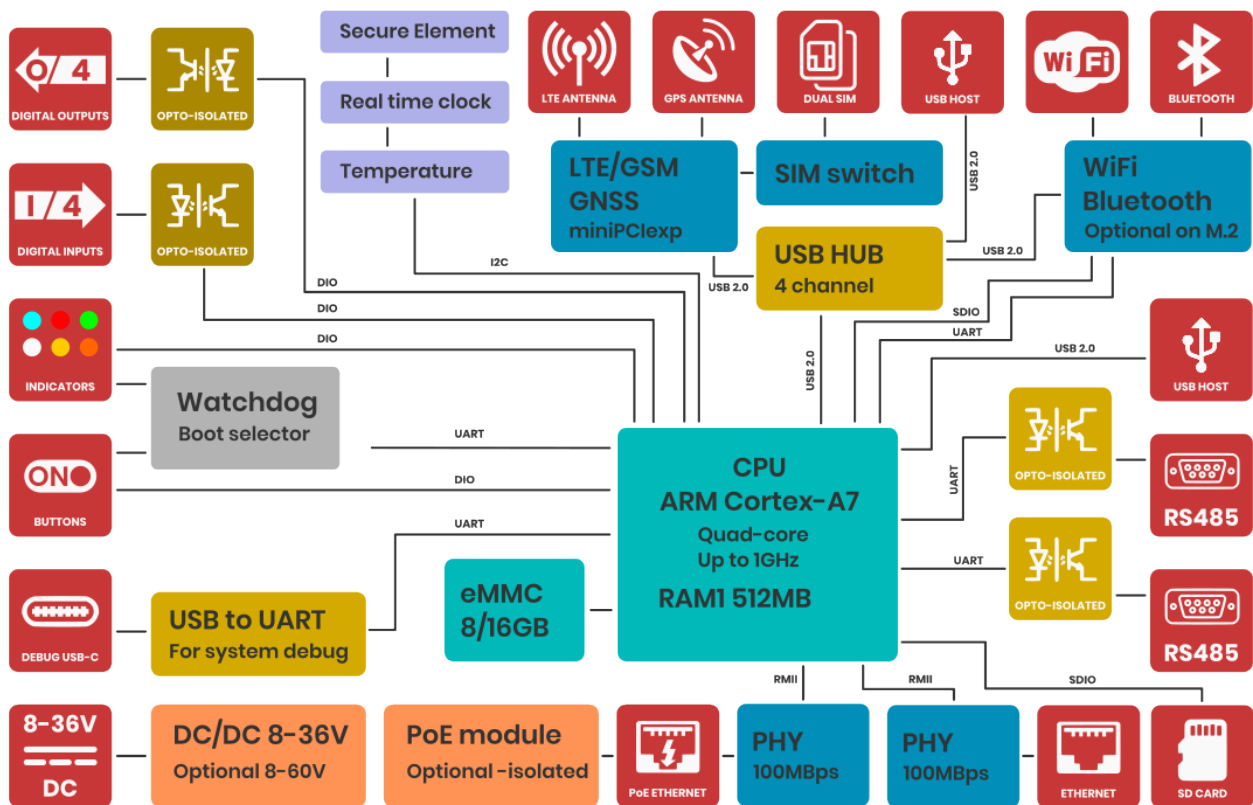
The gateway housing is made of anodized aluminum. There are heat sink fins on top. The gate heats up during operation and this is normal.

Side dimensions



Block diagram

For a better understanding of how the computer works, we present a block diagram.



Safety information

Operating environment

- The device is designed to be installed in clean, dust-free and insect-free places
- Operating temperature: -25 ~ 65°C (-13 ~ 149°F).
- Humidity range is 10% to 95% (non-condensing). Use the device in a dry environment.
- Away from heat sources and direct sunlight.
- It must not be exposed to acid fumes, salts and other chemicals.
- The device must not be used in places where there is a risk of gas explosion.

Use in inappropriate conditions may damage the device or shorten its life.

Electrical and power supply safety

- The device is powered with a voltage in the range of 8-48V. Voltage up to 24V is considered safe. Be especially careful when supplying them with higher voltages.
- The device has the ability to control the output with the Voltage of 50V. In this case, it is especially necessary to observe the safety rules during installation.
- Use only approved accessories
- Use the supplied power adapter or a good quality certified power adapter with the correct supply voltage range and sufficient power.
- Only use approved accessories like antenna etc.

Only a person with qualification and appropriate knowledge should install the device.

Malfunctioning and damaged device

- Do not disassemble the device.
- Only qualified personnel must service or repair the device or its accessories.
- If water or other liquid has got into the device, or if it looks mechanically damaged, do not connect the device, but take it to an authorized service center.

Radio frequency exposure

This device has been designed and manufactured not to exceed radio frequency energy emission limits set by regulatory agencies. To comply with RF exposure guidelines, the device must be used at least 20 cm away from a person's body. Failure to follow these instructions may result in

exceeding the applicable RF exposure limits. This only applies to models with a built-in LTE modem.

What to do and what not to do

- You are solely responsible for the use of the device and any consequences of its use.
- Do not store or use the device in harsh environments such as dust, gases, oils, chemical vapors and damp places.
- Do not throw the device and its accessories. Handle with care.
- The device heats up during operation. Ensure proper ventilation.
- If you need to dispose of your device, check your local regulations for recycling and disposal of electronics.
- Route power, Ethernet, and antenna cables properly so that they cannot be accidentally pulled out.
- The device should be used and kept away from small children.