



# Huawei AR502C Industrial IoT Gateway Brochure

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# HUAWEI AR502 Industrial IoT Gateway

## 1 Overview

The AR502 Industrial IoT Gateway is designed to work in harsh environments. It provides a rapidly deployable, highly available, reliable and secure solution into Internet of Things (IoT). Industry applications include transportation, financial, agriculture, electricity, oil, telemetry, retail, industrial automation, etc.

The AR502 has one model: AR502CG-L.

AR502CG-L	<ul style="list-style-type: none"><li>• Serial interface: <b>1*RS232</b></li><li>• Digital interface: <b>1*DI/DO</b></li><li>• Fixed Ethernet interface: <b>2*GE (100/1000M RJ45)</b></li><li>• Wireless WAN: <b>LTE (1*mini SIM)</b></li><li>• Dimensions (W x D x H): <b>150 x 100 x 44mm</b></li><li>• Power supply: <b>8~36VDC</b></li><li>• Operating temperature: <b>-25°C~65°C</b></li></ul>
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## 2 Key Features and Values

### 2.1 Typical Communication and Evolution

The AR502 IoT gateway is designed with serial port, digital I/O, LTE and GE interfaces. The gateway converts the data from 3rd party device to IP through the serial port, ZigBee/RF network, and GE. Also LTE or GE are supported as backhaul for the uplink.

Some types of the AR502 Integrates GE, RS232, RS485/RS422, ZigBee, six DI/DO interfaces and allows flexible configurations.

### 2.2 Better Service Experience

The AR502 gateway supports a high-performance processor. The AR502 operates over a wider temperature range, has a fan-less design and low power consumption. With these key features, it also supports connectivity to a diverse set of IoT end devices with

varied space and power capabilities.

## 2.3 Easy to Configure and Maintenance

The AR502 supports network management protocol SNMPv3, to enable remote management, including alarm and upgrades. The gateway can upgrade the configuration and firmware from a central server. This allows mass reconfiguration of many gateways.

## 3 Typical Applications

- **Transportation and security**

Connection of various sensors in lighting, trains, vehicles, container transportation assistance and river boats.

- **Energy and power industry**

Connection of electric-meter, wind power plants, solar panels, data transfer provided by gas, oil, water distribution networks and smart grids.

- **Self-service terminals**

Connection of ATMs, payment and gaming terminals, etc.

- **Metrology, alarm and warning systems**

Connection of sensors measuring water flow level in rivers, seismographs, rainfall meters, air pollution monitoring devices and meteorological stations.

## 4 Product Specifications

The following table lists the specifications of the AR502.

Specifications	AR502CG-L
Hardware Specifications	
RS232	1(RJ45)
RS485/RS422	-
Ethernet	100/1000M RJ45
DI	1
DO	1

Specifications	AR502CG-L
LTE	LTE (FDD) B1/B2/B3/B5/B7/B8/B20, all bands with diversity DC-HSPA+/HSPA+/HSPA/WCDMA B1/B2/B5/B8, all bands with diversity EDGE/GPRS/GSM 1900/1800/900/850 MHz
USB 2.0	1
Power Supply	DC: 8V~36V
DRAM Memory	256MB
Flash Memory	512MB
Power consumption	10 Watts (100% Load)
Dimensions ( W x D x H)	150 x 100 x 44mm (without antennas)
Operating temperature	-25°C to +65°C The device can work for 24 hours at temperatures in the range of -35°C to +75°C
Storage temperature	-40°C to +85°C
Relative humidity	5% to 95% RH (non-condensing)
Din-Rail Mount	Yes
Shock and vibration standards	EN50155
Safety compliance	IEC 60950-1, IEC60065, IEC60215
Software Specifications	
Basic features	<ul style="list-style-type: none"> <li>• TCP, UDP, ICMP, IPv4</li> <li>• PPP protocols: PPP, PAP, IPCP, CHAP, and BCP</li> <li>• NAT</li> </ul>
Unicast routing	Static IPv4
QoS	<ul style="list-style-type: none"> <li>• Traffic classification based on the Layer-2 header, Layer-3 information, Layer-4 information, and 802.1p priority</li> <li>• Traffic policing (CAR)</li> <li>• Traffic shaping</li> <li>• Queue scheduling of PQ, WRR, DRR, PQ+WRR, and PQ+DRR</li> <li>• Congestion avoidance, such as WRED and tail drop</li> </ul>

Specifications	AR502CG-L
Configuration and maintenance	<ul style="list-style-type: none"> <li>• CLI, NQA, Telnet, and SSH terminals</li> <li>• SNMPv1/v2c/v3</li> <li>• FTP and TFTP</li> <li>• Boot ROM upgrades and remote upgrades</li> <li>• User operation logs</li> </ul>
Security and management	<ul style="list-style-type: none"> <li>• AAA authentication, RADIUS authentication</li> <li>• Provides CPU protection</li> <li>• Ping and Tracert functions</li> </ul>

For more information, visit <http://enterprise.huawei.com/en/> or contact Huawei local sales office.