



- Performant
- IoT Ready
- Industrial and Automotive Grade
- Field Protocol Support
- Cloud Certified
- Open Platform
- Customizable



## Features

**i.MX6 Powered** - Powered by NXP i.MX6 CPU: great performance for industrial and lightly rugged applications

**IoT Ready** - Breadth of connectivity options: optional cellular modem, integrated GPS, Wi-Fi, BLE, dual Gigabit Ethernet and Fieldbus interfaces, including CAN bus ports, analog and digital I/Os, protected USB and serial ports

**Industrial and Automotive Grade** - Wide operating temperature, wide range power supply with transient protection, and SAE/J1455 certification

**Field Protocol Support** - Native support for Modbus, S7 and OPC UA, the extensible, secure, and platform-independent industrial interoperability standard

**Cloud Certified** - Seamless integration with Eurotech Everyware Cloud, Microsoft Azure, Amazon Web Services IoT and other Cloud services

**Open Platform** - Provides a Java/OSGi gateway middleware, to free the developer from proprietary solutions

**Customizable** - Flexible: personalization and full customization options are available, ranging from branding ("skin" and color) to deep HW/SW configurations

## Description

The ReliaGATE 10-20 is an industrial grade Multi-service IoT Edge Gateway that provides communications, computation power and a simplified application IoT framework for platform integration.

The ReliaGATE 10-20 offers a variety of communication interfaces including cellular, Wi-Fi and Bluetooth, enabling connectivity to a wide range of sensors and edge devices essential in IoT applications. The ReliaGATE 10-20 also includes interfaces for wired connectivity such as Dual Gigabit Ethernet, CAN bus, analog and digital I/O, up to four serial ports and three USB ports.

The ReliaGATE 10-20 comes with Everyware Software Framework (ESF), a commercial, enterprise-ready edition of Eclipse Kura, the open source Java/OSGi middleware for IoT Edge Gateways.

Distributed and supported by Eurotech, ESF supports ready-to-use field protocols (including Modbus, OPC-UA, S7), MQTT connectivity, web-based visual data flow programming and deep configuration.

ESF is also integrated with Everyware Cloud (EC), Eurotech IoT Integration Platform (separately available), enabling advanced diagnostics, provisioning, and full remote device access and management.

The ReliaGATE 10-20 is Microsoft Azure certified and can also be integrated with 3rd party cloud services such as Amazon Web Services IoT.

### Ordering code: REGATE-10-20-XX

| XX                      |                     | - 01                                                                                             | - 21       | - 31 |
|-------------------------|---------------------|--------------------------------------------------------------------------------------------------|------------|------|
| <b>PROCESSOR</b>        | CPU                 | NXP i.MX6 800MHz, 1 Core                                                                         |            |      |
| <b>MEMORY</b>           | RAM                 | 512MB DDR3 (Factory Option: up to 2GB)                                                           |            |      |
| <b>STORAGE</b>          | Embedded            | 4GB eMMC (Factory Option: up to 64GB)                                                            |            |      |
|                         | Other               | 1x microSD Slot (User Accessible)                                                                |            |      |
| <b>I/O INTERFACES</b>   | Ethernet            | 2x 10/100/1000Mbps - RJ45                                                                        |            |      |
|                         | USB                 | 3x Host 2.0 - Type A                                                                             |            |      |
|                         | Serial              | 1x RS-232/422/485 + 1x Serial Console RS-232 – Factory Option: 1x RS-232/422/485 + 1x Serial TTL |            |      |
|                         | CAN bus             | 1x CAN bus 2.0A                                                                                  |            |      |
|                         | Digital I/O         | 4x Digital Input/Output, 5V Level Output, 5V Input Protected to IEC61000 (15kV)                  |            |      |
|                         | Analog I/O          | 2x Analog Input (8-bit, 0-45V)                                                                   |            |      |
|                         | Audio               | 1x Single Channel Line Out, 1x Mic                                                               |            |      |
| <b>RADIO INTERFACES</b> | Cellular            | Optional Accessory: ReliaCELL 10-20 (3G/4G) – Factory Option: Internal Cellular                  |            |      |
|                         | GPS                 | 50-channel GPS L1                                                                                | No         |      |
|                         | Wi-Fi / BT          | 802.11n/a/b/g/n (Access Point and Client) Bluetooth 4.0 (BLE)                                    | No         |      |
|                         | Antennas (External) | 1x SMA GPS, 1x RSMA Wi-Fi/BT                                                                     | 1x SMA GPS | No   |
| <b>OTHER</b>            | RTC                 | Yes (User Accessible Battery)                                                                    |            |      |
|                         | Ext. Watchdog       | Yes                                                                                              |            |      |
|                         | EEPROM              | 16Mbit                                                                                           |            |      |
|                         | Sensors             | 3-axis Accelerometer                                                                             |            |      |
|                         | LEDs                | 1x Power, 3x Programmable                                                                        |            |      |
| <b>POWER</b>            | Input               | 6 - 36VDC (Nominal 12VDC), with Transient Protection, Vehicle Ignition Input and Sleep Mode      |            |      |
|                         | Consumption         | 4W Typ. (17W Max)                                                                                |            |      |
| <b>ENVIRONMENT</b>      | Operating Temp      | - 40 to +80°C                                                                                    |            |      |
|                         | Storage Temp        | - 40 to +85°C                                                                                    |            |      |
| <b>CERTIFICATIONS</b>   | Regulatory          | CE, FCC, ISED                                                                                    |            |      |
|                         | Safety              | SAE/J1455 (Vibration), EN 60950-1, UL 60950-1 (§)                                                |            |      |
|                         | Environmental       | RoHS2, REACH                                                                                     |            |      |
|                         | Wi-Fi / BT Radio    | RED, FCC, ISED                                                                                   | -          |      |
|                         | IoT Platform        | Microsoft Azure Certified                                                                        |            |      |
|                         | Ingress             | IP40                                                                                             |            |      |
| <b>MECHANICAL</b>       | Enclosure           | Material: Aluminum and Plastic - Color: Black Anodized                                           |            |      |
|                         | Dimensions          | 7.35x5.1"x2.4" / 187x139x61mm (LxWxH)                                                            |            |      |

### Software

|                 |               |                                          |  |  |
|-----------------|---------------|------------------------------------------|--|--|
| <b>SOFTWARE</b> | OS            | Eurotech Everyware Linux                 |  |  |
|                 | SDK           | Yocto-based Eclipse Tooling, Azul Java   |  |  |
|                 | IoT Framework | Everyware Software Framework (Java/OSGi) |  |  |

(§) UL, NRTL listing Factory Option.