



- **Reliable Performance**
- **Integrated Cellular**
- **Truly Industrial**
- **Field Protocol Support**
- **Cloud Certified**
- **Open Platform**
- **Customizable**



## Features

- Reliable Performance** - Powerful and efficient: single, dual and quad core Intel Atom E3800, soldered-down eMMC storage and ECC memory for additional protection
- Integrated Cellular** - Certified 3G/LTE cellular modems can be integrated. It also supports Eurotech ReliaCELL 10-20, the cellular module with global carrier precertifications
- Truly Industrial** - Extended operating temperature, a wide range power supply with surge and sag protection, isolated and protected DIO, protected USB and serial
- 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, AWS IoT Core 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 20-25 is a high-performance, globally certified, Multi-service IoT Edge Gateway for industrial and lightly rugged applications.

It features up to four cores, soldered-down ECC RAM and storage, extended operating temperature support, wide range power supply, isolated and protected I/O interfaces, and customizable connectivity options.

The ReliaGATE 20-25 configuration options include GNSS and LTE connectivity, both integrated and through the ReliaCELL 10-20 family of 2G/3G/LTE external modems with global carrier precertifications.

The ReliaGATE 20-25 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 adds advanced security, diagnostics, provisioning and remote access. It 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's IoT Integration Platform](#) (separately available), enabling advanced diagnostics, provisioning, and full remote device access and management.

Used stand-alone, or in conjunction with EC, the ReliaGATE 20-25 provides a fast go-to-market solution for projects of any size.

The ReliaGATE 20-25 is AWS IoT Core Qualified, Microsoft Azure Certified and can be integrated with 3rd party cloud services.

## Ordering code: REGATE-20-25-xy

| HARDWARE CONFIGURATION |                  | - x2  | - x3   | - x4                      | - x5                   | - x6                      | - x7   | -x8                       |
|------------------------|------------------|---|--|---------------------------|------------------------|---------------------------|--|---------------------------|
| PROCESSOR              | CPU              | E3827, 1.75GHz, Dual Core   |  | E3845, 1.91GHz, Quad Core |                        | E3827, 1.75GHz, Dual Core |  | E3845, 1.91GHz, Quad Core |
| MEMORY                 | RAM              | 2GB, 1333MHz (DDR3L-ECC)  |  | 4GB, 1333MHz (DDR3L-ECC)  |                        | 2GB, 1333MHz (DDR3L-ECC)  |  | 4GB, 1333MHz (DDR3L-ECC)  |
| STORAGE                | Embedded         | 8GB eMMC  |  |                           |                        |                           |  |                           |
|                        | SATA             | 1x SATA 2.0 (Internal Connector) – 1x 32GB mSATA (Included on -4y Variants)                 |  |                           |                        |                           |  |                           |
|                        | Other            | 1x microSD Slot (User Accessible)   |  |                           |                        |                           |  |                           |
| I/O INTERFACES         | Ethernet         | 2x 10/100/1000Mbps - RJ45   |  |                           |                        |                           |  |                           |
|                        | USB              | 1x Host 3.0, 1x Host 2.0, 1x ReliaCELL (Noise and Surge Protected) - Type A                 |  |                           |                        |                           |  |                           |
|                        | Serial           | 2x RS-232/RS-422/RS-485 (9 Wires, Noise and Surge Protected) on DB9 – 1x Serial Console TTL |  |                           |                        |                           |  |                           |
|                        | CAN 2.0B         | 1x CAN bus with 5V (100mA) Power Out  |  |                           |                        |                           |  |                           |
|                        | Digital I/O      | 3x Digital Input 7 - 35VDC, 1KV Optoisolated – 3x Digital Output (40VDC), 20mA Sink         |  |                           |                        |                           |  |                           |
|                        | Video            | 1x Mini DisplayPort (Service Panel)   |  |                           |                        |                           |  |                           |
|                        | Audio            | 1x Line Stereo Line Out, 1x Stereo Mic In (Service Panel)                                   |  |                           |                        |                           |  |                           |
|                        | EXPANSION        | miniPCIe Slots  | Up to 3x Full/Half Size Mini PCIe (PCIe/USB/mSATA) |                           |                        |                           |  |                           |
| RADIO INTERFACES       | Cellular         | Eurotech ReliaCELL 10-20  |  |                           |                        |                           | LTE Cat 4 (EU) 2G/3G Fallback                              |                           |
|                        | GPS              | Eurotech ReliaCELL 10-20 – Factory Option: Integrated GNSS                                  |  |                           |                        | Internal GNSS             | Eurotech ReliaCELL 10-20 – Factory Option: Integrated GNSS |                           |
|                        | Wi-Fi / BT       | No  | 802.11a/b/g/n, BLE 4.0                             | No                        | 802.11a/b/g/n, BLE 4.0 |                           |  |                           |
| OTHER                  | RTC              | Yes (User Accessible Battery)   |  |                           |                        |                           |  |                           |
|                        | Ext. Watchdog    | Yes   |  |                           |                        |                           |  |                           |
|                        | Sensors          | Temperature, Accelerometer  |  |                           |                        |                           |  |                           |
|                        | LEDs             | 1x Power, 3x miniPCIe Slot, 2x Programmable (Dual Color Green/Amber)                        |  |                           |                        |                           |  |                           |
|                        | Buttons          | 1x Reset, 1x Programmable   |  |                           |                        |                           |  |                           |
| POWER                  | Input            | 7 - 35VDC (Nominal 24VDC), Surge and Sag Protection, Vehicle Ignition Input                 |  |                           |                        |                           |  |                           |
|                        | Consumption      | 10W Idle  |  | 12W Idle                  |                        | 10W Idle                  |  | 12W Idle                  |
| ENVIRONMENT            | Operating Temp   | - 40 to +65°C   |  |                           |                        |                           |  |                           |
|                        | Storage Temp     | - 40 to +85°C   |  |                           |                        |                           |  |                           |
| CERTIFICATIONS         | Regulatory       | CE, FCC, ISED   |  |                           |                        |                           |  |                           |
|                        | Safety           | EN 62368, UL 60950 (§)  |  |                           |                        |                           |  |                           |
|                        | Environmental    | RoHS3, REACH  |  |                           |                        |                           |  |                           |
|                        | Wi-Fi / BT Radio | RED, FCC, ISED  |  |                           |                        | RED                       |  |                           |
|                        | Cellular Radio   | Eurotech ReliaCELL 10-20 Carrier Certifications   |  |                           |                        | RED                       |  |                           |
|                        | Ingress          | IP30  |  |                           |                        |                           |  |                           |
| MECHANICAL             | Enclosure        | Material: Anodized Aluminium - Color: Aluminum  |  |                           |                        |                           |  |                           |
|                        | Dimensions       | 192x131x52mm (WxDxH)  |  |                           |                        |                           |  |                           |

## Ordering code: REGATE-20-25-xy

| CONFIGURATION |               | -2y   | -3y                                      | -4y                       |
|---------------|---------------|---|--|---------------------------|
| SOFTWARE      | OS            | Eurotech Everywhere Linux   |  | Windows 10 IoT Enterprise |
|               | SDK           | Yocto-based Eclipse Tooling, Azul Java                                    |  | -                         |
|               | IoT Framework | -   | Everyware Software Framework (Java/OSGi) | -                         |
|               | IoT Platform  | AWS IoT Core Qualified, Microsoft Azure Certified, Everyware Cloud Native |  |                           |

(§) UL, NRTL listing Factory Option.

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