

ReliaGATE 20-25

- **Reliable Performance**
- **Integrated 3G/LTE Cellular**
- **Truly Industrial**
- **Field Protocol Support**
- **Cloud Certified**
- **Open Platform**
- **Customizable**



FEATURES

Reliable Performance - Powerful and efficient: single, dual and quad core Intel Atom E38xx, soldered-down eMMC storage and ECC memory for additional protection

Integrated Cellular - Certified 3G/LTE cellular modems can be integrated. It also supports Eurotech's 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, 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

The ReliaGATE 20-25 is a high-performance, globally certified, IoT 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 GPS 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 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.

The ReliaGATE 20-25 is Microsoft Azure certified and can also be integrated with 3rd party cloud services such as Amazon Web Services IoT.

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

ReliaGATE 20-25

Specifications

| Ordering code: REGATE-20-25-□□ | | | | | | | |
|--------------------------------|-------------------------|---|--|------|---------------------------|-------------------------------|------|
| HARDWARE CONFIGURATION | | - □1 | - □2 | - □3 | - □4 | - □5 | - □8 |
| PROCESSOR | CPU | E3815, 1.46GHz, Single Core | E3827, 1.75GHz, Dual Core | | E3845, 1.91GHz, Quad Core | | |
| MEMORY | RAM | 2GB, 1067MHz, (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 -□4 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) - 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 | | | | | |
| | Audio | Factory Option | | | | | |
| | 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) 3G Fallback | |
| | GPS | Eurotech ReliaCELL 10-20 Factory Option: Integrated GPS | | | | | |
| | Wi-Fi / BT | No | b/g/n, BLE | No | b/g/n, BLE | | |
| OTHER | RTC | Yes (User Accessible Battery) | | | | | |
| | Ext. Watchdog | Yes | | | | | |
| | EEPROM | 256kbit | | | | | |
| | 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 12VDC), Surge and Sag Protection, Vehicle Ignition Input | | | | | |
| | Consumption | 7W Idle | 10W Idle | | 12W Idle | | |
| ENVIRONMENT | Operating Temp | - 20 to +60°C | - 40 to +65°C | | | | |
| | Storage Temp | - 40 to +85°C | | | | | |
| CERTIFICATIONS | Regulatory | CE, FCC, ISED | | | | | |
| | Safety | EN 62368, UL [®] 60950 | | | | | |
| | Environmental | RoHS2; REACH | | | | | |
| | Wi-Fi / BT Radio | CE (RED), FCC | | | | CE (RED) | |
| | Cellular Radio | Eurotech ReliaCELL 10-20 Carrier Certifications | | | | CE (RED) | |
| | IoT Platform | Microsoft Azure Certified | | | | | |
| | Ingress | IP40 | | | | | |
| MECHANICAL | Enclosure | Material: Anodized Aluminium - Color: Aluminum | | | | | |
| | Dimensions | 192x131x52mm (WxDxH) | | | | | |
| Ordering code: REGATE-20-25-□□ | | | | | | | |
| SOFTWARE CONFIGURATION | | - 3□ | | | - 4□ | | |
| SOFTWARE | OS | Yocto Linux | | | Windows 10 IoT Enterprise | | |
| | SDK | Yocto-based Eclipse Tooling, Oracle Java SE | | | - | | |
| | IoT Framework | Everyware Software Framework (Java/OSGi) | | | - | | |

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