



- **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 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, 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 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 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 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.

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.

Ordering code: REGATE-20-25-xy							
HARDWARE CONFIGURATION		- x1	- x2	- x3	- x4	- x5	- x8
<b>PROCESSOR</b>	CPU	E3815, 1.46GHz, Single Core	E3827, 1.75GHz, Dual Core		E3845, 1.91GHz, Quad Core		
	RAM	2GB, 1067MHz (DDR3L-ECC)	2GB, 1333MHz (DDR3L-ECC)		4GB, 1333MHz (DDR3L-ECC)		
<b>STORAGE</b>	Embedded	8GB eMMC					
	SATA	1x SATA 2.0 (Internal Connector) – 1x 32GB mSATA (Included on -4 Variants)					
	Other	1x microSD Slot (User Accessible)					
<b>I/O INTERFACES</b>	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)					
<b>EXPANSION</b>	miniPCIe Slots	Up to 3x Full/Half Size Mini PCIe (PCIe/USB/mSATA)					
<b>RADIO INTERFACES</b>	Cellular	Eurotech ReliaCELL 10-20					LTE Cat 4 (EU) 2G/3G Fallback
	GPS	Eurotech ReliaCELL 10-20 – Factory Option: Integrated GPS					
	Wi-Fi / BT	No	b/g/n, BLE	No	b/g/n, BLE		
<b>OTHER</b>	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					
<b>POWER</b>	Input	7 - 35VDC (Nominal 24VDC), Surge and Sag Protection, Vehicle Ignition Input					
	Consumption	7W Idle	10W Idle		12W Idle		
<b>ENVIRONMENT</b>	Operating Temp	- 20 to +60°C	- 40 to +65°C				
	Storage Temp	- 40 to +85°C					
<b>CERTIFICATIONS</b>	Regulatory	CE, FCC, ISED					
	Safety	EN 62368, UL 60950 (§)					
	Environmental	RoHS2, REACH					
	Wi-Fi / BT Radio	RED, FCC					RED
	Cellular Radio	Eurotech ReliaCELL 10-20 Carrier Certifications					RED
	IoT Platform	Microsoft Azure Certified					
	Ingress	IP40					
<b>MECHANICAL</b>	Enclosure	Material: Anodized Aluminium - Color: Aluminum					
	Dimensions	192x131x52mm (WxDxH)					

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<b>SOFTWARE</b>	CONFIGURATION	-3y	- 4y	
	OS	Yocto Linux		Windows 10 IoT Enterprise
	SDK	Yocto-based Eclipse Tooling, Oracle Java SE		-
	IoT Framework	Everyware Software Framework (Java/OSGi)		-

(§) UL, NRTL listing Factory Option.

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