



- **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
<b>PROCESSOR</b>	CPU	E3827, 1.75GHz, Dual Core		E3845, 1.91GHz, Quad Core		E3827, 1.75GHz, Dual Core		E3845, 1.91GHz, Quad Core
	RAM	2GB, 1333MHz (DDR3L-ECC)		4GB, 1333MHz (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 -4y 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 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			
<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	10W Idle		12W Idle		10W Idle	12W Idle	
<b>ENVIRONMENT</b>	Operating Temp	- 40 to +65°C						
	Storage Temp	- 40 to +85°C						
<b>CERTIFICATIONS</b>	Regulatory	CE, FCC, ISED						
	Safety	EN 62368, UL 60950 (S)						
	Environmental	RoHS3, REACH						
	Wi-Fi / BT Radio	RED, FCC, ISED				RED		
	Cellular Radio	Eurotech ReliaCELL 10-20 Carrier Certifications				RED		
	Ingress	IP30						
<b>MECHANICAL</b>	Enclosure	Material: Anodized Aluminium - Color: Aluminum						
	Dimensions	192x131x52mm (WxDxH)						

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CONFIGURATION		-2y	-3y	-4y
<b>SOFTWARE</b>	OS	Eurotech Everyware 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		

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(S) UL, NRTL listing Factory Option.