



- **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, 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 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.

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	
	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 GPS				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							
	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				RED			
	Cellular Radio	Eurotech ReliaCELL 10-20 Carrier Certifications					RED		
	Ingress	IP30							
MECHANICAL	Enclosure	Material: Anodized Aluminium - Color: Aluminum							
	Dimensions	192x131x52mm (WxDxH)							

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CONFIGURATION		-2y	-3y	-4y
SOFTWARE	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.