



- Quad Core, 64bit ARM
- IoT Building Block
- Secure
- Industrial Grade
- Expandable
- Open Platform
- Customizable



## Features

**ARM Powered** - Powered by NXP i.MX 8M Mini CPU: quad core Cortex A53 performance for intensive workloads

**IoT Building Block** - Breadth of connectivity options: carrier certified LTE configurations with 2G/3G fallback, Wi-Fi, BLE, Gigabit Ethernet and Fieldbus interfaces, supporting Modbus, S7, OPC UA, and many more protocols

**Secure from Cyberattacks** - Designed to be secure: hardware anti-tampering, TPM 2.0 and optional IEC 62443-4-1/-4-2 assessment (Professional Service)

**Industrial Grade** - Extended operating temperature, wide range power supply with transient protection, optoisolated analog in and digital I/Os, protected USB, protected and isolated serial ports, DIN bar and wall mount

**Expandable** - Allows extra features by adding side expansion modules that provide LoRa, more DI/O, analog inputs, and custom peripherals

**Open Platform** - Features Everyware Software Framework (ESF), the IoT Java/OSGi based-middleware for IoT gateways that accelerates gateway development and enables remote management

**Customizable** - Personalization and full customization options are available, ranging from branding ("skins" and color) to deep HW/SW configurations

## Description

The ReliaGATE 10-14 is a Multi-service IoT Gateway that has been designed to deliver LTE and 2G/3G connectivity to industrial and lightly rugged applications.

Based on the NXP i.MX 8M Mini Cortex-A53 quad core processor, with up to 4GB of RAM, up to 32GB of eMMC and a user-accessible microSD slot, the ReliaGATE 10-14 is a low power gateway suitable for demanding use cases: it supports a 9 to 30V power supply with transient protection, Display Port video output, two protected and isolated RS-232/422/RS-485 serial ports, two noise and surge protected USB ports, six optoisolated digital and two isolated analog interfaces.

The ReliaGATE 10-14 features a wide range of connectivity capabilities: it integrates a carrier certified LTE Cat 1 cellular modem with dual SIM support, Wi-Fi, Bluetooth 4.2/BLE, and two Gigabit Ethernet ports; an internal GNSS provides precise geolocation capabilities. Expansion options allow adding extra features with side modules, such as the [ReliaWAN 10-12](#), a [Lora Gateway unit](#), or the [ReliaIO 10-12](#), which provides analog input and more DI/O ports.

The ReliaGATE 10-14 is equipped with TPM 2.0, which provides standard cutting-edge security features that protect the system integrity and authenticity against unauthorized manipulations. It also features hardware antitampering and is designed to meet IEC 62443-4-1/-4-2 cybersecurity (Professional Service).

The ReliaGATE 10-14 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 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 IoT Integration Platform (separately available), enabling advanced diagnostics, provisioning, and full remote device access and management.

### Ordering code: REGATE-10-14-xx

XX		-32	-35	-36	-37
<b>PROCESSOR</b>	CPU	i.MX 8M Mini Quad Cortex-A53 1.6 GHz			
	GPU	2D and 3D Acceleration			
	Security	Secure Boot, Cryptographic Acceleration, TrustZone Architecture			
<b>MEMORY</b>	RAM	2GB (Up to 4GB LPDDR4)			
<b>STORAGE</b>	Embedded	16GB (Up to 32GB eMMC)			
	Additional	Micro SD Slot (User Accessible)			
<b>I/O INTERFACES</b>	Ethernet	2x 10/100/1000			
	USB 2.0	2x Host 2.0 (Noise and Surge Protected)			
	Serial	2x RS-232/RS422/RS-485 protected and isolated (5 wires), 1x Serial Console TTL			
	Digital I/O	4x Digital Inputs Optoisolated, 2x Digital Outputs Optoisolated, 2x 11bit Analog Inputs isolated			
	Video Out	1x Video Output (Display Port)			
<b>RADIO INTERFACES</b>	Internal Cellular	No	LTE Cat 1 (NA)	LTE Cat 1 (EU)	LTE Cat 1 (AP)
	GNSS	No	Internal GPS		
	Wi-Fi/BT	802.11 a/b/g/n/ac (2.4GHz, 5GHz) - BLE4.2 (2.4GHz)			
	Ext. Antennas	1x RP-SMA Wi-Fi/BT	2x SMA Cellular, 1x RP-SMA Wi-Fi/Bluetooth, 1x SMA GNSS		
<b>OTHER</b>	RTC	Yes (SuperCAP Backup)			
	Ext. Watchdog	Yes			
	EEPROM	256 Kbit			
	TPM	TPM 2.0			
	Anti-Tamper	Yes (2x Switches: Product Enclosure and Service Panel, Event Logging with Time Stamping)			
	Temp. Sensor	Yes			
	Accelerometer	3D Accelerometer / 3D Gyroscope			
	LED	1x Power Blue, 1x Cellular activity Green, 4x User Configurable (2x Green, 2x Amber)			
<b>MISC</b>	Buttons	Reset and Programmable Button			
	SIM Slot	No	2x miniSIM (User Accessible)		
<b>EXPANSIONS</b>	Connector	Expansion Connector compatible with ReliaIO 10-12 and ReliaWAN 10-12			
<b>POWER</b>	Input	Nominal: 12 or 24 VDC; Range: 9 to 30 VDC with Transient Protection			
	Consumption	5W (Typ.)			
<b>ENVIRONMENT</b>	Operating Temp.	-30°C to +70°C			
	Storage Temp.	-40°C to +85°C			
	Humidity	RH 5...95% Operating Non Condensing (40°C)			
<b>CERTIFICATIONS</b>	Regulatory	CE, FCC, ISED	CE, FCC, ISED	CE	JATE, TELEC
	Safety	EN 62368, UL 60950 (§)			
	Environmental	ROHS3, REACH			
	Wi-Fi/BLE Radio	RED, FCC, ISED	FCC, ISED	RED	JATE, TELEC
	Cellular Radio	No	FCC, ISED, PTCRB, AT&T, Verizon, T-Mobile	RED	JATE, TELEC
<b>CERTIFICATION</b>	Ingress	IP40			
<b>MECHANICAL</b>	Enclosure	Material: Aluminium/Magnesium Alloy - Color: Aluminium			
	Dimensions	107x85x46mm (LxWxH) - Excluding Connectors, DIN Bar Mounting Bracket			

### SOFTWARE

<b>SOFTWARE</b>	OS	Eurotech Everyware Linux
	SDK	Yocto-based Eclipse Tooling, Azul Java
	IoT Framework	Everyware Software Framework (.Java/OSGi)

§ UL, NRTL listing Factory Option.

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