ReliaGATE 10-14

COMPACT GATEWAY - i.MX8M - LTE - Carrier Certified - Wi-Fi/BT - IEC 62443-4-2

- **Robust cybersecurity: hardware + software hardening**
- **Compact, industrial-grade design and expandable capabilities**
- **Easy to install configure and program**
- **Global cellular deployment for worldwide connectivity**

Features

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

EVERYWARE GREENEDGE : With Everyware GreenEdge, the ReliaGATE 10-14 acquires additional capabilities, evolving into the industry's first fully integrated gateway with Zero-Touch provisioning, AWS IoT Greengrass v2, Eurotech's Everyware Software Framework for IIoT equipment configuration and edge computing, and Everyware Cloud for full edge (and asset) lifecycle management.

BEST IN CLASS CYBERSECURITY : ANSI/ISA 62443-4-1/-4-2 SL2, IEC 62443-4-1/-4-2 SL2 (Hardware plus Software) and PSA Level 1 certified, California SB-327 compliant, always on and power independent antitampering monitor and logger, TPM 2.0 and full hardware hardening

GLOBAL CELLULAR DEPLOYMENTS : Carrier certified LTE and ready to deploy in most countries, Wi-Fi, BLE, Gigabit Ethernet and Fieldbus interfaces, supporting Modbus, S7, OPC UA, and many more protocols

EASY TO PROGRAM : Build your first pilot IIoT project in a snap: from when you get the Everyware GreenEdge gateway on your desk, you need 30 minutes to gen onboard on Everyware Cloud and easily provision your gateway on your AWS IoT environment. Starting building your first edge applications like a store-and-forward datalogger in 10 minutes.

INDUSTRIAL APPLICATIONS : Connect your industrial equipment or sensors with a simple, yet powerful configuration UI

EXPANDABLE : Add LoRa, more Digital I/O, analog inputs, and custom peripherals with side expansion modules

OPEN, NO LOCK-IN : Based on open standards and Cloud agnostic, it can be integrated with all major platform and service provides

CUSTOMIZABLE : Can be personalized and even fully customized, with options ranging from branding ("skins" and color) to deep HW/ SW changes

Description

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The ReliaGATE 10-14 is an industrial, highly secure Edge Gateway that is easy to program: it supports classic and visual programming and comes with a rich and expandable IoT programming Framework. It is open and supports all major Cloud providers and services. It is suitable for immediate deployment in most countries, thanks to carrier certified LTE with 2G/3G backup connectivity, with options to expand the geographic coverage to a truly global scale.

The ReliaGATE 10-14 offers best in class Cybersecurity: it leads the market with IEC 62443-4-1/-4-2 SL2, ANSI/ISA 62443-4-1/-4-2 SL2 and PSA Level 1 certification; it is also compliant with California SB-327 password law. Protection starts at the hardware level, with full support for TPM 2.0, Secure Boot and an always-on physical antitampering monitor/logger that is active even when the system is removed from power. For most demanding customers, special production-only images can be configured with full hardware hardening (interface disabling) to further reduce the attack surface.

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 lightly rugged use cases: it supports a 9 to 30 VDC power supply with transient protection, Display Port video output, two protected and isolated RS-232/RS-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 1/4 cellular modem with dual SIM support, Wi-Fi, Bluetooth 5/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 may come with various software combinations:

1. 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.
2. With Everyware GreenEdge, the ReliaGATE 10-14 transforms into the first industrial Edge gateway fully integrated with Zero-Touch provisioning and full trusted chain from manufacturing to deployment, AWS IoT Greengrass v2, and ESF+EC, providing a few-clicks onboarding experience and immediate deployment in most countries, eliminating the need for extensive coding and transforming the device management and IoT operations into a smooth workflow. In addition to its technical advantages, Everyware GreenEdge comes with a unified billing system for all software and services related costs through the Amazon Marketplace. This simplifies the procurement process, making it easier for customers to access and manage the solution while also benefiting from AWS’s trusted billing infrastructure.

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Ordering Code: REGATE-10-14-xy						
Hardware Configuration		-x2	-x5	-x6	-x7	-x8
PROCESSOR	CPU	i.MX 8M Mini Quad Cortex-A53 1.6 GHz				
	GPU	2D and 3D Acceleration				
MEMORY	RAM	2GB (Factory Option: Up to 4GB LPDDR4)				
STORAGE	Embedded	16GB (Factory Option: Up to 32GB eMMC)				
	Additional	1x Micro SD Slot (User Accessible)				
I/O INTERFACES	Ethernet	2x 10/100/1000 - RJ45				
	USB 2.0	2x Host 2.0 (Noise and Surge Protected) - Type A				
	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				
	Analog I/O	2x Analog Inputs Isolated (11-bit, 0-36VDC)				
	Video Out	1x Video Output (Display Port)				
RADIO INTERFACES	Internal Cellular	No	LTE Cat 1 (NA)	LTE Cat 1 (EU)	LTE Cat 1 (AP)	LTE Cat 4 (CN)
	GNSS	No	GPS, Glonass, Beidou, Galileo, QZSS			
	Wi-Fi/BT	802.11 a/b/g/n/ac (2.4GHz, 5GHz) - BLE5 (2.4GHz)				
	Ext. Antennas	1x RP-SMA Wi-Fi/BT	2x SMA Cellular, 1x RP-SMA Wi-Fi/Bluetooth, 1x SMA GNSS			
OTHER	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)				
	Accelerometer	3D Accelerometer / 3D Gyroscope				
	LED	1x Power Blue, 1x Cellular activity Green, 4x User Configurable (2x Green, 2x Amber)				
	Buttons	1x Reset Button and 1x Programmable Button				
	SIM Slot	No	2x miniSIM (User Accessible)			
EXPANSIONS	Connector	Expansion Connector compatible with ReliaIO 10-12 and ReliaWAN 10-12				
CYBER (HW)	TPM	TPM 2.0				
	Anti-Tamper	Yes, Always-on Physical Tampering Monitoring, Reporting and Event Logging with Time Stamping; TrustZone Architecture				
POWER	Input	Nominal: 12 or 24 VDC; Range: 9 to 30 VDC with Transient Protection, Ignition Key Sense				
	Consumption	2.5W Idle (5W Typ.)				
ENVIRONMENT	Operating Temp.	-30 to +70 °C				
	Storage Temp.	-40 to +85 °C				
	Humidity	RH 5...95% Operating Non Condensing (40°C)				
CERTIFICATIONS	Cybersecurity	EN 18031-1 (RED-DA) - Off-the-shelf Compliance, Secure Boot, PSA Level 1				
	Regulatory	CE, FCC, ISED, NAL, SRRC, JATE/TELEC, ICASA	FCC, ISED	CE	JATE, TELEC	NAL, SRRC
	Safety	CB, EN 62368-1, UL 62368-1 (UL Mark)				
	Vertical	E-Mark, IEC 60601-1-2				
	Environmental	ROHS3, REACH				
	Wi-Fi/BLE Radio	RED, FCC, ISED, JATE/TELEC	FCC, ISED	RED	JATE, TELEC	NAL, SRRC
	Cellular Radio	No	PTCRB, AT&T, Verizon	RED	JATE, TELEC	NAL, SRRC
	Ingress	IP40				
MECHANICAL	Enclosure	Material: Aluminium/Magnesium Alloy - Color: Aluminium				
	Dimensions	107x85x46mm (LxWxH) - Excluding Connectors, DIN Bar Mounting Bracket				

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Software Configuration		-2y	-3y	-3yGE	-9y	-9yGE
OS	Eurotech Everyware Linux	Yes				
IOT FRAMEWORK	Everyware Software Framework (Includes Zero-Touch-Provisioning)(*)	-	Yes			
SUITE and SERVICES	Everyware GreenEdge (EGE)	-		Yes	-	Yes
SOFTWARE HARDENING	Hardening	-			Yes	
CERTIFICATIONS	Cybersecurity	-			ISASecure/IEC 62443-4-2 SL2 Host †	
	IoT Platform	-		AWS IoT Core, AWS IoT GreenGrass	-	AWS IoT Core, AWS IoT GreenGrass

* Requires Everyware Cloud

† additional Professional Service might be required depending on customer requirements

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