ReliaGATE 10-12

- **Industrial Grade**
- **Internal LTE Cat 1 (NA, EU)**
- **ARM Powered**
- **IoT Ready**
- **Expandable**
- **Open Platform**
- **Customizable**

EC ESF

FEATURES

Industrial Grade - Wide operating temperature, wide range power supply with transient protection

Internal LTE - Carrier certified LTE Cat 1 cellular modem with European and North American variants, ready for immediate deployment

ARM Powered - Powered by TI AM335X CPU: optimum performance for intensive workloads at just 2W

IoT Ready - Breadth of connectivity options: internal and external cellular modems, Wi-Fi, BLE, Fast Ethernet and Fieldbus interfaces, including CAN bus ports, optoisolated digital I/Os, protected USB and serial ports

Expandable - Allows extra features by adding side expansion modules that provide a LoRa gateway unit, more DI/O, analog inputs, and custom peripharals

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

ReliaGATE 10-12 is a Multi-service IoT Gateway that has been designed to deliver LTE connectivity (with 3G fallback) to industrial and lightly rugged applications.

Based on the TI AM335X Cortex-A8 (Sitara) processor family, with 1GB of RAM, 4GB of eMMC and user-accessible MicroSD and dual Micro-SIM slots, ReliaGATE 10-12 is a low power gateway suitable for demanding use cases: it supports a 6 to 36V power supply with transient protection and vehicle ignition sense, two protected RS-232/RS-485 serial ports, two CAN bus interfaces, three noise and surge protected USB ports, and four isolated digital interfaces.

ReliaGATE 10-12 features a wide range of connectivity capabilities: it integrates an internal LTE Cat 1 cellular modem with dual Micro-SIM support, Wi-Fi, Bluetooth Low Energy, and two Fast Ethernet ports; an optional internal GPS provides precise geolocation capabilities.

Expansion options include the ReliaCELL 10-20 family, consisting of external, rugged cellular modules for global use that are certified by leading carriers. An expansion connector allows adding extra features with side modules, such as ReliaLORA 10-12, a LoRa Gateway unit, or RelialO 10-12, which provides analog input and more DI/O ports.

ReliaGATE 10-12 comes with a genuine Oracle Java SE Embedded 8 Virtual Machine and Everyware Software Framework (ESF), a commercial, enterprise-ready edition of Eclipse Kura, the open source Java/OSGi middleware for IoT gateways.

Distributed and supported by Eurotech, ESF adds advanced security, diagnostics, provisioning, remote access and full integration with Everyware Cloud (EC), Eurotech's IoT integration platform (separately available).

Used stand-alone, or in conjunction with EC, ReliaGATE 10-12 provides a fast go-to-market solution for IoT projects of any size.

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ReliaGATE 10-12

Specifications

Ordering code: REGATE-10-12-XX							
XX		- 31	- 32	- 33	- 34	- 35	- 36
PROCESSOR	**CPU**	TI AM3352 1GHz, 1 Core					
MEMORY	**RAM**	1GB DDR3					
STORAGE	**Embedded**	4GB eMMC					
	Other	MicroSD Slot (User Accessible)					
I/O INTERFACES	**Ethernet**	2x 10/100Mbps on RJ45					
	USB	3x Host 2.0 (Noise and Surge Protected) - Type A					
	Serial	2x RS-232/RS-485 (Surge Protected, RS-485 Termination and Fail-safe Resistors) - 1x Serial Console TTL					
	CAN 2.0B	2x CAN bus with 5V (100mA) Power Out					
	Digital I/O	2x Digital Input 36V, 1KV Optoisolated - 2x Digital Output (40VAC/DC), 500mA Sink, 1KHz Max Switching					
	Exp. Connector	Yes, for Side Expansion Modules					
RADIO INTERFACES	**Internal Cellular**	No		LTE Cat 1 (NA) 3G Fallback	LTE Cat 1 (EU) 2G Fallback	LTE Cat 1 (NA) 3G Fallback	LTE Cat 1 (EU) 2G Fallback
	External Cellular	Optional Accessory: ReliaCELL 10-20 (3G/4G)					
	GPS	Factory Option: Internal (72 channels GPS, Galileo, GLONASS, BeiDou) Optional Accessory: External ReliaCELL 10-20 3G					
	Wi-Fi	No	802.11a/b/g/n	No		802.11a/b/g/n	
	BT	No	BLE 4.2	No		BLE 4.2	
	Antennas (External)	No	2x RP-SMA Wi-Fi/BT	2x SMA Cellular		2x SMA Cellular 2x RP-SMA Wi-Fi/BT	
OTHER	**RTC**	Yes (User Accessible Battery)					
	Watchdog	Yes - Dedicated Chip					
	EEPROM	256kbit					
	TPM	Factory Option					
	Sensors	Temperature, Accelerometer					
	LEDs	1x Power, 1x Cellular, 4x Programmable					
	Buttons	1x Reset, 1x Programmable					
	SIM Slot	No		2x Micro-SIM (User Accessible)			
POWER	**Input**	6-36VDC, with Transient Protection, Vehicle Ignition Sense					
	Consumption	2W Typ. (15W Max.)					
ENVIRONMENT	**Operating Temp**	- 30 to +70°C					
	Storage Temp	- 40 to +85°C					
CERTIFICATIONS	**Regulatory**	FCC, ISED, CE	FCC, ISED	CE		FCC, ISED	CE
	Safety	EN 62368, UL§ 60950					
	Environmental	RoHS2, REACh					
	Wi-Fi / BT Radio	No	FCC, ISED, CE (RED)	FCC, ISED	CE (RED)	FCC, ISED	CE (RED)
	Cellular Radio	No	No	FCC, ISED, PTCRB, AT&T	CE (RED)	FCC, ISED, PTCRB, AT&T	CE (RED)
	IoT Platform	Microsoft Azure Certified					
	Ingress	IP40					
MECHANICAL	**Enclosure**	Material: ABS - Color: Aluminum					
	Dimensions	139x98x44mm (LxWxH) - With SMA Connectors, Excluding Mounting Bracket					
SOFTWARE							
OS		Yocto Linux					
SDK		Yocto-based Eclipse Tooling					
IoT Framework		Oracle Java SE Embedded Version 8 - Everyware Software Framework (Java/OSGi)					

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