ReliaGATE 10-11 Development Kit

Multi-service IoT Edge Gateway - TI AM335x, Globally Certified



- **Ready to Plug**
- **Ready to Code**
- **Ready to Connect**
- **Ready to Deploy**

Features

Ready to Plug - Contains all the hardware needed to get started, including one ReliaGATE 10-11 and a complete set of cables and accessories

Ready to Code - Features Everyware Software Framework (ESF), the Java/OSGi based-middleware for IoT Edge Gateways that accelerates gateway application development

Ready to Connect - Includes a free trial account for Everyware Cloud (EC), the Eurotech IoT Integration Platform for device connectivity, data collection, and remote device management

Ready to Deploy - Designed to comply with global certification requirements and to quickly move IoT applications solutions from prototype to global deployment

Description

The ReliaGATE 10-11 Development Kit allows for quick development and prototyping of IoT applications on an industrial grade platform which is precertified for global deployment. The kit targets all aspects of an IoT application from hardware interfacing, to development of on-board software and cloud connectivity.

Based on the TI AM335X Cortex-A8 processor family, with 512MB of RAM and 4GB of eMMC, the ReliaGATE 10-11 is a low power Edge Gateway suitable for industrial and automotive applications: it supports a 9 to 36V power supply with transient protection and vehicle ignition sense, two protected RS-232/485 serial ports, two CAN bus interfaces, and much more.

The ReliaGATE 10-11 features a wide range of connectivity capabilities: it integrates a global cellular modem with GPS, Wi-Fi, Bluetooth, and two Fast Ethernet ports.

The ReliaGATE 10-11 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.

The ReliaGATE 10-11 is Microsoft Azure certified and can also be integrated with 3rd party cloud services such as Amazon Web Services IoT.

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EUROTECH

Ordering code: REGTW-D1011-B00xx

XX		33	36
PROCESSOR	CPU	TI AM3352 800MHz, 1 Core	
MEMORY	RAM	512MB DDR3	
STORAGE	Embedded	4GB eMMC	
	Other	1x microSD Slot (User Accessible)	
I/O INTERFACES	Ethernet	2x 10/100Mbps - RJ45	
	USB	2x Host 2.0 (Noise and Surge Protected) - Type A	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 In 5V (TTL), 1KV Optoisolated – 2x Digital Out (40VDC), 30mA Sink	
RADIO INTERFACES	Cellular	3G Global	ReliaCELL 10-20 Option (Not Included)
	GPS	Integrated on Cellular Module	ReliaCELL 10-20 Option (Not Included)
	Wi-Fi / BT	b/g/n, BLE	
OTHER	RTC	Yes (User Accesible Battery)	
	Sensors	Temperature, Accelerometer	
	LEDs	1x Power, 1x Cellular, 4x Programmable	1x Power, 4x Programmable
	Buttons	1x Reset, 1x Programmable	
	SIM Slot	1x microSIM (User Accessible)	
POWER	Input	9-36VDC, with Transient Protection, Vehicle Ignition Sense	

For more specifications and certifications, please check the ReliaGATE 10-11 datasheet.

Included Software

SOFTWARE	OS	Eurotech Everyware Linux
	SDK	Yocto-based Eclipse Tooling, Azul Java
	IoT Framework	Oracle Java SE Embedded Version 8 - Everyware Software Framework (Java/OSGi)

Included Accessories

I/O INTERFACES	Ethernet	1x RJ45 Male Cable
	Serial	1x Serial Cable (2x RS-232/RS-485 Interfaces - 3 Wires Each - RS-232 Default Pinout) with 2x DB9 Screw Terminal Male Connectors (for Fast Pinout Switching: RS-232/RS-485) Wired on a 10P Terminal Block with 2P for Each Cable Reserved for the Termination Resistors – 1x USB to Serial TTL Cable Converter (Debug Port)
	CAN 2.0B	1x CAN bus Cable (2x CAN bus Interfaces - 4 Wires Each) with DB9 Male Connector wired on a 8P Terminal Block
	Digital I/O	1x Digital I/O Cable (2x Digital IN + 2x Digital OUT - 8 Wires) wired on a 8P Terminal Block
RADIO	Cellular	1x Pentaband (GSM/GPRS/UMTS) Antenna with SMA Connector
	GPS	1x Amplified GPS Antenna with SMA Connector
	Wi-Fi / BT	1x Dipole Wi-Fi / Bluetooth (2.4/5GHz) Antenna with RP-SMA Connector
OTHER	Adapter	1x DB9 Female to Female Gender Changer – 1x Breakaway Male to Male Pin Strip (40P) - Gender Changer for Digital I/O Cable
	Resistor	2x 120 Ohm Termination Resistors for RS-485 Interface
	Documentation	1x Quick Start Guide, 1x Everyware Cloud Setup Guide
POWER	AC-DC PSU	1x 24VDC (24W) Power Supply Unit with Terminal Block
	Blades	3x Power Blades for Wall Mount Adapter (US, JP, EU, UK)
MECHANICAL	Mounting	1x Aluminum Wall Mount Bracket, 1x Nylon DIN Bar Mount Adapter

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