## **ReliaGATE 10-11**



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



- ARM® Powered
- IoT Ready
- Industrial and Automotive Grade
- Field Protocol Support
- Cloud Certified
- Open Platform
- Customizable



## **Features**

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

**IoT Ready** - Breadth of connectivity options: 3G cellular modem, GPS, Wi-Fi, BLE, Fast Ethernet and Fieldbus interfaces, including CAN bus ports, optoisolated digital I/Os, protected USB and serial ports

Industrial and Automotive Grade - Wide operating temperature, wide range power supply with transient protection, and E-Mark certification

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, Amazon Web Services IoT 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 10-11 is an IoT Edge Gateway that has been designed to comply with global certification requirements for industrial and lightly rugged applications.

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 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/RS-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. A dedicated internal GPS is also available as a factory option.

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.

## ReliaGATE 10-11

**EUROTECH** 

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

PROCESSOR   CPU   TI AM3352 800MHz, 1 Core     MEMORY   RAM   512MB DDR3     STORAGE   Embedded   4GB eMMC     STORAGE   Ethernet   1 x 10/100 Mps - RJ45   2 x 10/100 Mps - RJ45     I/O INTERFACES   Serial   3 x Host 2.0 (Noise and Surge Protected) - Type A   3 x Host 2.0 (Noise and Surge Protected) - Type A   3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   3 x Host 2.0 (Noise and Surge Protected) - Type A   2 x Host 3 x Host 2.0 (Noise and Surge Protected) - Type A   3 x Host 2.0 (Noise and Surge Protected) - T			
MEMORY     RAM     Impedded     STORAGE       Embedded     Content     Conten     Conten     Content<	- 37		
STORAGE     Embedded     Consumption       STORAGE     Embedded     1x10/100/bys-RJ45     2x10/100Mbys-RJ45			
STORAGEOtherStorageOther1x10/10/// S-RJ452x10/100/// S-RJ452x10/100/// S-RJ45Vio Bhand3x Host 2.0 (Noise and Surge Protected)3x Host 2.	512MB DDR3		
OtherINTERMENT INTERMENTFiltemeti1x 10/10/USF RJ45\$\$2x 10x 10x 10x 10x 10x 10x 10x 10x 10x 10	4GB eMMC		
IVO INTERFACES     SSB     SX Host 2.0 (Noise and Surge Protected) - Type A     SX Host 2.0 (Noise Protected) - Type A     <	1x microSD Slot (User Accessible)		
IVO INTERFACES     Indiana and Surge Protected) -Type A     Star Post 2.0 (Noise and Surge Protected) -Type A			
CAN 2.0BNo2x CAN bus with 5V (10mA) Power OutDigital I/O2x Digital I/put 5V (TTL), 1KU/pitoisolated - 2x Digital U/OVOC), 3U/A SinkCellularNo3G U/AGPSNoIntegrationVi-Fi / BTVi-Fi / BTReliaCELL OptionAntennas (External)No2x SMA Cell/GPS, 1x RSMA Wi-Fi/BT1x RP-SMA Wi-Fi/BTRTCVi-Fi / BT2x SMA Cell/GPS, 1x RSMA Wi-Fi/BT1x RP-SMA Wi-Fi/BTRTCEEPROM2x SMA Cell/GPS, 1x RSMA Wi-Fi/BT2x SMA RP-SMEEPROMTerrereYes2x SMA RP-SMEEDROMIntegrationIntegrationReliaCELL optionButtonsIntegrationIntegrationIntegrationButtonsIntegrationIntegrationIntegrationInduStange TerrereIntegrationIntegrationPowerIntegrationIntegrationIntegrationButtonsIntegrationIntegrationIntegrationInputOperating TerrereIntegrationIntegrationPowerOperating TerrereIntegrationIntegrationInputOperating TerrereIntegrationIntegrationInputInputInput IntegrationIntegrationInputInput Input	2.0 (Noise e Protected) ype A		
Digital I/O2x Digital I/D X Di X Digital I/D X Digital I/D X Digital I/D X	2x RS-232/RS-485 (Surge Protected, RS-485 Termination and Fail-safe Resistors), 1x Serial Console TTL		
Cellular     No     3 G G bal     Relia CELL Option     3 G Ja       GPS     No     Integrated     Relia CELL Option     Integrated       Wi-Fi / BT     No     2x SMA Cell/GPS     Zx SMA Cell/GPS, 1x     Relia CELL Option     Zx SMA Cell/GPS, 1x     X RP-SMA Wi-Fi/BT			
RADIO INTERFACEGPSNoInter-Relia CELLO tionInter-W-Fi / BT </td <td></td>			
RADIO INTERFACEWi-Fi / BTNoNo2x SMA Cell/GPS2x SMA Cell/GPS,1x RSMA Wi-Fi/BT1x RP-SMA Wi-Fi/BT2x SMA RP-SMA <td>pan Only</td>	pan Only		
WHY BY     Image (External)     No     2x SMA Cell/GPS     2x SMA Cell/GPS, 1x RSMA Wi-Fi/BT     1x RP-SMA Wi-Fi/BT     2x SMA RP-SM       RTC     C     Sex Source (User Accessible Batter)	egrated		
Antennas (external)No2X SMA Cell/GPSRSMA Wi-Fi/BTIX RP-SMA Wi-Fi/BTRP-SMARTCRTCRSMA Wi-Fi/BTRP-SMAKX WatchdogServerYesServerEEPROMSensorsSensorsSensorsLEDs1x Power, 4x Progr. $1x$ Power, 1x Cellular, 4x ProgrammableSensorsButtons1x Power, 4x Progr. $1x$ Power, 1x Cellular, 4x ProgrammableSensorsButtonsNo $1x$ microSIM (User Accessible)SensorsPOWERInputSensorsSensorsSensorsInputSensorsSensorsSensorsSensorsOperating TempSensorsSensorsSensorsSensorsSensorsSensorsSensorsSensorsSensorsInputSensorsSensorsSensorsSensorsSensorsSensorsSensorsSensorsSensorsButtonsSensorsSensorsSensorsSensorsPOWERInputSensors </td <td></td>			
Final ProblemYesExt. WatchdogYesEPROM $256kbit$ Sensors $Temperature, Accelerometer$ LEDs $1x$ Power, $4x$ Progr.Buttons $1x$ Power, $1x$ Cellular, $4x$ ProgrammableButtons $1x$ Power, $1x$ Reset, $1x$ ProgrammableSIM SlotNoPowerInputConsumption $9-36VDC$ , with $Tx$ microSIM (User Accessible)EnvironmetricOperating Temp $1x$ Pometric $-20$ to $+70^{\circ}C$ Regulatory $-40$ to $+85^{\circ}C$	Cell/GPS, 1x A Wi-Fi/BT		
EEPROM     256kbit       EEPROM     Sensors     Temperature     Temperature, Accelerometer       LEDs     1x Power, 4x Progr.     1x Power, 1x Cellular, 4x Programmable       Buttons     1x Power, 4x Progr.     1x Power, 1x Cellular, 4x Programmable       Buttons     1x Power, 1x Cellular, 4x Programmable       SiM Slot     No     1x microSIM (User Accessible)       Power     Input     9-36VDC, with TraincorSIM (User Accessible)       Consumption     9-36VDC, with TraincorSIM (User Accessible)       Power     Operating Temp     2W Ide (15W Max)       Fervireonmeter     -20 to +70°C       Storage Temp     6     -40 to +85°C       Regulatory     CE, FUSED, JATE, TELEC, E-Mark			
OTHERSensorsITemperature, AccelerometerLEDs1x Power, 4x Progr.1x Power, 1x Cellular, 4x ProgrammableButtonsIx Reset, 1x ProgrammableSIM SlotNo1x microSIM (User Accessible)POWERInput9-36VDC, with Traisient Protection, Vehicle Ignition SensePOWEROperating Temp2W Ide (15W Max)Operating Temp0-20 to +70°CStorage TempRegulatoryCE, FCC, ISED, JATE, TELEC, E-Mark	Yes		
LEDs 1x Power, 4x Progr. 1x Power, 1x Cellular, 4x Programmable   Buttons 1x Reset, 1x Programmable   SIM Slot No 1x microSIM (User Accessible)   POWER Input 9-36VDC, with Transient Protection, Vehicle Ignition Sense   Consumption -20V Idle (15W Max)   POWER Operating Temp -20 to +70°C   Storage Temp -40 to +85°C   Regulatory CE, FCC, ISED, JATE, TELEC, E-Mark			
Buttons     1x Reset, 1x Programmable       SIM Slot     No     1x microSIM (User Accessible)       POWER     Input     9-36VDC, with Transient Protection, Vehicle Ignition Sense       Consumption     2W Idle (15W Max)       Operating Temp     -20 to +70°C       Storage Temp     -40 to +85°C       Regulatory     CE, FCC, ISED, JATE, TELEC, E-Mark			
SIM Slot     No     1 x microSIM (User Accessible)       POWER     Input     9-36VDC, with Transient Protection, Vehicle Ignition Sense       Consumption     9-36VDC, with Transient Protection, Vehicle Ignition Sense       POWER     Operating Temp     2W Idle (15W Max)       Storage Temp     0     -20 to +70°C       Regulatory     CE, FCC, ISED, JATE, TELEC, E-Mark			
POWER Input 9-36VDC, with Transient Protection, Vehicle Ignition Sense   Consumption 2W Idle (15W Max)   PNVIRONMENT Operating Temp -20 to +70°C   Storage Temp -40 to +85°C   Regulatory CE, FCC, ISED, JATE, TELEC, E-Mark	1x Reset, 1x Programmable		
POWER     Consumption     2W Idle (15W Max)       ENVIRONMENT     Operating Temp     -20 to +70°C       Storage Temp     -40 to +85°C       Regulatory     CE, FCC, ISED, JATE, TELEC, E-Mark			
Consumption     2W Idle (15W Max)       ENVIRONMENT     Operating Temp     Consumption       Storage Temp     -20 to +70°C       Regulatory     -40 to +85°C			
ENVIRONMENT Storage Temp - 40 to +85°C   Regulatory CE, FCC, ISED, JATE, TELEC, E-Mark	2W Idle (15W Max)		
Storage Temp - 40 to +85°C   Regulatory CE, FCC, ISED, JATE, TELEC, E-Mark	- 20 to +70°C		
	- 40 to +85°C		
Safety EN 62368, UL 60950 (§)	CE, FCC, ISED, JATE, TELEC, E-Mark		
	EN 62368, UL 60950 (§)		
Environmental RoHS2, REACH	RoHS2, REACH		
CERTIFICATIONS (*)     Wi-Fi / BT Radio     No     RED, FCC, JATE, TELEC			
	E, TELEC		
IoT Platform Microsoft Azure Certified	Microsoft Azure Certified		
Ingress IP40	IP40		
MECHANICAL Enclosure Material: ABS - Color: Aluminum	Material: ABS - Color: Aluminum		
Dimensions 140x95x45mm (LxWxH) - with SMA Connectors	140x95x45mm (LxWxH) - with SMA Connectors		

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

(\*) Additional Country Certifications for REGATE-10-11-33 are: NOM and IFETEL (Mexico), RCM (Australia / New Zealand), CCC (China), NCC (Taiwan), KC (South Korea).

(§) UL, NRTL listing Factory Option.

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