ResIOT® X2 868MHz

Desk & DIN-Rail Mounting LoRaWAN® Gateway

ResIOT® X2 is the latest Indoor LoRaWAN® Gateway/Base station model.

Thanks to construction materials and DIN rail mounting case, this device is perfect to be installed in very difficult environments and meets all the requirements of any industrial application.

This gateway works in a range of industrial temperatures, from -40 °C to + 85 °C. ResIOT® X2 provides durable, low-power, widearea connectivity in support of M2M and IoT applications.

It is perfect for demanding markets like Smart Grid, Energy, Telecom and Broadcasting.

Cortex-A7 629MHz	RAM 512Mb	4Gb eMMC	DC 12÷24 Volt	RS-485	ChipSIM MFF2	MicroSIM 3FF Slot	-40 to +85 °C 10%-90% H
Modem 2G 3G/4G LTE	Semtech SX1303	LoRaWAN® class support	Wifi	Linux Yocto 4.1.15	Embedded sensors	Data Retention	LoRa Net Srv & IoT Platform

ResIOT® Software	Four modes of use: 1) LoRaWAN® Gateway with ResIOT® Merlin Base Station Client (for business or carrier-grade networks with full remote control and secure connection with ResIOT® GW Remote Access Server) 2) LoRaWAN® Gateway with Semtech™ Packet Forwarder 3) Industrial IoT Box. On-premises ResIOT® LoRaWAN® Net Srv and ResIOT® IoT Platform all in a box with free unlimited license 4) Hybrid Mode 1+3 LoRaWAN® Gateway with ResIOT® Merlin Base Station Client & Industrial IoT Box SSH, OpenVPN available
Data Retention	In case of connection lost between gateway and network server the arrived radio messages are not lost, they are saved in memory and forwarded to the network server when the connection is restored
CPU & Memory	ARM Cortex-A7 528/629MHz, RAM DDR3 512MB, 4GB eMMC Flash, Cache 32 KB-I, 32 KB-D, 128 KB L2
Power Supply	12V/1.5A, Consumption about 12V/0.3A
External Conn.	RS485, Optional RS232 and CAN-bus
Modem & SIM	Only for LTE version, Modem Quectel EG91x 4G, LTE, 3G, 2G, EMEA EDGE GSM/GPRS Regulatory: GCF/ CE/ KC / NCC/ RCM / NBTC / FAC / ICASA Chip SIM MFF2 included and ready to activate (worldwide connectivity! Visit sim.resiot.io). MicroSIM 3FF slot available. You can use your own SIM Card (ChipSIM will be automatically deactivated)
Radio LoRa	Chipset Semtech SX1303, new generation of LoRa® baseband processor with Fine Timestamp capability that enables Time Difference of Arrival (TDOA) network-based geolocation, 8 Multi-SF LoRa® Channels, Listen before talk Able to receive up to 8 LoRa® modulated packets simultaneously. Protocol 1.02, 1.03, 1.1. Class A,C Max TX Power +27 dBm, Receiving Sensitivity -142.5dBm
Connectors	Ethernet 1 RJ-45 10/100, 1x USB Host, 1x Micro USB Device Debug LoRa 1xSMA, LTE Antenna 1xSMA (only for LTE version) 2 Pin connector RS485
Wifi	Only for Wifi version, 802.11b/g/n
Sensors & OS	Embedded Accelerometer, Temperature & Humidity Sensors. Linux 4.1.15 (Yocto)
Working Param.	-40°C~85°C. Operating Humidity 10%~90%, non-condensing
Case & Size	IP30 Aluminum Case & Polycarbonate Panels, 98.33mm x 113.28mm x 69.01mm, about 0.350 Kg

LoRa™ Alliance Member

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Ordering Information

ResIOT® X2 is configured and delivered with pre-installed Software
- ResIOT® Merlin IoT Box/Base Station Client
- ResIOT® LoraWAN® Network Server
- IoT Platform with free license unlimited devices
- SSH Access & custom configuration available for other network servers

Desk setup

DIN-Rail setup

Model	Freq.	Description	Radio Ch.	Modem 2G/3G/ 4G/LTE	LoRa Antenna	LoRaWAN® Classes
ResIOT-X2-ETH-1-868-00	863..870 MHz	ResIOT® X2 Industrial DIN LoRaWAN® Gatewa 8 channels 868Mhz Ethernet, 12/24v, RS485 Included: 12V power supply, LoRa Antenna omni 868MhZ 195x12.9mm 3 dBi	8	N	1x 3 dBi	A, C
ResIOT-X2-LTE-1-868-00	863..870 MHz	ResIOT® X2 Industrial DIN LoRaWAN® Gateway 8 channels 868Mhz Ethernet, LTE/4G/3G/2G Modem, 12/24v, RS485, Chip SIM, slot Micro SIM 3FF Included: 12V power supply, LoRa Antenna omni 868MhZ 195x12.9mm 3 dBi, 1x LTE Antenna 195mm	8	YES	1x 3 dBi	A, C
ResIOT-X2-LTE-1-868-IA	863..870 MHz	ResIOT® X2 Industrial DIN LoRaWAN® Gateway 8 channels 868Mhz Ethernet, LTE/4G/3G/2G Modem, 12/24v, RS485, Chip SIM, slot Micro SIM 3FF Included: 12V power supply, LoRa Antenna omni 868MhZ 195x12.9mm 3 dBi, 1x Internal LTE Antenna 195mm	8	YES	1x 3 dBi	A, C
ResIOT-X2-ETH-1-868-0W	863..870 MHz	ResIOT® X2 Industrial DIN LoRaWAN® Gateway 8 channels 868Mhz Ethernet, 12/24v, RS485, WiFi 2,4GHz 802.11b/g/n Included: 12V power supply, LoRa Antenna omni 868MhZ 195x12.9mm 3 dBi, 1x WiFi Antenna 2,4Ghz	8	N	1x 3 dBi	A, C

ResIOT-X2-ETH-1-868-00

ETH, LoRa

ResIOT-X2-LTE-1-868-00

ETH, LoRa, Modem 2G/3G/4G LTE + ChipSIM MicroSIM 3FF Slot + External LTE Antenna

ResIOT-X2-LTE-1-868-IA

ETH, LoRa, Modem 2G/3G/4G LTE + ChipSIM MicroSIM 3FF Slot + Internal LTE Antenna

ResIOT-X2-ETH-1-868-0W

ETH, LoRa, Wifi + External Wifi Antenna

Every ResIOT® X2 comes with its own RGRA Serial, a special unique secret key printed on a label inside the gateway pack that allows to access remotely, manage and monitor your device everywhere at any time

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