

ResIoT® X4S is the latest **LoRaWAN® Gateway/Base station Business-grade model**. It is specifically designed for outdoor application thanks to its **modern-designed IP67 case** and **waterproof** components & connectors. Its external power supply connector is suitable for solar panels connection, in order to make this gateway completely grid-free and suitable for every environment.

ResIoT® X4S 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



External power sup. DC 12÷24
for solar panels connection



ChipSIM
MFF2



MicroSIM
3FF Slot



-20 to +70 °C
10%-95% H



Modem 2G
3G/4G LTE



Semtech
SX1303



LoRaWAN®
class support



LiFePO4
batteries



Linux Yocto
4.1.15



Data
Retention



Waterproof
case



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 (only if the gateway is connected to a ResIoT® network server)
CPU & Memory	ARM Cortex-A7 528/629MHz, RAM DDR3 512MB, 4GB eMMC Flash, Cache 32 KB-L, 32 KB-D, 128 KB L2
Power Supply	External DC 12-24V power supply connector suitable for 12-24V solar panels and external DC power supply sources. Embedded MPPT high efficiency charge controller to maximize the solar panels productivity PoE-Power over ethernet Input 42~60 VDC IEEE 802.3at (batteries are not charged by PoE circuit)
Batteries	Embedded LiFePO4 high-capacity batteries
Modem & SIM	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 + 2x SX1257 RF end-front, 8 Multi-SF LoRa Channels, Listen before talk, Fine Timestamp capability for Time Difference of Arrival (TDOA & network-based geolocation), 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	LoRa 1xNTYPE External DC 12-24V power supply connector LTE antenna Ethernet 1 RJ-45 10/100 (PoE)
Sensors & OS	Embedded Accelerometer, Shock, Inclination, Temperature & Humidity Sensors. Linux 4.1.15 (Yocto)
Working Param.	-20°C~70°C. Operating Humidity 10%~90%, non-condensing
Case & Size	IP67 Aluminum Case, 258mm x 228mm x 90mm, about 3.5 Kg