

the power of the Sun ...
... the power of LoRaWAN[®]

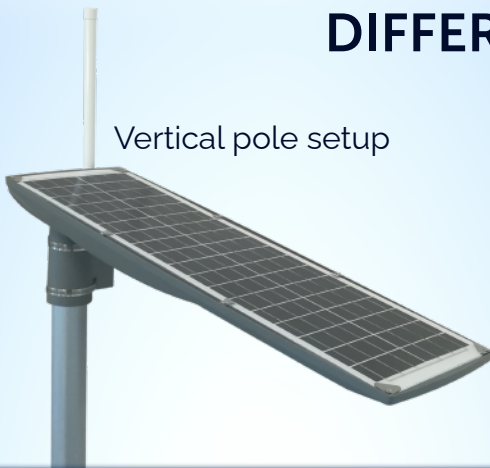
ALL-IN-ONE SOLUTION!

Solar panel 30W • LoRaWAN[®] Gateway • 7 days autonomy

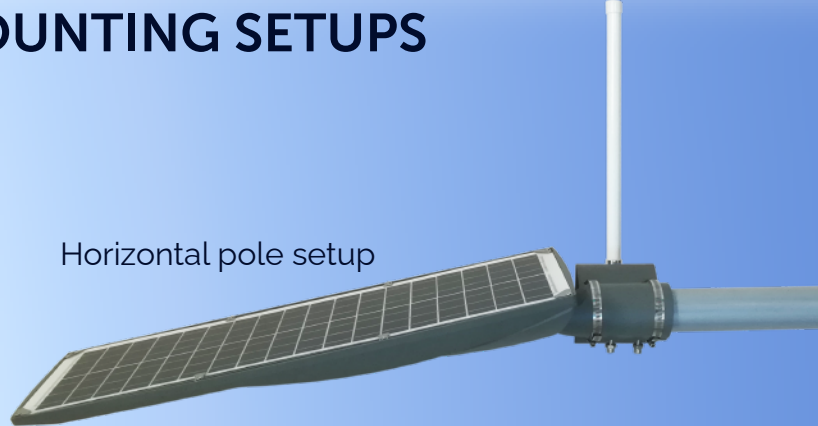
100% AUTONOMOUS & SUITABLE FOR ANY ENVIRONMENT

DIFFERENT MOUNTING SETUPS

Vertical pole setup



Horizontal pole setup



30W solar panel



Up to 7 rainy days



883*261*91mm
about 8 kg



Modem 2G
3G/4G LTE



GPS
GNSS



NO maintenance needed



IP66 IK08 case



-20 to +60 °C

EMBEDDED LoRaWAN[®] GATEWAY



Cortex-A7
629MHz



RAM
512Mb



4Gb
eMMC



Ext. power sup.
DC 9+35



Optional 30W
extra panel



ChipSIM
MFF2



EU Connectivity
included



External
RS-485



3.8dBi omni-
directional antenna



Semtech
SX1303



LoRaWAN[®]
class support



Wifi
optional



Linux Yocto
4.1.15



Embedded
sensors



Data
Retention



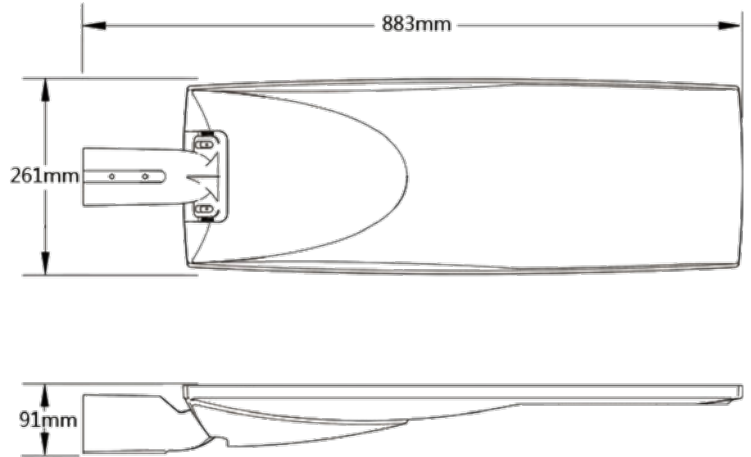
LoRa Net Srv
& IoT Platform

Overview

ResIoT® X8 is the latest outdoor solar powered LoRaWAN® Gateway/Base station.

Thanks to the 30W solar panel and the 7 rainy days batteries autonomy, this device is the perfect low maintenance & high performance solution that can be installed in every type of environment.

This gateway is suitable for both rural and urban contexts thanks to its compact IP66 case and modern designed shape that ensures high production & volume efficiency. ResIoT® X8 provides durable, low-power, widearea connectivity to support M2M and IoT applications. It is perfect for demanding markets like Smart Grid, Energy, Telecom and Broadcasting.



Technical details

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-L1, 32 KB-D, 128 KB L2
External Conn.	RS485, Ethernet & LoRa Antenna connectors, extra solar panel and DC 9~35V connector for uninterruptible power supply.
Modem & SIM	Modem Quectel EG91x 4G, LTE, 3G, 2G, EMEA EDGE GSM/GPRS. Regulatory: GCF/ CE/ KC / NCC/ RCM / NBTC / FAC / ICASA EU connectivity included! Chip SIM MFF2 included and ready to be activated (Visit sim.resiot.io)
Radio LoRa	Chipset Semtech SX1303, Fine Timestamp capability, 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, B, C Max TX Power +27 dBm, Receiving Sensitivity -142.5dBm
Wifi & GPS	Optional Wifi 802.11b/g/n GPS Module Ublox MAX-M8Q (concurrent reception of up to 3 GNSS)
Sensors & OS	Embedded Accelerometer, Temperature & Humidity Sensors. OS Linux 4.1.15 (Yocto)
Working Param. & Size	-20°C~60°C, IP66 IK08 waterproof case, 883mm x 261mm x 91mm, about 8 Kg
Solar Panels	30W solar panel, optional 30W extra solar panel
Battery & Autonomy	LiFePO4 Batteries, up to 7 rainy days autonomy. External connector DC 9~35V for uninterruptible power supply, to backup the solar panels production in case of long cloudy/rainy periods