



## LoRaWAN GATEWAY

The Wirnet iStation is a best-in-class industry standard outdoor LoRaWAN gateway, combining simplicity of outdoor installation, unique superior coverage and operational excellence.

The Wirnet iStation is the reliable backbone of AgrIoT IoT wireless sensor networks and can support thousands of wireless sensors.\* This flexible solution provides durable, low-power, wide area connectivity in support of a vast range of precision agriculture IoT applications.

Designed for easy deployment, the solution includes a, IP67 enclosure, LoRa antenna to improve outdoor range and provides a choice of 3G / 4G or Ethernet backhaul options.

The AgrIoT gateway has a range of at least 1.5 km.† Smart Farm Sensing offers pre-configured AgrIoT network solutions with soil moisture sensors, weather stations, smart valves, smart flow meters, smart traps, etc.

AgrIoT wireless IoT sensor networks are based on open radio standards, we can integrate almost any off-the-shelf LoRa or cellular sensor. Contact Smart Farm Sensing for sensor integration services.



\* Represents ideal network configuration and equipment set up.

† Results vary depending on payload amount, transmission frequency, spreading factor used, as well as terrain, RF interference and obstruction type (e.g., metal, cement, etc.).

# SPECIFICATIONS

## Key Features

- Outdoor LoRa® Gateway
- Carrier grade casing (IP67) for industrial use,
- Supported unlicensed bands : 863-874.4MHz (EMEA, India), 902-928MHz (North America), 915-928MHz (APAC, Latin America),
- Supported LoRaWAN® regional parameters: EU863-870, IN865-867, RU864-870, US902-928, AU915-928, AS923, KR920-923,
- 8ch RX (125 kHz, multi Spreading Factor) + 1ch RX (250kHz or 500kHz, mono Spreading Factor) + 1ch RX (FSK) to get 10ch RX + 1ch TX,
- Backhaul connectivity: 4G Worldwide module with 3G/2G fallback and Ethernet (RJ45)
- Powered by PoE (Injector, switch, ...), both Mode A and Mode B (802.3af specifications), or +/- 48VDC through RJ45 (UPS, solar panels, ...)
- Highly secured device relying on a hardware secure core

## Technical Features

- Sniffer for LBT (Listen Before Talk)
- Built-in with high rejection SAW filters
- Rx Sensitivity: -141 dBm (SF12)
- TX Power: configurable from 5dBm to 27dBm
- Range -40°C +60°C
- Humidity: 95%
- Size: 265 x 165 x 100 mm
- Weight: 1,4kg (mounting kit included)
- Spectrum analysis compliant
- Backup batteries to allow the clean shut down of applications in case of power cut
- Casing: IP67 Alu (Back), Polycarbonate (Front), Inox (mounting kit)
- Surge protection of the RF LoRa link (option),
- CPU: ARM Cortex A9
- DDRAM 256MB,
- 8GB eMMC (6GB available for user)



## SMART FARM SENSING

Smart Farm Sensing provides products, services and solutions to the agriculture sector based on intelligent sensor data, remote sensing and geospatial information.

Our vision is to increase global agriculture productivity and sustain our future food chain with fully operational satellite, aerial and ground remote sensing data supply chains.

