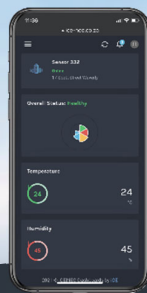


LoRaWAN Industrial IoT

- Smart Cities
- Agriculture
- Water Treatment
- Petro-chemical
- Mining
- Transport
- Energy



iCE i-Sky-II Smart Industrial IoT Solution.

Features

- Rugged Industrial Design
- Up to 15km Range (LoRaWAN)
- Hi Capacity – Up to 2000 Nodes (per Gateway)
- Embedded Network Server
- Real-Time Data Collection and Processing
- GSM Module – GSM/3G/4G LTE
- Wi-Fi IEEE 802.11b/g/n
- GPS Module
- Ethernet (802.3 af PoE Suport)
- Quad-Core Processor
- IP67 Weatherproof Case
- Supports multiple Backhaul Connectivity

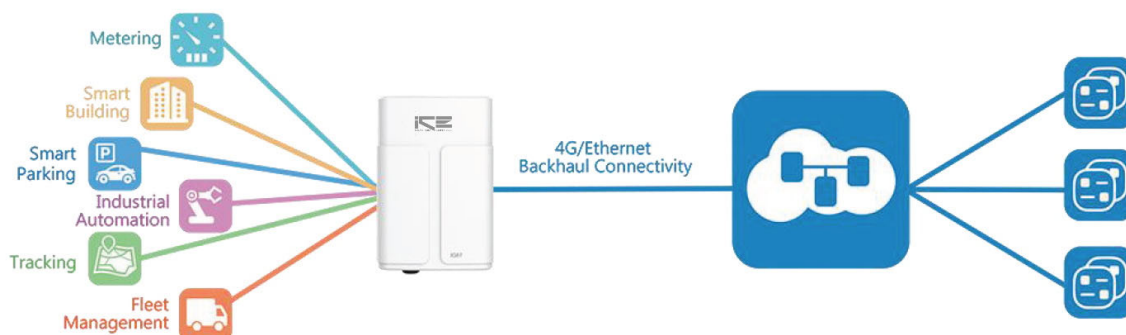


Please note all images and specifications may change without notice. E & OE. Please check with your local distributor that you have the latest version.

INTRODUCTION

The iCE i-Sky-II is a true industrial IoT solution offering a combination of wireless flexibility and self-powered industrial sensors to suite any application. Low-power sensors communicate to central gateways using an industry standard, low frequency LoRaWAN protocol. Data is then made available through the iCE-NEO cloud platform where its can be viewed in real-time and logged for historical analysis. Thresholds can be added to trigger events and alerts can be generated and sent to relevant parties.

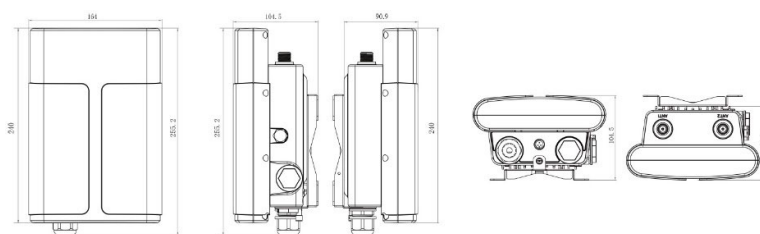
TYPICAL APPLICATION



THE iCE LoRaWAN GATEWAY



iCE iG67 is a robust 8-channel outdoor LoRaWAN® gateway. Adopting SX1302 LoRa chip and high-performance quad-core CPU, iG67 supports connections of more than 2000 nodes. The iG67 has line of sight comms of up to 15km and an IP67 waterproof case, which is ideally suited to smart agriculture, smart metering and many other outdoor applications. Multiple back-haul redundancy makes it ideal for reliable real-time monitoring and management.



- Quad-core industrial processor with large memory capacity
- 8 half/full-duplex channels
- IP67 waterproof enclosure, industrial design for harsh environmental applications
- Wall or pole mount options
- PoE or solar power options
- Backup Capacitor for alerting of power failures
- Multiple backhaul backup with Ethernet, cellular (4G/3G) and Wi-Fi
- The iCE-NEO IoT Cloud provides easy and centralized management of remote devices
- Enable security communication with multiple VPNs including IPsec/OpenVPN/L2TP/PPTP/DMVPN
- Built-in network server and MQTT/HTTP/HTTPS API for integration options

iCE LoRaWAN Commercial Sensors – i300 Sensor Series

The iCE range of commercial LoRaWAN sensors are designed to support most indoor and outdoor applications. Professional and good protection against the elements, this range of sensors offer a long battery life combined reliability and high levels of accuracy.



Temp/Humidity



IP67 Dust/Moisture



Door/Window Sensor



Leak Sensor (Spot)



Leak Sensor (Zone)

iCE LoRaWAN Industrial Sensors – i500 Sensor Series

The iCE range of Industrial LoRaWAN sensors are designed for more extreme environmental and outdoor applications. Higher protection against the elements, and a longer battery life combined reliability and high levels of accuracy make these sensors ideal in almost any environment.



Front View

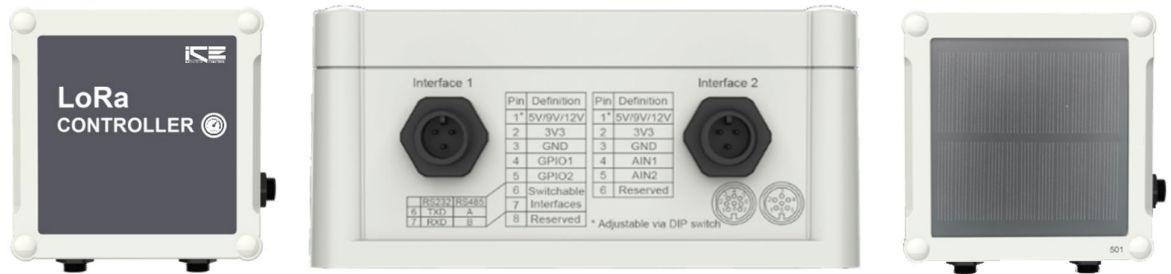


Rear View

- Multi-Sensor – CO₂, Temp, humidity & Air-Pressure Combination
- Light Levels Sensor (LUX)
- Pressure Sensor (Pipes)
- Temperature Sensor
- Soil Moisture Sensor
- Soil Moisture, Temperature and Electrical Conductivity
- Tank Level Sensor
- Distance Level Sensor (Silos/Dams)

Sensor Conversion to iCE LoRaWAN – i500 Controller Series

Where existing or traditional sensors require remote monitoring, the i-Sky-II caters for these scenarios with our i500 Controller Series. IP67 Rated, long-run power and solar options, these controllers introduce conventional sensors into the Industrial IoT space, with low power and remote monitoring options.



MULTIPLE I/O OPTIONS

Supporting most sensor output types, including DI/DO with Pulse support, RS232/485 and Dual Analog (4~20mA or 0~10V) Ports are also available. The variable power output supply port powers most sensor types up to 12VDC. An 11km, line of sight (internal antenna) offers maximum flexibility in design and positioning.

