LoRa AIoT Solution
for Future Communication

LoRaWAN | VPN | Dual WAN | Redundant Power | Wide Temperature | ESG Energy Monitoring

Industrial LoRaWAN Gateway for 300 Nodes

LCG-300-NR

- 8 programmable parallel demodulation paths
- Supports Frequency Band EU868/US915/AS923 MHz Sub 1G
- Web UI for LoRa and network configuration
- SSL VPN and robust hybrid VPN (IPSec/PPTP/L2TP over IPSec)
- DC 9 to 54V redundant power; -40 to 75 degrees C operating temperature
- IP30 metal case with DIN-rail or wall-mount design
- Global 5G NR (NSA/SA) / 4G LTE network for cellular network connection

5G NR | 4G LTE

LCG-300/LCG-300W

- 8 programmable parallel demodulation paths
- Supports Frequency Band EU868/US915/AS923 MHz Sub 1G
- Web UI for LoRa and network configuration
- Concurrent dual-band connectivity in 2.4GHz (600Mbps) and 5GHz (1200Mbps)(LCG-300W)
- SSL VPN and robust hybrid VPN (IPSec/PPTP/L2TP over IPSec)
- DC 9 to 54V redundant power; -40 to 75 degrees C operating temperature
- IP30 metal case with DIN-rail or wall-mount design

TAIWAN EXCELLENCE 2023

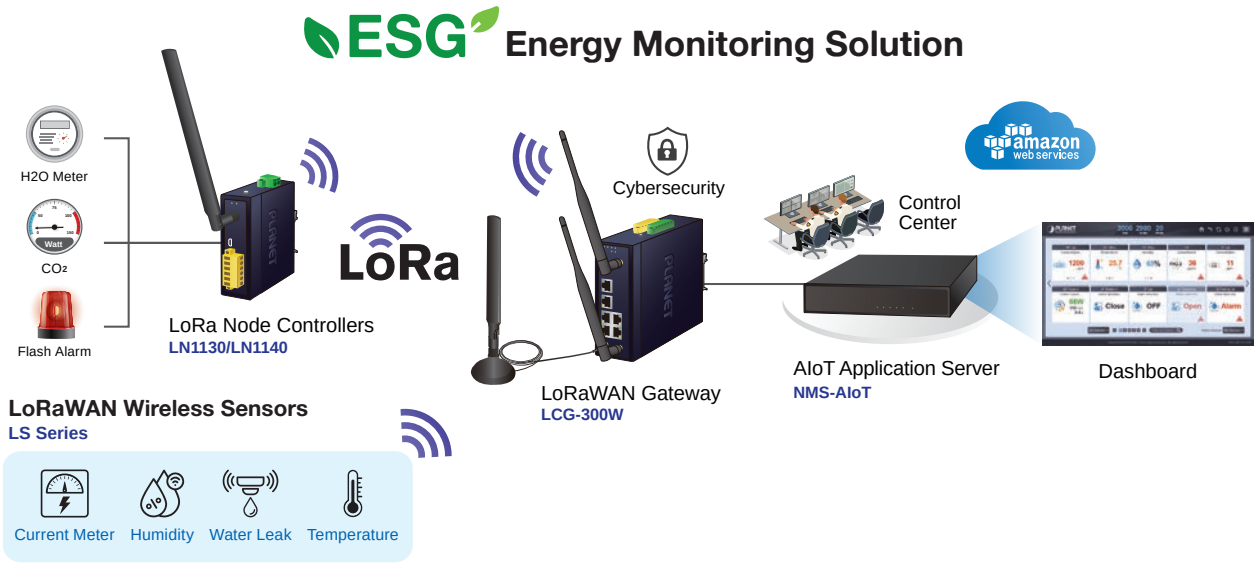
LoRa AIoT Communication

Utilizing LoRa Technology to Create Efficient AIoT Solution

PLANET AIoT Solution consists of LCG-300 LoRaWAN Gateway Series (LCG-300/LCG-300W/LCG-300NR), AIoT Application Server (NMS-AIoT), LoRa Node Controllers (LN1130/LN1140) and LoRa Sensors (LS Series) which incorporate LoRa technology to bridge LoRa wireless network to an IP network. The LoRa wireless allows users to send data over extremely long ranges with low power consumption. It also offers long-range spread spectrum communication and high interference immunity. PLANET AIoT Solution can help you to promote the implementation of AIoT network.

LoRa Communication Solution

PLANET LoRa Gateway (LCG-300 Series) supports the LoRa and LoRaWAN standards. Transceivers are configured with LoRa devices such as CO2 and water sensors, which are embedded into end nodes or sensor devices. These devices capture and transmit data to gateways over wireless networks. The LCG-300 Series can send information via Ethernet to the Network Server/ Application Server, which is responsible for network management functions and distributes information to each node accordingly. It integrates LoRaWAN and environmental sensors to monitor energy usage, helping to improve energy usage efficiency and achieve environmental sustainability.



LoRaWAN Gateway for 100 Nodes

LCG-100F

- One 1000BASE-X SFP slot for WAN interface
- Two 10/100/1000BASE-T Gigabit RJ45 copper
- Supports Frequency Bands of EU868, US915, AS923MHz (Sub 1G)
- 8 programmable parallel demodulation paths
- Web UI for LoRa and network configuration
- SSL VPN and robust hybrid VPN (IPSec/PPTP/L2TP over IPSec)
- DC 12V power input; 0 to 50 degrees C operating temperature
- IP30 metal case with DIN-rail or wall-mount design

AIoT Application Server

NMS-AIoT

- Central management platform
- 5 x Gigabit Ethernet ports and 2 x USB 3.0
- Supported MQTT Broker
- Graphical interface management
- Real-time sensor information
- Data collection from LoRa sensors

LoRa Node Controller

LN1130

- Ultra-wide-distance transmission up to 10km with line of sight
- Easy to connect with multiple wired sensors through RS232/RS485 interface
- Triggers multiple conditions and actions
- Compliant with standard LoRaWAN gateways and network servers
- 9 to 48V DC power with reverse polarity protection (AC 24V power adapter acceptable)
- Industrial metal case IP30 design with wide -40 ~ 75°C operating temperature range

LN1140

- Ultra-wide-distance transmission up to 10km with line of sight
- 2DI/DO interfaces each for operating application
- Triggers multiple conditions and actions
- Compliant with standard LoRaWAN gateways and network servers
- 9 to 48V DC power with reverse polarity protection (AC 24V power adapter acceptable)
- Industrial metal case IP30 design with wide -40 ~ 75°C operating temperature range

LoRa Sensor

LoRa sensor devices serve a myriad of purposes, including flood detection, temperature and humidity monitoring, PIR motion sensing, and more. Leveraging the LoRaWAN protocol, these devices ensure long-range wireless communication in IoT applications. Their notable benefits include extended battery life due to low power consumption. Widely applied in scenarios such as smart agriculture, industrial monitoring, and asset tracking, LoRa sensors offer a cost-effective and reliable solution for collecting and transmitting data over considerable distances, making them invaluable in diverse environmental and operational contexts.

LS100 series

LS100-WL

- Water Leak Sensor
- IP65 rating
- LoRaWAN™ Class A compatible

LS100-PIR

- Indoor Occupancy Sensor (Occupancy/ Light/Temperature)
- IP30 rating
- LoRaWAN™ Class A compatible

LS100-DW

- Door and Window Contact Sensor
- IP30 rating
- LoRaWAN™ Class A compatible

LS200 series

LS200-TH

- Indoor Temperature and Humidity Sensor (-20~55 degrees C)
- IP65 rating
- LoRaWAN™ Class A compatible

LS200-PT

- Machine Temperature Sensor with Thermocouple (-70~200 degrees C)
- IP65 rating
- LoRaWAN™ Class A compatible

LS200-TC

- Machine Temperature Sensor with Thermocouple (-40~125 degrees C)
- IP65 rating
- LoRaWAN™ Class A compatible

LS200-RF

- Refrigerator Temperature and Humidity Sensor (-40~55 degrees C)
- IP65 rating
- LoRaWAN™ Class A compatible

LS200-CM3

- 3-phase Current Meter with Clamp-On CT
- Measure 75A current maximum
- IP53 rating
- LoRaWAN™ Class A compatible

LS200-LG

- Light Level Sensor
- IP65 rating
- LoRaWAN™ Class A compatible