LoRa AIoT Solution for Future Communication

PLANET AIoT Solution consists of LCG-300 Series (LCG-300/LCG-300W), which incorporates 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.

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
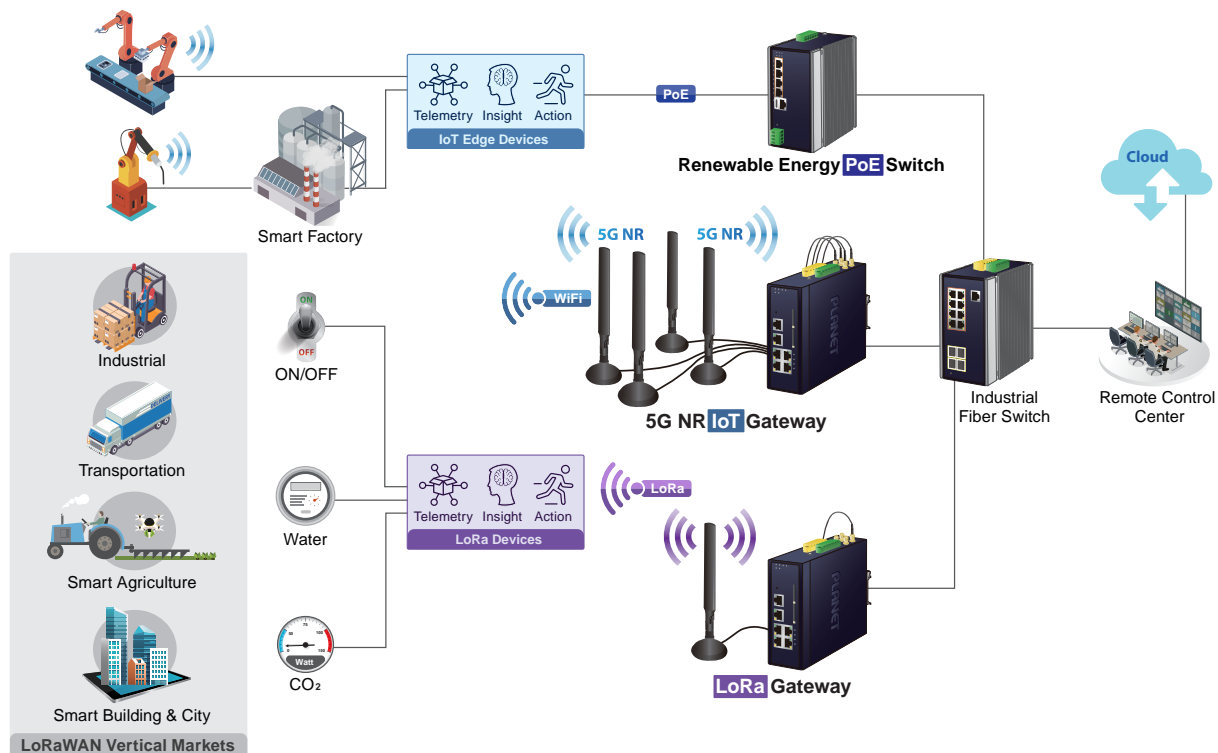
LCG-300/LCG-300W

- 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

LoRa Communication Solution

PLANET LCG-300 Series LoRa Gateway supports LoRa and LoRaWAN standards. Transceivers configured with LoRa devices like CO2 and water sensors are embedded into end-nodes, or sensor devices that capture and transmit data to gateways over distances through wireless network. LCG-300 Series can send information via Ethernet to Network Server, which is responsible for network management functions that distribute information to each node accordingly.

LoRa Node

LN1152 & LN501

- Convert serial and I/O data to LoRa environment
- Support RS232, RS485, DI and DO interfaces
- Compliant with LoRaWAN® 1.0/1.0.2 class C
- Support EU868/AU915/US915/AS923

LN1130/LN1140

- Ultra-wide-distance transmission up to 10km with line of sight
- Easy to connect with multiple wired sensors through RS232/ RS485 interfaces (LN1130)
- 2 DI/DO interfaces for operating application (LN1140)
- 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 -40°C~75 temperature range