

# IOT-G65

## LoRaWAN Gateway Data Sheet

**Reliable and Remote-Manageable  
for Large Scale M2M Deployment**

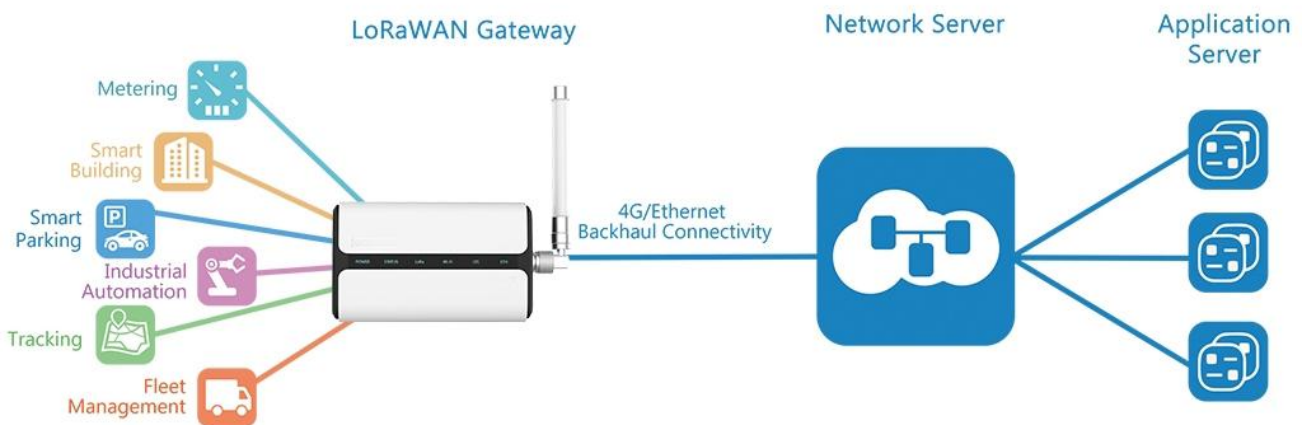


## ► Introduction

IOT-G65 is an affordable 8-channel indoor LoRaWAN gateway. Adopting SX1302 LoRa chip and high-performance quad-core CPU, IOT-G65 supports connection with more than 2000 node connections. IOT-G65 has line of sight up to 10km and can cover about 2km in urbanized environment, which is ideally suited to smart office, smart building and many other indoor applications.

IOT-G65 not only supports not only multiple back-haul backups with Ethernet, Wi-Fi and cellular and has integrated mainstream LoRa network servers (such as TTN, ChirpsStack, etc.), but also is built-in network server and Linovision Cloud compliance for easy deployment.

## ► Application Example

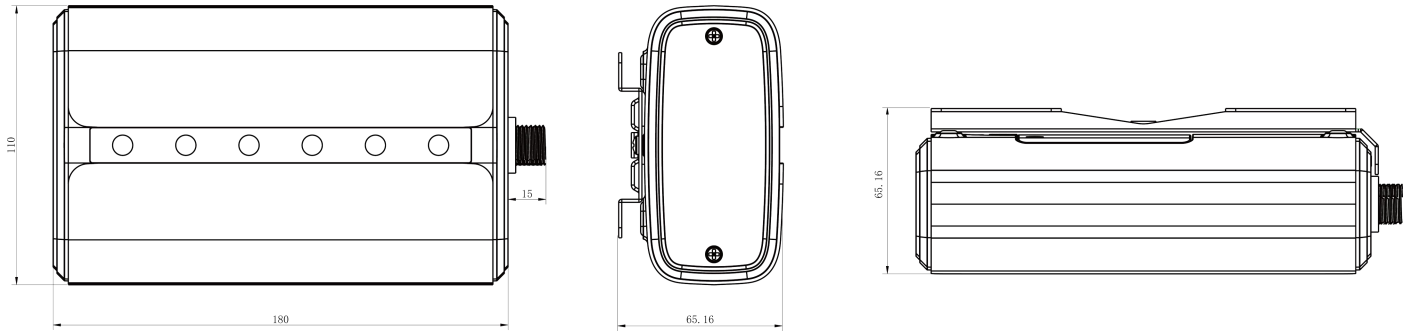


## ► Specifications

|                           |   |
|---------------------------|---|
| <b>Model</b>              | <b>IOT-G65</b>  |
| <b>Hardware System</b>    |   |
| CPU                       | Quad-core 1.5 GHz, 64-bit ARM Cortex-A53  |
| Memory                    | 512 MB DDR4 RAM   |
| Flash                     | 8 GB eMMC   |
| <b>LoRaWAN</b>            |   |
| Antenna                   | Fully Integrated and Internal Antenna<br>(Optional: 1 × 50 Ω N-Female External Connector) |
| Channel                   | 8 RX+1 TX   |
| Frequency Band            | EU433/CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923                                     |
| Sensitivity               | -140dBm Sensitivity @292bps   |
| Output Power              | 27dBm Max   |
| Protocol                  | V1.0 Class A/Class C and V1.0.2 Class A/Class C   |
| <b>Ethernet Interface</b> |   |
| Port                      | 1 × RJ45 (PoE PD_support)   |
| Physical Layer            | 10/100/1000 Base-T (IEEE 802.3)   |
| Data Rate                 | 10/100/1000 Mbps (Auto-Sensing)   |
| Interface                 | Auto MDI/MDIX   |
| Mode                      | Full or Half Duplex (Auto-Sensing)  |
| <b>Wi-Fi</b>              |   |
| Antenna                   | Fully Integrated and Internal Antenna   |
| Standards                 | IEEE 802.11 b/g/n   |
| Tx Power                  | 802.11b: 18 dBm +/-2.0 dBm (11 Mbps)  |

|                                      |   |
|--------------------------------------|---|
|                                      | 802.11g: 15 dBm +/-2.0 dBm (6 Mbps)<br>802.11g: 15 dBm +/-2.0 dBm (54 Mbps)<br>802.11n@2.4 GHz: 14 dBm +/-2.0 dBm (MCS0_HT20)<br>802.11n@2.4 GHz: 14 dBm +/-2.0 dBm (MCS7_HT20)<br>802.11n@2.4 GHz: 13 dBm +/-2.0 dBm (MCS0_HT40)<br>802.11n@2.4 GHz: 13 dBm +/-2.0 dBm (MCS7_HT40) |
| <b>Cellular Interface (Optional)</b> |   |
| Antenna                              | Fully Integrated and Internal Antenna   |
| SIM Slot                             | 1   |
| <b>Software</b>                      |   |
| Network Protocols                    | PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, DDNS, HTTP, HTTPS, DNS, ARP, SNTP, Telnet, SSH, MQTT, etc.   |
| VPN Tunnel                           | OpenVPN/IPsec/PPTP/L2TP/GRE/DMVPN   |
| Access Authentication                | CHAP/PAP/MS-CHAP/MS-CHAPV2  |
| Firewall                             | ACL/DMZ/Port Mapping/MAC Binding/URL Filter   |
| Management                           | Web, CLI, SMS, On-demand dial up, DeviceHub, Linovision Cloud   |
| Reliability                          | WAN Failover  |
| <b>Power Supply and Consumption</b>  |   |
| Power Supply                         | 1. DC Jack Connector for 9-24 VDC power supply<br>2. 1 × 802.3 af PoE input   |
| Consumption                          | ≤ 4.2W  |
| <b>Physical Characteristics</b>      |   |
| Ingress Protection                   | IP65  |
| Dimensions                           | 180 x 110 x 56.5 mm   |
| Mounting                             | Desktop, Wall or Pole Mounting  |
| <b>Others</b>                        |   |
| Reset Button                         | 1 × RST   |
| Console Port                         | 1 × Type-C Port   |
| LED Indicators                       | 1 × POWER, 1 × STATUS, 1 × LoRa, 1 × Wi-Fi, 1 × LTE, 1 × ETH  |
| Built-in                             | Watchdog, RTC, Timer  |
| Certification                        | CE, FCC   |
| <b>Environmental</b>                 |   |
| Operating Temperature                | -40°C to +70°C (-40°F to +158°F)<br>Reduced Cellular Performance Above 60°C   |
| Storage Temperature                  | -40°C to +85°C (-40°F to +185°F)  |
| Ethernet Isolation                   | 1.5 kV RMS  |
| Relative Humidity                    | 0% to 95% (non-condensing) at 25°C/77°F   |

## ► Product Images/Dimensions (mm)



## ► Ordering Information

| Model         | IOT-G65  |
|---------------|--|
| Air Interface | LTE(LTE-FDD/LTE-TDD)/CDMA(CDMA 1x/EVDO)/TD-SDMA/DC-HSPA+/HSPA+/HSUPA/HSDPA/WCDMA/EDGE/GPRS/GSM   |
| 4G            | -E: B1/B3/B5/B7/B8/B20@FDD LTE, B38/B40/B41@TDD LTE<br>-AF: B2/B4/B5/B12/B13/B14/B66/B71@FDD LTE<br>-AU: B1/B2/B3/B4/B5/B7/B8/B28@FDD LTE, B40@TDD LTE<br>-J: B1/B3/B8/B18/B19/B26 @FDD LTE,B41@TDD LTE<br>-CE: B1/B3/B8@FDD LTE,B38/B39/B40/B41@TDD LTE |
| 3G            | -E: B1/B5/B8@WCDMA<br>-AF: B2/B4/B5@WCDMA<br>-AU: B1/B2/B5/B8 WCDMA<br>-J: B1/B6/B8/B19@WCDMA<br>-CE: B1/B8@WCDMA, B34/B39@TD-SCDMA, BC0@CDMA2000 1x/EVDO  |
| 2G            | -E: 900/1800@GSM<br>-AU: 850/900/1800/1900@GSM<br>-CE: 900/1800@GSM  |

\*: Any other frequency band requirements please contact us.