# MS-7UG63

LoRaWAN® Gateway

MoviSight

MS-7UG63 is a 8-channel lightweight indoor LoRaWAN® gateway. Adopting, SX1302 chip and high-performance CPU, MS-7UG63 can not only set up packet forwarding connection between more than 2000 end nodes and mainstream network servers (such as TTN, Chirpstack, etc.), but also cover up to 2 km in urbanized environment as a blind-filling gateway. With compact size, it is an MS-7UG65 supplement for MS-7UG65 or MS-7UG67 for blind-filling in complex environment or wide indoor areas such as office, parking lots, campuses, etc.

Besides, MS-7UG63 also has built-in network server and is compatible with MoviSight IoT for dealing with data for a few end-nodes, suitable for LoRaWAN® small deployments.

◆ Application Example
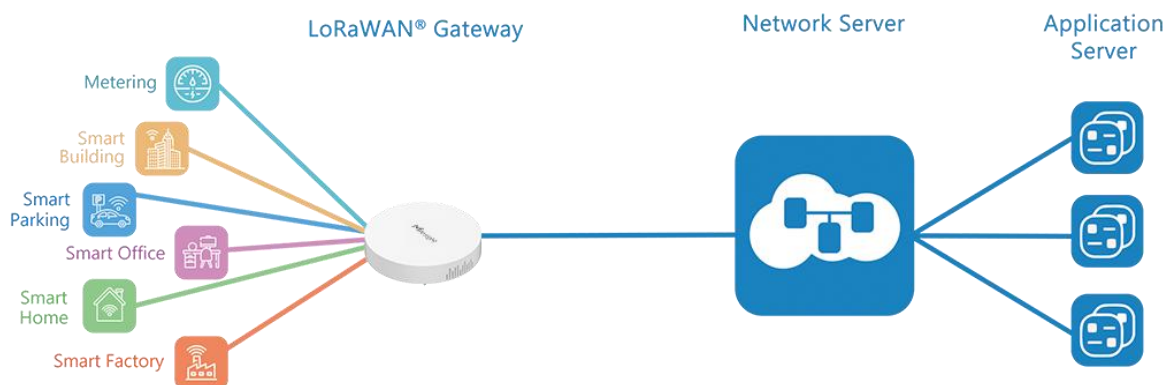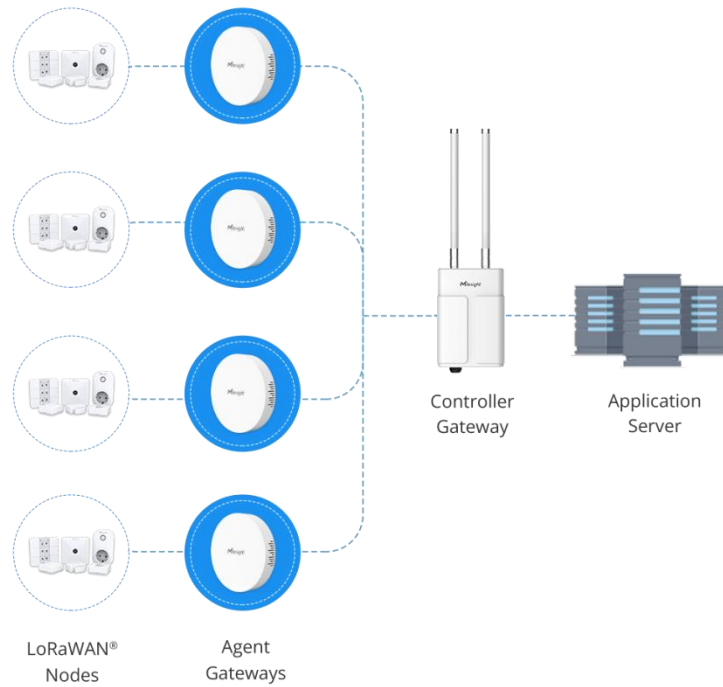
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Note: This shows the blind-filling function among MoviSight gateways.

◆ Features

- High Performance NXP industrial processor and SX1302 chip
- 8 half/full-duplex channels
- Support Listen Before Talk (LBT) for downlink
- Small in size for easy carrying & deployment
- Desktop, wall or ceiling mounting support
- Cover the blind spot of LoRaWAN® network by transmitting data to MoviSight MS-7UG56/MS-7UG65/MS-7UG67 controller gateway

- MoviSight DeviceHub & IoT Cloud provide easy and centralized management of remote devices
- Enable security communication with multiple VPNs like IPsec/OpenVPN/L2TP/PPTP/DMVPN
- Compatible with mainstream network servers like The Things Industries, ChirpStack, etc.
- Built-in network server and MQTT/HTTP/HTTPS API for easily integration
- Support 20-50 end nodes with embedded NS for small deployment

◆ Specifications

Hardware System	
CPU	528 MHz, ARM Cortex-A7
Memory	256 MB DDR4 RAM
Flash	4 GB eMMC

LoRaWAN

Antenna	2 × Internal Antennas
Channel	8 (Half/Full-duplex)
Frequency Band	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4
Sensitivity	-140dBm Sensitivity @292bps
Output Power	27dBm Max
Protocol	V1.0 Class A/Class B/Class C and V1.0.2 Class A/Class B/Class C
LBT	Support

Ethernet Interface

Port	1 × RJ45 (PoE PD supported)
Physical Layer	10/100 Base-T (IEEE 802.3)
Data Rate	10/100 Mbps (Auto-Sensing)
Interface	Auto MDI/MDIX
Mode	Full or Half Duplex (Auto-Sensing)

Others

Reset Button	1 × RST
Console Port	1 × Type-C
LED Indicators	1 × SYS, 1 × LoRa
Built-in	Watchdog, RTC, Timer

Software

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
Management	Web, CLI, DeviceHub, MoviSight IoT Cloud

Power Supply and Consumption

Power Input	1. 1 × 802.3af standard PoE input 2. 5V by Type-C Port
Power Consumption	Max 3.3 W

Physical Characteristics

Ingress Protection	IP30
Dimensions	Φ 115 x 21 mm (Φ 4.52 x 0.83 in)
Color & Material	White, PC + ABS
Installation	Desktop, Wall or Ceiling Mounting

Environmental

Operating	-20°C to +50°C (-4℉ to +122℉)

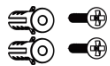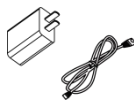| Temperature	
Storage Temperature	-40°C to +85°C (-40℉ to +185℉)
Ethernet Isolation	1.5 kV RMS
Relative Humidity	0% to 95% (non-condensing) at 25°C/77℉
Approvals	
Regulatory	CE, FCC
Environmental	RoHS

◆ Dimensions (mm)
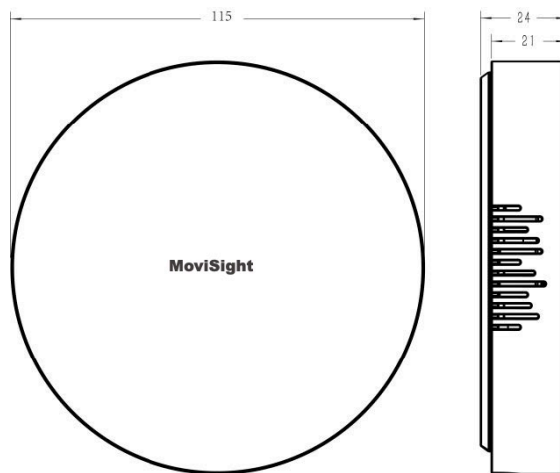
◆ Accessories

2 × Wall Mounting
Kits

1 ×Type-C Cable &
Power Adapter
(Optional)

*Note: Contact us if you need any other special accessories or customized accessories.