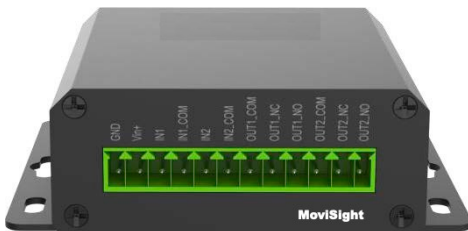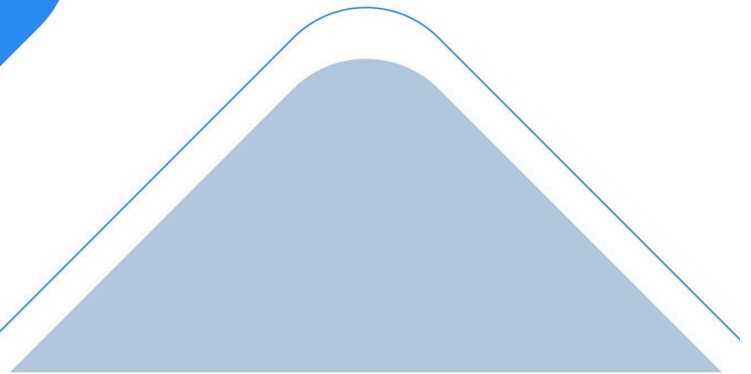# MS-7UC11

LoRa Controller

MS-7UC11 series LoRa wireless controller is a device used for data acquisition from multiple sensors. It contains different I/O interfaces including analog inputs, digital inputs, relay outputs, serial ports, which simplify the deployment and replacement of LoRaWAN® networks. Besides, MS-7UC11 series support multiple trigger conditions and actions which can work without network.

Adopting industrial design and IP30 metal case, MS-7UC11 series is widely used in indoor applications like smart industries, building automation,etc.
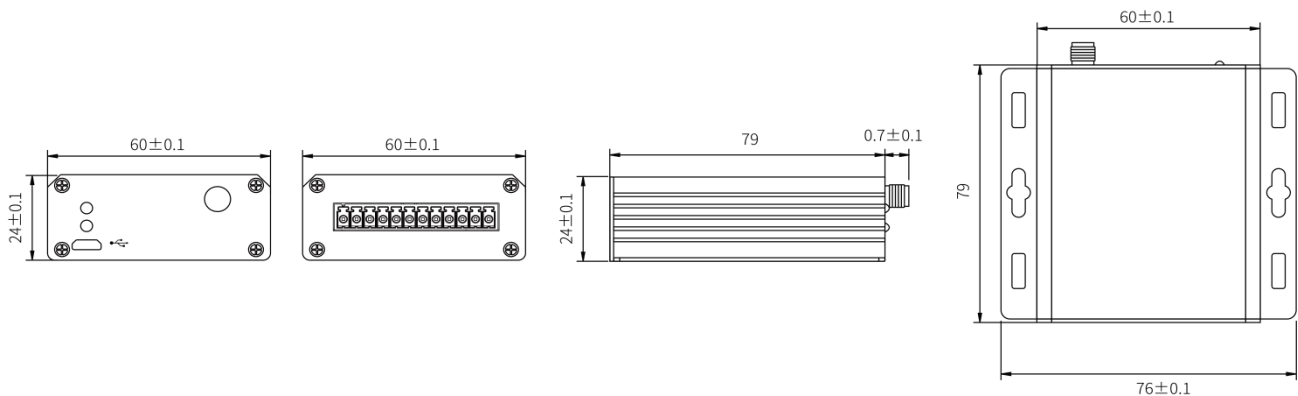
◆ Application Example

◆ Features

- Easy to connect with multiple wired sensors through GPIO/AI/RS232/RS485 interfaces
- Ultra-wide-distance transmission up to line of sight of 10km
- Multiple triggering conditions and actions
- Embedded watchdog for work stability
- Industrial metal case design with wide operating temperature range
- Compliant with standard LoRaWAN® gateways and network servers
- Quick and easy management with MoviSight IoT Cloud solution

◆ Dimensions(mm)

◆ Specifications

Wireless Transmission	
Technology	LoRaWAN®
Antenna Connector	1 × 50 Ω SMA Connectors (Center PIN: SMA Female)
Frequency	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923
Tx Power	16dBm(868)/20dBm(915)/19dBm(470)
Sensitivity	-147dBm @300bps
Mode	OTAA/ABP Class C
Data Interfaces	
Interface Type	3.5mm Terminal Block
IO	
Digital Input	Opto-isolated Digital Inputs, 3-24VDC (pulse counter support)
Digital Output	SPDT Relay Contact Rating: 3A@DC Max: 30 V or AC Max: 250 V
Serial Port	
Ports	RS232/RS485

Baud Rate	4800~115200bps(RS232)/1200~115200 bps(RS485)
Protocol	Transparent (RS232), Modbus RTU (RS485)

Analog Input

Input Range	4~20mA
Resolution	12 bit

Others

Configuration Port	1 × Micro USB
LED Indicators	1 × System, 1 × ACT
Built-in	Watchdog, Timer

Physical Characteristics

Power Connector	3.5mm Terminal Block
Power Supply	5-24 VDC
Ingress Protection	IP30
Operating Temperature	-40°C to +70°C (-40℉ to +158℉)
Relative Humidity	0% to 95% (non-condensing) at 25°C/77℉
Dimensions	79 × 60 × 24 mm (3.11 × 2.36 × 0.94 in)
Installation	Desktop, Wall mounting

Approvals

Regulatory	CE, FCC,KC

◆ Ordering Information

Model	Digital Input	Digital Output	Analog Input	RS232	RS485
MS-7UC1114	2	2	-	-	-
MS-7UC1122	1	1	2	-	-
MS-7UC1152	1	1	-	1	1