

## SEED-114993080



## PRODUCT DETAILS

SenseCAP M2 Multi-Platform LoRaWAN Gateway is a standard LoRaWAN® gateway that supports connecting to different network servers. It supports global LoRaWAN® frequency plans from 865 MHz to 923 MHz and can be used in multiple LoRaWAN® applications like smart building, environmental monitoring systems, precision farming, etc. It has wide-range coverage and strong signal output capability and other features, making it the perfect gateway for building a LoRaWAN® network.

### Key Features

- **Support Multiple LoRaWAN® Network Servers:** Compatible with multiple LNS like AWS, TTN, ChirpStack, etc. via using the Packet Forwarder / Basics™ Station mode.
- **Built-in SenseCAP Local Console for Configuration:** Provides a simple setup experience to configure the device on Web UI through Wi-Fi AP and Ethernet.
- **Support Power-over-Ethernet (PoE):** For users who need to power the gateway on Ethernet instead of an extra power supply cable, the PoE feature is also added to this device, making your deployment more reliable and faster.
- **Wide-range Coverage and Strong Signal:** Provides up to 10km of LoRaWAN® coverage and strong signal, allowing users to send data with extremely long ranges at low data rates.
- **Excellent and Stable Performance:** The gateway is powered by the mature hardware solution MT7628 and Semtech SX1302 baseband Long Range chip. It supports Cellular(optional)、Wi-Fi and Ethernet internet connection.

- **Professional Management Tools and Cloud Services:** Users could easily set up the gateway in a few simple steps via Web Interface. SenseCAP Portal and SenseCAP Local Console are also developed for users to monitor and manage the gateway efficiently and easily.

## Description

SenseCAP M2 Multi-Platform LoRaWAN® Gateway is a standard LoRaWAN® gateway that supports connecting to different network servers.

As a LoRaWAN® gateway, it could be able to provide miles of wireless network coverage and data transmission capacity for your LoRaWAN® devices.

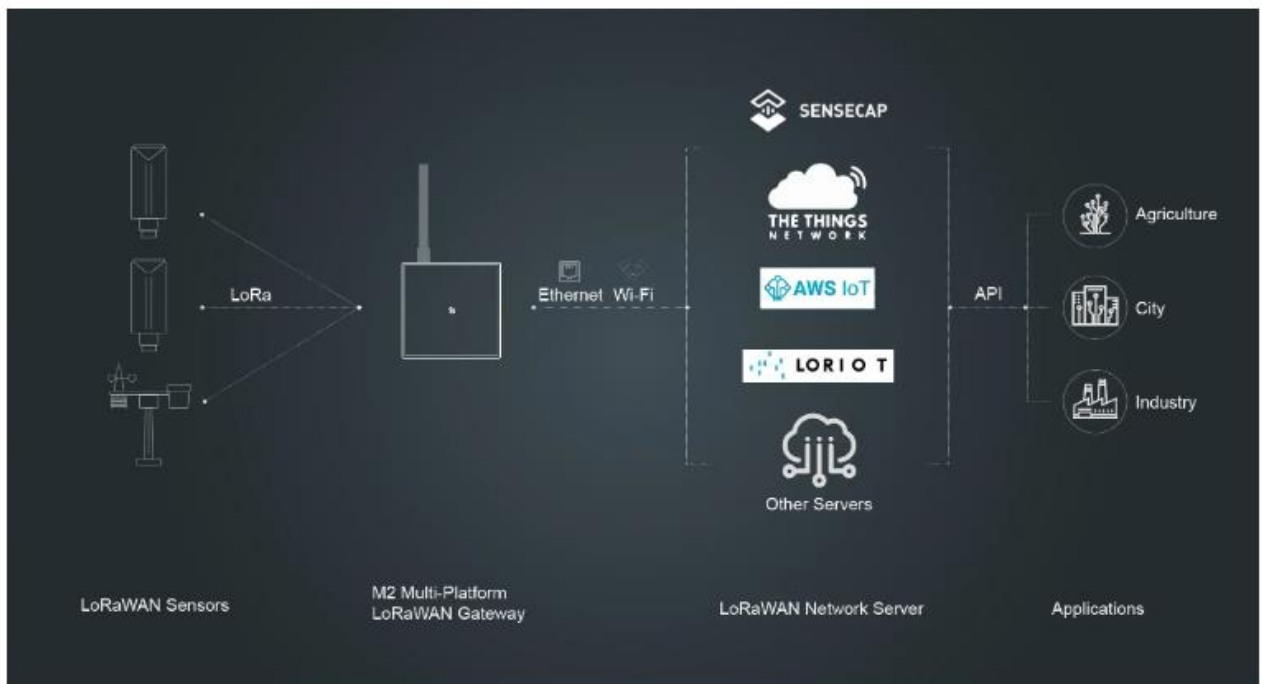
SenseCAP M2 Multi-Platform LoRaWAN® Gateway supports multiple applications like smart agriculture, smart city, or any smart project that requires network densification, providing both unique superior coverage and operational excellence.

The Gateway can be set up easily out of the box. Users can bind and manage the device through **SenseCAP Mate APP** and [SenseCAP Portal](#) in 4 steps. After that, users can start configuring the sensors in the same way to create the LoRaWAN® network solutions.

1. Scan the QR code for device binding
2. Connect gateway to internet and power on
3. Check gateway status on the SenseCAP platform
4. Connect sensors to the network and upload data to the cloud



Here is the network architecture for reference:



SenseCAP M2 Multi-Platform LoRaWAN® Gateway can be configured in 2 ways:

1. Wi-Fi/ Ethernet access to the SenseCAP Local Console
2. Access the SenseCAP Local Console via SenseCAP Portal remotely

Additionally, If you want to deploy the SenseCAP M2 Multi-Platform LoRaWAN® Gateway outdoors, you might need to apply shell accessories to meet the requirements for outdoor deployments. Check the [SenseCAP Outdoor Enclosure](#) with high robustness for quick deployment.

## Specifications

Processor	MT7628(MIPS24KEc@580MHz)
RAM	DDR2 128MB
Flash	32MB
Long Range Gateway Chip	SX1302
Channel	8
LoRaWAN® Protocol	V1.0.3 Class A/Class B/Class C
Frequency Plan	IN865/EU868/RU864/US915/AU915/KR920/AS923
Long Range Sensitivity	-125dBm @125KHz/SF7
	-139dBm @125KHz/SF12
Long Range TX Power	Up to 26 dBm
Antenna	Long Range: 3dBi External Antenna with Base Wi-Fi: Internal Antenna 4G Antenna: Main Antenna : 3dBi @ PCB Antenna DIV Antenna : 7dBi @FPC Antenna
Antenna Impedance	50 Ohm
Wi-Fi	Support 2.4 GHz 802.11 b/g/n
Ethernet	1xRJ45 (10M / 100 M), PoE PD support

4G Band	<p>LTE-FDD: B1/B3/B7/B8/B20</p> <p>LTE-TDD: B38/B40/B41</p> <p>WCDMA: B1/B8</p> <p>GSM: 900/1800MHz</p>
4G Features	<p>Support non-CA Cat 4 FDD and TDD</p> <p>LTE-FDD: Max 150Mbps (DL), Max 50Mbps (UL)</p> <p>LTE-TDD: Max 130Mbps (DL), Max 30Mbps (UL)</p>
UMTS Features	<p>Support 3GPP R8 DC-HSDPA, HSPA+, HSDPA, HSUPA and WCDMA</p> <p>DC-HSDPA: Max 42Mbps (DL) HSUPA: Max 5.76Mbps (UL)</p> <p>WCDMA: Max 384Kbps (DL), Max 384Kbps (UL)</p>
Input Voltage	<p>DC 12V - 2A</p> <p>PoE (IEEE 802.3 af), 40V-57V DC</p>
Interfaces	<p>Ethernet RJ45 * 1</p> <p>RP-SMA Female Antenna Connector * 1</p> <p>Micro SD Card Slot (Future use) * 1</p> <p>USB Type-C (Console) * 1</p>
Management Software	<p>Web</p>
Dimension	<p>143.6x135x34mm (connector not included)</p> <p>150.6x135x34mm (connector included)</p> <p>Package: 340*230*65mm</p>
Operating Temperature	<p>-20°C to 55°C</p>
Relative Humidity	<p>0% - 85% (non-condensing)</p>