3-in-1 Indoor Air Quality Sensor

AM103/AM103L is a compact IAQ sensor for detecting CO₂ concentration, humidity and temperature accurately and economically.

LoRaWAN CERTIFIED

Overall Features

- Traffic Light Status Indicator for Direct Notification
- Wireless Installation with Anti-theft Protection
- Smart Screen Mode for Low Power Consumption
- Support Data Storage and Retransmission
- 2.13 -Inch E-Ink Screen with Vivid Emoticon Indication (AM103)
- Light/Dark Color Theme with Multiple Display Styles (AM103)
- Battery Life up to 3 Years (AM103) / 4 Years (AM103L)

AM103 AM103L

7-in-1 Indoor Air Quality Sensor

AM104/AM107 is a well-qualified IAQ sensor for monitoring CO₂ concentration, temperature, humidity, light, TVOC, barometric pressure and motion in indoor scenarios.

LoRaWAN CERTIFIED

Overall Features

- 2.13-Inch E-Ink Screen with Intuitive Display
- Smart Screen Mode for Low Power Consumption
- Powered via USB Type-C for Stable Power Supply
- Battery Life up to 1.5 Years (AM104) /1 Year (AM107)

AM104 AM107

Model		AM103	AM103L
Wireless Transmission	Technology		
	Frequency	CN470/IN86	
	Mode		
Measurement	Temperature		
	Humidity		
	Carbon Dioxide (CO₂)	±	
Physical Characteristics	Configuration		
	Display	2.13-inch Black & White	
	Alarm System		
	Power Supply*	Easily Replaceable Ba... up to 3-Year Batte...	
	Ingress Protection		
	Dimension		
	Installation		

Model		AM104	AM107
Wireless	Technology	LoRaWAN®	

9-in-1 Indoor Air Quality Sensor

AM307/AM308/AM319 is a comprehensive IAQ sensor for detecting CO_2 concentration, temperature, humidity, light, HCHO/O_3 level, TVOC, barometric pressure, PM2.5, PM10 and motion.

AM307
AM308
AM319

Overall Features

- 4.2 -Inch E-ink Screen with Vivid Emoticon Indication
- Traffic Light Status Indicator and Built-In Buzzer for Alarming
- Flexible Installation with Anti-theft Protection
- Support Retransmission for Reliable Communication
- Store Capacity with 18,000 Sets of Historical Data Records
- Smart Screen Mode for Low Power Consumption
- Powered via USB Type-C for Stable Power Supply
- Battery Life up to 3 Years (AM307) / 1 Year (AM308)

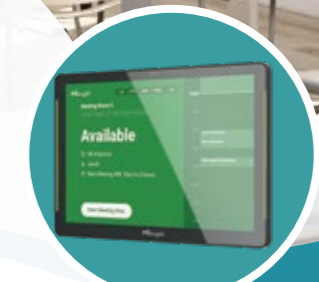| Model		AM307	AM308	AM319
Wireless Transmission	Technology	LoRaWAN®		
	Frequency	CN470/RU864/IN865/EU868/US915/AU915/KR920/AS923-1&2&3&4		
	Work Mode	OTAA/ABP Class A	OTAA/ABP Class A	OTAA/ABP Class C
Measurement	Temperature	± 0.2°C (-20°C - 60°C)		
	Humidity	± 2% (0% ~ 100%)		
	Motion	5m (80 ° Horizontal, 55 ° Vertical), Vacant/Occupied (Status)		
	Light	0-60000 Lux (Determine as 6 Levels, 0-5)		
	TVOC	1.00 - 5.00 (IAQ Rating), ±1 Accuracy		
	Barometric Pressure	±0.5 hPa (260 ~ 1260 hPa)		
	Carbon Dioxide (CO_2)	± (30 ppm + 3 % of Reading) 400 ~ 5000 ppm		± (50 ppm + 5 % of Reading) 400 ~ 2000 ppm
	PM2.5 & PM10	-	±10µg/m3 (0-100 µg/m³), ±10 % (100 ~ 1000µg/m³)	
	Formaldehyd(HCHO)$_2$	-		±10 % (0 - 1.25 mg/m³)
	Ozone (O_3)$_2$	-		±5 % FS (0 - 10 ppm)
Physical Characteristics	Configuration	NFC, USB Type-C Port		
	Power Supply*	Easily Replaceable Battery with up to 3-Year Battery Life	Easily Replaceable Battery with over 1-Year Battery Life	-
		5V/1A by Type-C Port		
	Ingress Protection	IP30		
	Dimensions	100.8 × 114 × 22 mm (3.97 × 4.49 × 0.87 in) & 4.2-inch E-Ink Screen		
	Installation	3M Tape Mounting, Wall Screw Mounting, 86 Box Mounting		

IoT Display

DS7610 brings customers simplicity and a user-friendly experience in managing rooms' conditions with one tap.

Overall Features

- Built-in LoRaWAN® Gateway for AIoT Insights
- Quad-Core Industrial Processor with Big Memory
- 10.1-inch Capacitive Touch Screen with RGB LED Indicators
- Powerful SDK Capabilities for Secondary Developer
- Support Third-party Android Applications
- More User-Friendly with NFC Enabled Applications
- Smart Screen Mode for Low Power Consumption
- Optional Docking Station with Flexible Connection Options

DS7610

Model		DS7610
Display	LCD Screen	10.1-inch TFT LCD Touch Screen (STB 74.88%)
	Resolution	1280 x 800 Pixels
	Indicators	RGB Side LED Indicators, Stepless Adjustment
Sensors & NFC	Proximity Sensor	Detection Distance: 1 m (Max.)
	Light Sensor	5 Brightness Level Adjustment
	NFC	13.56 MHz
Wireless Transmission	LoRaWAN® Channel	Single Channel
	LoRaWAN® Frequency	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4
	LoRaWAN® Protocol	V1.0.3 Class A/Class C
	Wi-Fi	IEEE 802.11 b/g/n，2.4 GHz, IEEE 802.11 a/n/ac，5 GHz
	Bluetooth	Bluetooth 5.0
	Ethernet	1 x RJ45 10/100/1000 Mbps Ethernet Port (PoE PD Supported)
Physical Characteristics	Processor	Quad-core ARM Cortex-A55
	Operating System	Android 11.0
	Power Supply	① 802.3af PoE ② 12V/1A by DC Jack Connector ③ 5V/2A by Type-C Port
	Ingress Protection	IP30
		Wall Mounting, 3M Tape Mounting

Pulse Counter

EM300-DI is a LoRaWAN® pulse counter which transforms traditional water meters into wireless intelligent meters at ease.

LoRaWAN   N   ☁

Overall Features

- IP67 Rated for Harsh Environment
- Support Digital Filtering for More Accurate Counters
- Embedded Pulse/Digital Signals & Temp & Humidity
- Support Retransmission for Reliable Communication
- Store Capacity with 1,000 Sets of Historical Data Records
- Up to 5 Years Battery Life for Easy Maintenance
- LoRaWAN® Wireless Deployment with Low Power Consumption

EM300-DI

- IP67
- Pulse Counting
- 5-Year Battery Life

Model		EM300-DI
Wireless Transmission	Technology	LoRaWAN®
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
	Mode	OTAA/ABP Class A
Measurement	GPIO	Pulse Counter, Digital Input (1 x GPIO Interface, Dry Contact)
	Temperature	±0.3°C (0°C ~ 70°C), ±0.6°C (-30°C ~ 0°C)
	Humidity	±3%RH (10% ~ 90%), ±3%RH (below 10% and above 90%)
Physical Characteristics	Configuration	NFC
	Power Supply*	Easily Replaceable Batteries with up to 5-Year Battery Life
	Operation Temperature	-30°C ~ 70°C
	Ingress Protection	IP67
	Dimension	105.6 × 85.2 × 27 mm (4.15 × 3.35 × 1.06 in)
	Installation	Screw Mounting

* Tested under laboratory conditions and for guideline purposes only.

Magnetic Contact Switch

EM300-MCS can be mounted to any doors or windows to detect an opening or closing physical security monitoring to your location by alarming for intrusion or unauthorized

LoRaWAN®   N   ☁

Overall Features

- IP67 Rated and UV Resistance
- Detect Temperature, Humidity and Door/Window Status
- High Sensitivity with 20 to 30 mm Open/Close Sensing Distance
- Customized Alarm Reporting Interval/Times for Various Usage
- Support Retransmission for Reliable Communication
- Store Capacity with 2,800 Sets of Historical Data Records
- Up to 5 Years Battery Life for Easy Maintenance
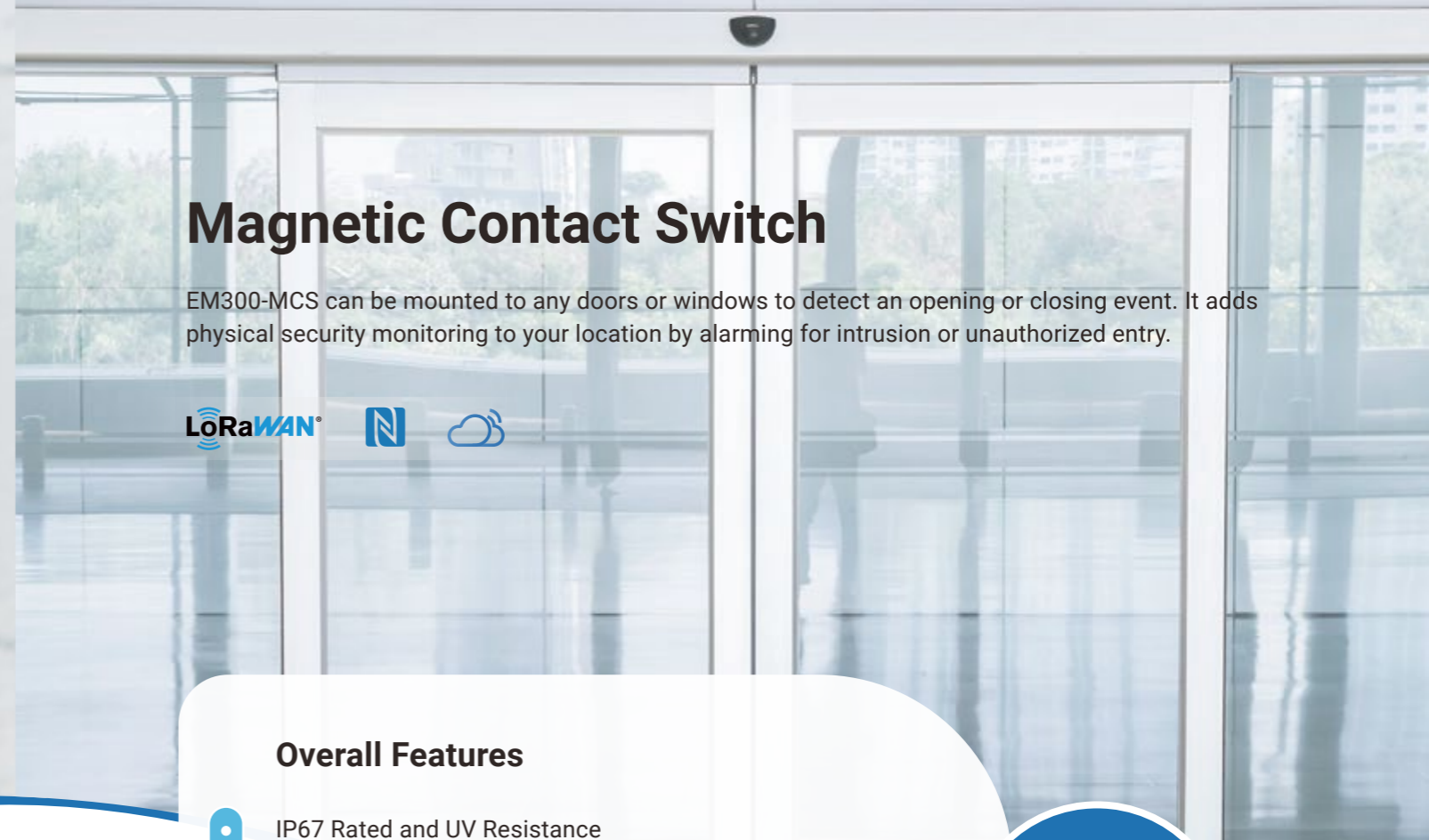- LoRaWAN® Wireless Deployment with Low Power Consumption

EM300-MCS

Model		EM300-MCS
Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
	Mode	OTAA/ABP Class A
Measurement Door Magnet	Detection Distance	20-30 mm
	Cable Length	1.5 m
	Temperature	+ 0.3°C (0°C ~ 70°C), + 0.6°C (-30°C ~ 0°C)
	Humidity	+ 3% (10% ~ 90%), + 5% (below 10% and above 90%)
Physical Characteristics	Configuration	NFC
	Power Supply*	Easily Replaceable Battery with up to 10-year Battery Life
	Operation Temperature	-30°C ~ 70°C
	Ingress Protection	IP67
	Dimension	Transceiver: 105.6 × 85.3 × 27 mm (4.16 × 3.36 × 1.06 in) Magnet: 32 × 15 × 8 mm (1.25 × 0.59 × 0.31 in)
	Installation	Wall Mounting

* Tested under laboratory conditions and for guideline purposes only.

Temperature & Humidity Sensor

EM300-TH is suitable for indoor and outdoor temperature and humidity monitoring. It can be widely used in office areas, greenhouses and other environments

Overall Features

- IP67 Rated and UV Resistance
- Detect Temperature and Humidity with Higher Accuracy
- Support Retransmission for Reliable Communication
- Store Capacity with 2,800 Sets of Historical Data Records
- Up to 10 Years Battery Life for Easy Maintenance
- LoRaWAN® Wireless Deployment with Low Power Consumption

EM300-TH

Model		EM300-TH
Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
	Mode	OTAA/ABP Class A
Measurement	GPIO	+ 0.3°C (0°C ~ 70°C), + 0.6°C (-30°C ~ 0°C)
	Temperature	+ 3% (10% ~ 90%), + 5% (below 10% and above 90%)
Physical Characteristics	Configuration	NFC
	Power Supply*	Easily Replaceable Battery with up to 10-Year Battery Life
	Operation Temperature	-30°C ~ 70°C
	Ingress Protection	IP67
	Dimension	88.5 × 85.3 × 27 mm (3.48 × 3.36 × 1.06 in)
	Installation	Wall Mounting

* Tested under laboratory conditions and for guideline purposes only.

Leak Detection Sensor

EM300-SLD/ZLD is suitable for detecting presence of water or other liquids and remotely alerting users the potential water leak accordingly.

Overall Features

- IP67 Rated and UV Resistance
- Conductive Liquids Leak Detection with 5mm to Trigger Alert
- Embedded Temperature & Humidity Sensors with High Accuracy
- Customized Alarm Reporting Interval/Times for Various Usage
- Support Retransmission for Reliable Communication
- Store Capacity with 2,800 Sets of Historical Data Records
- Up to 10 Years Battery Life for Easy Maintenance
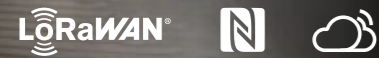- LoRaWAN® Wireless Deployment with Low Power Consumption

EM300-SLD
EM300-ZLD

Model		EM300-SLD	EM300-ZLD
Wireless Transmission	Technology	LoRaWAN®, Milesight D2D	
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923	
	Mode	OTAA/ABP Class A	
Measurement Leakage Detection	Trigger Condition	When Liquid Level Reaches 5 mm	
	Cable Length	1.5 m (Customizable)	3 m (Customizable)
	Temperature	± 0.3°C (0°C ~ 70°C), ± 0.6°C (-30°C ~ 0°C)	
	Humidity	± 3% (10% ~ 90%), ± 5% (below 10% and above 90%)	
Physical Characteristics	Configuration	NFC	
	Power Supply*	Easily Replaceable Battery with up to 10-Year Battery Life	
	Operation Temperature	-30°C ~ 70°C	
	Ingress Protection	IP67	
	Dimension	105.6 × 85.3 × 27 mm (4.16 × 3.36 × 1.06 in)	
	Installation	Wall Mounting	

* Tested under laboratory conditions and for guideline purposes only.

Tilt Sensor

EM310-TILT is suitable for angle measurement and asset movement based on angle changes and send threshold alarms.

Overall Features

- IP67 Rated for Harsh Environment
- 3-Axis Accelerometer for Accurate Detection
- Built-in Zero Adjustment for Smart Measurement
- 36 Customized Trigger Rules for Various Applications
- Up to 5 Years Battery Life for Easy Maintenance
- LoRaWAN® Wireless Deployment with Low Power Consumption

EM310-TILT

Model		EM310-TILT
Wireless Transmission	Technology	LoRaWAN®
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
	Mode	OTAA/ABP Class A
Measurement	Axis	X, Y, Z
	Range	± 1°, (- 90° ~ +90°)
	Resolution	0.01°
Physical Characteristics	Configuration	NFC
	Power Supply*	Easily Replaceable Batteries with over 5-Year Battery Life
	Operation Temperature	-30°C ~ 70°C
	Ingress Protection	IP67
	Dimension	111 × 62 × 33 mm (4.37 × 2.44 × 1.30 in)
	Installation	On the Flat Surfaces with Screws

* Tested under laboratory conditions and for guideline purposes only.

Ultrasonic Distance/Level Sensor

EM310-UDL features short blind zone and broad range distance measurement. It is suitable for various applications such as smart parking, smart waste bin and so on.

Overall Features

- IP67 Rated for Harsh Environment
- Non-Contact Distance Detection with 3-450cm Measurement Range
- 3-Axis Accelerometer for Accurate Measurement
- Up to 10 Years Battery Life for Easy Maintenance
- LoRaWAN® Wireless Deployment with Low Power Consumption

EM310-UDL

Model		EM310-UDL
Wireless Transmission	Technology	LoRaWAN®
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
	Mode	OTAA/ABP Class A
Measurement	Distance Range	± (1+0.3%*S) cm, S=distance (3 ~ 450 cm)
	Distance Resolution	1 mm
	Device Position	Normal/Tilt (Status)
Physical Characteristics	Configuration	NFC
	Power Supply*	Easily Replaceable Batteries with over 10-year Battery Life
	Operation Temperature	-15°C ~ 60°C
	Ingress Protection	IP67
	Dimension	111 × 62 × 40 mm (4.37 × 2.44 × 1.57 in)
	Installation	On the Flat Surfaces with Screws

* Tested under laboratory conditions and for guideline purposes only.

Temperature & Humidity Sensor

EM320-TH is suitable for indoor and outdoor temperature and humidity monitoring. It can be widely used in cold chain.

Overall Features

- IP67 Rated for Harsh Environment
- FDA-Approved Food Contact Materials
- Support Subtle Changes Monitoring with Higher Accuracy
- Standard & Magnetic Version for Practical Usage
- Support Retransmission for Reliable Communication
- Store Capacity with 3,000 Sets of Historical Data Records
- Up to 5 Years Battery Life for Easy Maintenance
- LoRaWAN® Wireless Deployment with Low Power Consumption

EM320-TH

Model		EM320-TH
Wireless Transmission	Technology	LoRaWAN®
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
	Mode	OTAA/ABP Class A
Measurement	Temperature	± (1+0.3%*S) cm, S=distance (3 ~ 450 cm)
	Humidity	± 0.2°C, -30°C ~ 60°C
Physical Characteristics	Configuration	± 0.2%, 0% to 100%RH
	Power Supply*	Easily Replaceable Batteries with over 5-year Battery Life
	Material	PC + ABS (Food-Grade)
	Operation Temperature	-30°C ~ 60°C
	Ingress Protection	IP67
	Dimension	85 × 58 × 18 mm (3.34 × 2.28 × 0.70 in)
	Installation	Wall Mounting (Standard Version) Magnetic Adsorption (Magnet Version)

* Tested under laboratory conditions and for guideline purposes only.

CO₂ Sensor (4 in 1)

EM500-CO₂ is designed for monitoring CO₂ concentration, temperature, humidity and barometric pressure in outdoor scenarios.

Overall Features

- IP65 Rated for Harsh Environment
- 4 Sensors in 1 for Various Outdoor Usage
- Measuring Ranges from 400 ppm to 5,000 ppm
- Up to 10 Years Battery Life for Easy Maintenance
- LoRaWAN® Wireless Deployment with Low Power Consumption

EM500-CO₂

Model		EM500-CO₂
Wireless Transmission	Technology	LoRaWAN®
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
	Mode	OTAA/ABP Class A
Measurement	Carbon Dioxide (CO₂)	± (30 ppm + 3 % of reading), 400 - 5000 ppm (0°C ~ 50°C)
	Temperature	+ 0.3°C (0°C ~ 70°C), + 0.6°C (-30°C ~ 0°C)
	Humidity	+ 3% (10% ~ 90%), + 5% (below 10% and above 90%)
	Barometric Pressure	±1 hPa, 300 ~ 1100 hPa (-40°C ~ 85°C)
Physical Characteristics	Configuration	NFC, USB Type-C Port
	Power Supply*	Built-in 19000 mAh Can be Used for up to 10 Years
	Operation Temperature	-30°C ~ 70°C
	Ingress Protection	IP65
	Dimensions	147.9 × 71 × 69.5 mm (5.8 × 2.8 × 2.7 in)
	Installation	Pole, Wall or DIN Rail Mounting

* Tested under laboratory conditions and for guideline purposes only.

Light Sensor

EM500-LGT can accurately monitor changes in the surrounding light intensity.

Overall Features

- IP67 Rated and UV Resistance
- Measuring Ranges from 0 lux to 100,000 lux
- Fast 1-Sec Response for Accurate Monitoring
- Up to 10 Years Battery Life for Easy Maintenance
- LoRaWAN® Wireless Deployment with Low Power Consumption

EM500-LGT

Model		EM500-LGT
Wireless Transmission	Technology	LoRaWAN®
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
	Mode	OTAA/ABP Class A
Measurement	Light	0 ~ 100000 lux
	Accuracy	±3%
Physical Characteristics	Configuration	NFC, USB Type-C Port
	Power Supply*	Built-in 19000 mAh Can be Used for up to 10 Years
	Operation Temperature	-30°C ~ 60°C
	Ingress Protection	IP67 (Transceiver)/IP65 (Light Sensor)
	Dimension	Transceiver: 105.4 × 71 × 69.5 mm (4.1 × 2.8 × 2.7 in) Light Sensor: 64 × 58 × 34 mm (2.5 × 2.3 × 1.3 in) Cable Length: 3 m
	Installation	Pole, Wall or DIN Rail Mounting

* Tested under laboratory conditions and for guideline purposes only.

Pipe Pressure Sensor

EM500-PP is designed for the pressure monitoring of tank level or leakage in pipes.

Overall Features

- IP67 Rated and UV Resistance
- Measuring Ranges from 0 kPa to 1,600 kPa
- Shock & Vibration & Corrosion Resistant
- ±0.5% FS Measuring Accuracy to Prevent Leakage Danger
- Temperature Compensation for Correcting Temperature Changes
- Up to 10 Years Battery Life for Easy Maintenance
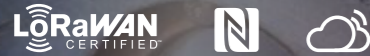- LoRaWAN® Wireless Deployment with Low Power Consumption

EM500-PP

Model		EM500-PP
Wireless Transmission	Technology	LoRaWAN®
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
	Mode	OTAA/ABP Class A
Measurement	Pressure Type	Gauge Pressure
	Range	± 0.5% FS, 0 - 1600 kPa (16 Bar)
	Overload	150% FS
	Long-term Stability	± 0.3% FS/year
Physical Characteristics	Configuration	NFC, USB Type-C Port
	Power Supply*	Built-in 19000 mAh Can be Used for up to 10 Years
	Operation Temperature	-30°C ~ 70°C (Transceiver)/-10°C ~ 70°C (Pipe Pressure Sensor)
	Ingress Protection	IP67 (Transceiver)/IP65 (Pipe Pressure Sensor)
	Dimension	Transceiver: 105.4 × 71 × 69.5 mm (4.1 × 2.8 × 2.7 in) Pipe Sensor: 67.5 × Φ27 mm (2.7 × Φ1.1 in) Cable Length: 1.5 m
	Installation	Pole, Wall or DIN Rail Mounting

* Tested under laboratory conditions and for guideline purposes only.

Industrial Temperature Sensor

EM500-PT100 equips a highly accurate temperature sensor PT100, platinum resistance temperature detector, to provide temperature measurement from -200°C to 800°C.

Overall Features

- IP67 Rated and UV Resistance
- Measuring Ranges from -200°C to 800°C
- Support Various Terminal Heads including Straight Tube, Armored, SMT, Threaded and Magnet
- 3-Wire Circuit Design for Stable Connection
- Up to 10 Years Battery Life for Easy Maintenance
- LoRaWAN® Wireless Deployment with Low Power Consumption

EM500-PT100

Model		EM500-PT100
Wireless Transmission	Technology	LoRaWAN®
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
	Mode	OTAA/ABP Class A
Measurement	Connection Type	3-wire connection
	Range	T050: -200 °C ~ 50 °C T500: -50 °C ~ 500 °C T200: -50 °C ~ 200 °C T800: -50 °C ~ 800 °C
		(Customizable from -200 °C ~ 800 °C)
	Accuracy	±0.5°C
Physical Characteristics	Configuration	NFC, USB Type-C Port
	Power Supply*	Built-in 19000 mAh Can be Used for up to 10 Years
	Operation Temperature	-30°C ~ 70°C
	Ingress Protection	Transceiver: IP67, Sensor: Differ Based on Temperature Ranges
	Dimension	105.4 × 71 × 69.5 mm (4.1 × 2.8 × 2.7 in) Probe Type: Straight Tube (Customizable) Cable Length: 1.5 m (Customizable)

* Tested under laboratory conditions and for guideline purposes only.

Ultrasonic Distance/Level Sensor

EM500-UDL provides highly accurate distance measurement for a variety of applications in harsh environment.

Overall Features

- IP67 Rated and UV Resistance
- Measurements in Small Containers or Openings
- Measuring Ranges from 0.3m to 10 m
- Range is Customizable for Snow Level Detection Usage
- Support Detection of Corrosive Liquid, Chemicals or Combustibles with Non-Contact Design
- Up to 10 Years Battery Life for Easy Maintenance
- LoRaWAN® Wireless Deployment with Low Power Consumption

EM500-UDL

Model		EM500-UDL
Wireless Transmission	Technology	LoRaWAN®
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
	Mode	OTAA/ABP Class A
Measurement	Range & Accuracy	W050: 0.3 ~ 5 m, ±1% FS W100: 0.5 ~ 10 m, ±1% FS S050: 0.3 ~ 5 m (Snow Version), ±1% FS C050: 0.25 ~ 5 m, ± (1+0.3%*S) cm, S=Distance C100: 0.25 ~ 8 m, ± (1+0.3%*S) cm, S=Distance
Physical Characteristics	Configuration	NFC, USB Type-C Port
	Power Supply*	Built-in 19000 mAh Can be Used for up to 10 Years
	Operation Temperature	W050/W100/S050: -30°C ~ 65°C C050/C100: -15°C ~ 60°C
	Ingress Protection	IP67
	Dimension	156.1 × 71 × 69.5 mm (6.1 × 2.8 × 2.7 in)
	Installation	Pole, Wall or DIN Rail Mounting

* Tested under laboratory conditions and for guideline purposes only.

Soil Moisture, Temperature and Electrical Conductivity Sensor

EM500-SMTC/SMT is suitable for soil condition monitoring. With an external probe, it can accurately and instantly detect conditions on soil moisture content, temperature, and electrical conductivity.

Overall Features

- IP67 Rated and UV Resistance
- Research-Grade Accuracy in Multiple Soil Media
- Rapid Monitoring of Growing Conditions
- Temperature Compensation for Correcting Temperature Changes
- Up to 10 Years Battery Life for Easy Maintenance
- LoRaWAN® Wireless Deployment with Low Power Consumption

EM500-SMTC

Model		SMTC	SMT
Wireless Transmission	Technology	LoRaWAN®	
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923	
	Mode	OTAA/ABP Class A	
Measurement	Moisture	±2% (0~50%), ±3% (50%~100%)	±2%, (0% ~100%)
	Temperature	±0.5°C (-40°C ~ 80°C)	/
	Conductivity	±3% (0~10000 μs/cm), ±5% (10000~20000 μs/cm)	/
Physical Characteristics	Configuration	NFC, USB Type-C Port	
	Power Supply*	Built-in 19000 mAh Can be Used for up to 10 Years	
	Ingress Protection	IP67 (Transceiver)/IP68 (Soil Sensor)	IP67
	Dimension	Transceiver: 105.4 × 71 × 69.5 mm (4.1 × 2.8 × 2.7 in) Soil Sensor: 88 × 68 × 26 mm (3.5 × 2.7 × 1.0 in) (Probe length: 50mm/1.97 in)	Transceiver: 105.4 × 71 × 69.5 mm (4.1 × 2.8 × 2.7 in) Soil Sensor: 89 × 18 × 7 mm (3.5 × 0.7 × 0.3 in) (Probe Length: 50mm/1.97 in, Cable Length: 5m)
	Installation	Pole, Wall or DIN Rail Mounting	

* Tested under laboratory conditions and for guideline purposes only.

Submersible Water Level Sensor

EM500-SWL is designed to measure the tank level or open water applications while fully submerged in liquid.

Overall Features

- IP67 Rated and UV Resistance
- Accurate Detection without Affecting by Foam, Wind, or Rain
- Support Water Detection & Customizable for Oil and Other Non-Corrosive Media
- Measuring Range is Customizable up to 200 m
- ±0.5% FS Measuring Accuracy for Better Detection
- Up to 10 Years Battery Life for Easy Maintenance
- LoRaWAN® Wireless Deployment with Low Power Consumption

EM500-SWL

Model		EM500-SWL
Wireless Transmission	Technology	LoRaWAN®
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
	Mode	OTAA/ABP Class A
Measurement	Pressure Type	Gauge Pressure
	Range	± 0.5% FS, (0 ~ 3m/5m/10m (H2O)) (Customizable up to 200 m and for Other Liquids)
	Long-term Stability	≤ ± 0.3% FS/Year
Physical Characteristics	Configuration	NFC, USB Type-C Port
	Power Supply*	Built-in 19000 mAh Can be Used for up to 10 Years
	Operation Temperature	-30°C ~ 70°C (Transceiver) -10°C ~ 70°C (Level Sensor)
	Ingress Protection	IP67 (Transceiver)/IP68 (Level Sensor)
	Dimension	Transceiver: 105.4 × 71 × 69.5 mm (4.1 × 2.8 × 2.7 in) Level Sensor: 140 × φ28 mm (5.5 × φ1.1 in) Cable Length: At Least 1 ~ 1.5 m Longer than Measuring Range
	Installation	Pole, wall or DIN Rail Mounting

* Tested under laboratory conditions and for guideline purposes only.