



Make Sensing Matter

V3.3



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Milesight

ErreUno Products Catalogue

AI & Sensing Technology



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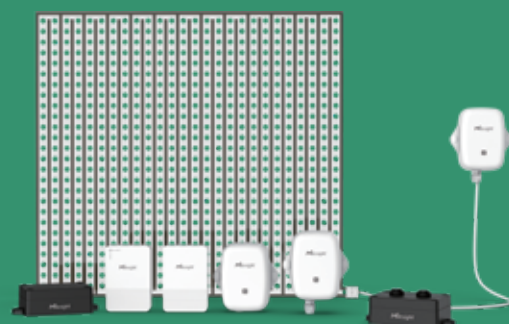


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- Capacitive Level Sensor EM300-CL
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- Gas Detector GS101
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Discover New Possibilities with Milesight EM400 Series

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- CO₂ Sensor (4 in 1) EM500-CO₂
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Protect and Manage Critical Assets at All Times

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Protect and Manage Critical Assets at All Times

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- Milesight IoT Cloud



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Connectivity Suite

Remote and Bulk Management

- DeviceHub
- Milesight VPN

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Enable All-around Connectivity

Milesight IoT Gateway


LoRaWAN® Wi-Fi HaLow AS923 BACnet





Overall Features

- Provide Large Capacity & Faster Data Processing
- Handle Higher Amount of Traffic with Lower Consumption
- Handle Massive Sensor Data Efficiently
- OpenVPN/IPsec/PPTP/L2TP/GRE/DMVPN
- Embedded Network Server & High Compatibility with Mainstream Networks Including Activity and Senet
- Support CN470/RU864/IN865/EU868/AU915/US915/KR920/AS923-1&2&3&4
- Connecting End Nodes Varies from Class A/B/C
- Extraordinary Features: Noise Analyzer, Multicast, Gateway Fleet and Listen Before Talk (Except UG63)
- Embedded Node-RED Development Tool (UG56/65/67)
- Embedded Python SDK (UG56/65/67)
- Support BACnet (UG56/65/67)


Enable All-around Connectivity

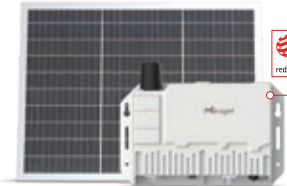
Model		UG63	
 Mini LoRaWAN® Gateway	LoRaWAN®	Chipset	SX1302, 8 Channels (Half-duplex)
		Frequency	CN470/RU864/IN865/EU868/US915/ AU915/KR920/AS923-1&2&3&4
	Connectivity	Ethernet	1 × 10/100Mbps (1 × WAN)
		Cellular(Opt.)	1 × SIM-3FF
		Wi-Fi	IEEE 802.11 b/g/n, 2.4GHz, AP Mode
	Hardware	CPU	Dual-core 240MHz, 32-bit Xtensa® LX7
		Power Supply	① 5VDC by Type-C Port ② 802.3af PoE via PoE Splitter ③ 5-12 VDC by Terminal Block
	Physical Characteristics	Ingress Protection	IP30
		Installation	Desktop, Wall Mounting, Ceiling Mounting


Model		UG56	
 Industrial LoRaWAN® Gateway	LoRaWAN®	Chipset	SX1302, 8 Channels (Half-duplex)
		Antenna	1 × 50 Ω SMA Connector (Center PIN: SMA Female)
		Frequency	CN470/IN865/EU868/RU864/US915/ AU915/KR920/AS923-1&2&3&4
		Protocol	V1.0 Class A/Class B/Class C and V1.0.2 Class A/Class B/Class C
	Connectivity	Ethernet	1 x RJ45 PoE PD Port, 10/100 Base-T (IEEE 802.3)
		Wi-Fi	IEEE 802.11b/g/n, 2.4 GHz
		Cellular (Opt.)	1 × Mini SIM-2FF Slot, Support Global GSM/3G/4G LTE Frequency Bands
	Hardware	CPU	Quad-core 1.3 GHz, 64-bit ARM Cortex-A35
		Power Supply	① 1 × 802.3af Standard PoE Input ② 5V, 2A by Type-C Port
	Physical Characteristics	Ingress Protection	IP30
		Dimension	110 x 75 x 24 mm (4.33 x 2.95 x 0.94 in)
		Installation	Desktop, Wall Mounting

Model		UG65	
 Semi-Industrial LoRaWAN® Gateway	LoRaWAN®	Chipset	SX1302, 8 Channels (Half/Full-duplex)
		Antenna	1 × 50 Ω N-Female External Connector (Opt.)
		Frequency	CN470/IN865/EU868/RU864/US915/AU915/ KR920/AS923-1&2&3&4
		Protocol	V1.0 Class A/Class B/Class C and V1.0.2 Class A/Class B/Class C
	Connectivity	Ethernet	1 x RJ45 PoE PD Port, 10/100/1000 Base-T (IEEE 802.3)
		Wi-Fi	IEEE 802.11b/g/n, 2.4 GHz
		Cellular (Opt.)	1 × Mini SIM-2FF Slot, Support Global GSM/3G/4G LTE Frequency Bands
	Hardware	Processor	Quad-core 1.5 GHz, 64-bit ARM Cortex-A53
		Built-in	Watchdog, RTC, Timer
		Power Supply	① 1 × 802.3 af Standard PoE Input ② 9 ~ 24 VDC by DC Male Jack Connector
	Physical Characteristics	Ingress Protection	IP65
		Dimension	180 x 110 x 56.5 mm (7.09 x 4.33 x 2.22 in)
		Installation	Desktop, Wall or Pole Mounting

Enable All-around Connectivity

Model		HL31	
 Wi-Fi HaLow Gateway	Wi-Fi HaLow	HaLow Chipset	MM6108
		Frequency	850~950MHz
		Channel Bandwidth	1/2/4/8MHz
		Work Mode	AP
	Connectivity	Wi-Fi	IEEE 802.11b/g/n, 2.4 GHz
		Cellular (Opt.)	1 × SIM-3FF
		Ethernet	1 × 10/100Mbps (1 × WAN)
	Hardware	Processor	RK3308, 1.3 GHz, 64-bit ARM Cortex-A35 Quad Core
		Power Supply	① 5 VDC by Type-C Port ② 802.3af PoE via PoE Splitter ③ 5-12 VDC by Terminal Block
	Physical Characteristics	Ingress Protection	IP30
		Installation	Desktop, Wall Mounting, Ceiling Mounting

Model		SG50	
 Ultra Low Power Solar LoRaWAN® Gateway	LoRaWAN®	Chipset	SX1302, 8 Channels (Half-duplex)
		Antenna	1 × 50 Ω N-Female External Connector
		Frequency	CN470/IN865/EU868/RU864/US915/AU915/ KR920/AS923-1&2&3&4
		Protocol	V1.0 Class A/Class B/Class C and V1.0.2 Class A/Class B/Class C
	Connectivity	Wi-Fi	IEEE 802.11 b/g/n, 2.4GHz, AP Mode
		Cellular	1 × Nano SIM-4FF, Support Global GSM/3G/4G LTE Frequency Bands
	Hardware	Processor	Dual-core 240MHz, 32-bit Xtensa® LX7
		Built-in	Watchdog, Timer
		Power Supply	① Solar Power or DC Power (12~24VDC) via M12 Connector ② 3.6V, 2500mAh Backup Batteries ③ 5V, by Type-C Port
	Physical Characteristics	Ingress Protection	IP67
		Dimension	250 × 157.5 × 46mm (9.84 x 6.20 x 1.81 in)
		Installation	Wall or Pole Mounting

Model		UG67	
 Outdoor LoRaWAN® Gateway	LoRaWAN®	Chipset	SX1302, 8 Channels (Half/Full-duplex)
		Antenna	2 × 50 Ω N-Female External Connectors
		Frequency	CN470/IN865/EU868/RU864/US915/ AU915/KR920/AS923-1&2&3&4
		Protocol	V1.0 Class A/Class B/Class C and V1.0.2 Class A/Class B/Class C
	Connectivity	Ethernet	1 x RJ45 PoE PD Port, 10/100/1000 Base-T (IEEE 802.3)
		Wi-Fi	IEEE 802.11b/g/n, 2.4 GHz
		Cellular (Opt.)	1 × Mini SIM-2FF Slot, Support Global GSM/3G/4G LTE Frequency Bands
		GPS	Support (Internal Antenna)
	Hardware	Processor	Quad-core 1.5 GHz, 64-bit ARM Cortex-A53
		Built-in	Watchdog, RTC, Timer
		Power Supply	① 1 × 802.3 af Standard PoE Input ② 12 VDC with M12 Connector
	Physica Characteristics	Ingress Protection	IP67
		Dimension	240 x 164 x 90.9 mm (9.45 x 6.46 x 3.58 in)
		Installation	Wall or Pole Mounting

Smart Heating and Cooling Controls


WT Series




Overall Features


- Great Candidate for Smart Temperature Control via HVAC Systems, Radiator, Fan Coil Unites, etc.
- Accurate Temperature Detection and Calibration
- Support Pre-set Date Period with Programmable Schedules
- Support Child Lock to Prevent Tampering (WT101/WT201)
- Compatible with Hotel Room Card Systems for Convenient Remote Management (WT201/WT30x)
- LoRaWAN® Wireless Deployment with Low Power Consumption
- Support Integration with BACnet Systems
- Mulesight D2D with Communication Latency to <1 Sec (WT201)
- Long Battery Life and Wireless Installation for Easy Deployment (WT101)

Smart Heating and Cooling Controls

Model			WT101
 Smart Radiator Thermostat	Wireless Transmission	Technology	LoRaWAN®
		Frequency	IN865/RU864/EU868
		Mode	OTAA/ABP Class A
	Valve Control	Actuator	Stepping Motor
		Default Valve Fitting	M30x1.5mm
		Optional Adapters	RA, RAV, RAVL, Giacomini, M28 (Comap, Herz, TA)
		Advanced Feature	Automatic Temperature Control, Heat plans, Child Lock, Freeze Protection, Open-window Detection, Tamper Alarm
	Temperature Sensor	Sensor Type	NTC
		Range	-20°C ~ 60°C
		Accuracy	± 0.5°C (0°C ~ 50°C)
	Physical Characteristics	Power Supply	2 x 1.5V Li-FeS ₂ AA Replaceable Batteries (3000 mAh in Total)
		Battery Life*	Around 5 Years
		Ingress Protection	IP30
		Installation	Latching on the Valve

* Tested under laboratory conditions and for guideline purposes only.

Model			WT201
 Smart Thermostat	Wireless Transmission	Technology	LoRaWAN®, Mulesight D2D
		Frequency	US915/AU915/KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class C
	Thermostat Feature	Temperature Control Mode Options	Heat, EM (Emergency) Heat, Cool, Auto
		Fan Mode Options	Auto, On, Circulate
		Advanced Feature	Local Control Schedule, Threshold Alarm, Freeze Protection, Child Lock, Multicast, Mulesight D2D Controller, Mulesight D2D Agent, Data Storage, Data Retransmission
	Sensor	Sensor Type & Range	NTC, -4°F to 140°F (-20°C to 60°C) Temperature: -4°F to 140°F (-20°C to 60°C) Humidity: 0% ~ 100% RH
	Others	Configuration	NFC or Type C USB
	Physical Characteristics	Power Supply	20 to 30 VAC, 24 VAC Nominal
		Ingress Protection	IP30
		Dimension	113 x 110 x 21 mm (4.45 x 4.33 x 0.83 in)
		Installation	Wall Screw Mounting

Model			WT301	WT302
 Smart Fan Coil Thermostat	Wireless Transmission	Technology	LoRaWAN®	
		Frequency	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4	
		Mode	OTAA/ABP Class C	
	Thermostat Feature	Compatible Fan Coil	Two Pipes, 3-speed Fan, 95~240 VAC	
		Fan Relay Amps	Resistance: 5A, Inductive: 3A	
		Commptabile Valve	Two-wire On/Off Motorized Valve	0-10V Proportional Integral Valve
		Valve Relay Amps	Resistance: 3A, Inductive: 1A	
	Temerature Sensor	Sensor Type & Range	NTC, -20°C~60°C	
	Physical Characteristics	Power Supply	95~240 VAC, 50~60Hz	
		Operating Temperature	0°C~45°C	
		Ingress Protection	IP20	
		Dimension	88 x 88 x 41.8 mm (3.46 x 3.46 x 1.65 in)	
		Installation	86*86mm Square or European 60mm Round Box Mounting	

Smart People Counting That Matters in Buildings & Retail









Occupancy & People Counting Series













Overall Features



- High Accuracy of Detection
- All LoRaWAN® Versions Are GDPR-Compliant & 100% Anonymity-Detecting
- Support Milesight D2D with Communication Latency to <1 Sec (VS121/VS34x/VS350)
- High Ceiling Mount Version Available (VS121/VS135 Series)
- Smart U-Turn Detection (VS121/VS133/VS135/VS351)
- Dwell Time Detection (VS121/VS125/VS133/VS135)
- Bi-Directional People Counting via In/Out Counting (VS121/VS125/VS133/VS135/VS350/VS351/VS361)
- Advanced Heat Map Available (VS133-P/VS135-P)















Smart People Counting That Matters in Buildings & Retail

Model			VS121	VS121-P
    AI Workplace Occupancy Sensor	Wireless Transmission	Technology	LoRaWAN® , Milesight D2D	-
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4	
		Mode	OTAA/ABP Class C	
    AI Workplace Occupancy Sensor	Ethernet Transmission	Ethernet Port	-	1× RJ45 10/100 Mbps (PoE PD)
		Network Protocol	-	MQTT(s), HTTP(s), RTSP, NTP, SSH, etc.
	Measurement	Field of View	Standard Version: 190° Horizontal, 112° Vertical High Ceiling Mount Version: 129.4° Horizontal, 68.4° Vertical	
		Recognition Range	Standard Version: a Radius of 5 Meters, At the Height of 3m High Ceiling Mount Version: 18m × 7m, At the Height of 7m	
		Recognition Rate	Region Counting: Up to 95% Line Crossing Counting: Up to 98% People Flow Analysis: Up to 98%	
		Installation Height	Standard Version: 2.5m to 4m High Ceiling Mount Version: 5m to 7m	
		Advanced Feature	Mapped Detection Region Customization, Filter U-Turns, Privacy Mask, Dwell Time Detection	
	Physical Characteristics	Configuration	Wi-Fi	Ethernet
		Power Supply	5 VDC / 1.5A by Type-C Port	1. 5 VDC / 2A by Terminal Block 2. 802.3af PoE
		Installation	Ceiling Mounting	

Model			VS133	VS133-P
     AI ToF People Counting Sensor	Wireless Transmission	Technology	LoRaWAN®	-
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4	
		Mode	OTAA/ABP Class C	
     AI ToF People Counting Sensor	Ethernet Transmission	Ethernet Port	-	1× RJ45 10/100 Mbps (PoE PD)
		Network Protocol	-	MQTT(s), HTTP(s), NTP, 802.1x, SSH, LLDP, BACnet/IP, etc.
	Measurement	ToF	FoV: 98° Horizontal, 80° Vertical Light Beam: 940nm (Invisible)	
		Accuracy	<3.5 cm	
		Range	0.5~3.5 m	
		Recognition Rate	Up to 99.8%	
	Physical Characteristics	Configuration	Wi-Fi	Ethernet
		Power Supply	12VDC / 2A	802.3 at PoE+
		Operation Temperature	-20°C ~ +50°C	
		Ingress Protection	IP40	
		Installation	Ceiling Mounting, Extended Ceiling Mounting & Lintel Mounting (with Optional Multifunctional Bracket)	

Smart People Counting That Matters in Buildings & Retail



Model			VS330		
<div></div> <div></div> <div>Cubicle Occupancy Sensor</div>	Wireless Transmission	Technology		LoRaWAN®	
		Frequency		CN470/IN865/RU864/EU868/US915/AU915 /KR920/AS923-1&2&3&4	
		Mode		OTAA/ABP Class A	
	Measurement	ToF	ToF FoV		27°
			Detetion Accuracy and Range		±2cm, 0.040 ~ 3.500m
		PIR	Detection Area		80°
			Detection Distance		Maximum 2.5m
		Others	Sensor Adjustable Angle		0°, 15°, 30°, 45°, 60°, 75°
	Physical Characteristics	Configuration		Mobile App via NFC	
		Power Supply*		Easily Replaceable Batteries with up to 4-Year Battery Life	
Button		1 × Power/Reset Button			
Ingress Protection		IP30			
Dimension		Φ100 x 24 mm (Φ3.94 x 0.95 in)			
Installation		Ceiling Mount or Wall Mount via Screws or 3M tapes			

Model		VS340	VS341	
<div><div></div><div></div><div>Desk & Seat Occupancy Sensor</div></div>	Occupancy Detection	Technology	PIR	PIR & Thermopile
		Recognition Rate	Up to 95%	Up to 98%*
		PIR Detection Area	107° Horizontal, 107° Vertical	
		PIR Detection Distance	Within 1m	
<div><div></div><div></div><div>Desk & Seat Occupancy Sensor</div></div>	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D	
		Frequency	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4	
		Mode	OTAA/ABP Class A	
<div><div></div><div></div><div>Desk & Seat Occupancy Sensor</div></div>	Physical Characteristics	Power Supply	1 x 4000 mAh ER18505 Li-SOCL ₂ Battery	
		Battery Life**	Around 5 Years (100 Triggers per Day, 25°C)	
		Configuration	NFC Configuration via Mobile App	
		Operating Temperature*	-20°C ~ +60°C	
		Dimension	73 x 73 x 26 mm (2.87 x 2.87 x 1.02 in) (Without PIR Cover)	
		Installation	3M Tape Mounting, Wall Screw Mounting	







* The temperature range of thermopile to reach best recognition rate is +10°C to +30°C.

** Tested under laboratory conditions and for guideline purposes only.





Smart People Counting That Matters in Buildings & Retails

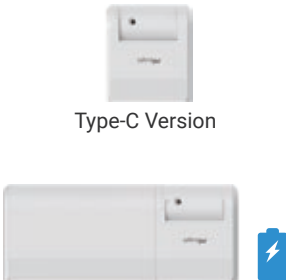
Model		VS350	
<div></div> <div></div> <div>Passage People Counter</div>	People Counting	Technology	Dual PIR
		Installation Height	Ceiling Mount: ≤ 3.0m, Wall Mount: 1.2m~1.3m
		Detection Range	Bi-directional People Counting Ceiling Mount: Passage Width = 2.8 m (At the height of 3m) Wall Mount: Passage Width < 2.3 m
	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
		Frequency	CN470/IN865/EU868/RU864/US915/AU915 /KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class A
	Physical Characteristics	Power Supply	2 x 2700 mAh ER14505 Li-SOCl ₂ Replaceable Batteries
		Battery Life*	Around 4 Years (10-min Interval, 25°C, 1000 People per Day)
		Operating Temperature	-20°C ~ +60°C
		Dimension	100 x 70 x 21 mm (3.94 x 2.76 x 0.83 in)
Installation		Ceiling Mount, Wall Mount	

* Tested under laboratory conditions and for guideline purposes only.


Model		VS135-P	VS135-L08EU	VS135-HL-868M/915M	VS135-868M/915M/470M	
<div><div><div></div><div></div></div><div></div><div>Ultra ToF People Counter</div></div>	People Counting	ToF FoV	Standard Version: 98° Horizontal, 80° Vertical / High Ceiling Mount Version: 60° Horizontal, 45° Vertical			
		ToF Light Beam	940nm (Invisible)			
		ToF Lighting Mode	Auto/Always On			
		Measuring Accuracy	Standard Version: < 3.5cm High Ceiling Mount Version: < 6.5cm			
		Installation Height	Standard Version: Up to 3.5m High Ceiling Mount Version: Up to 6.5m			
		Recognition Rate	Up to 99.8%			
		Advanced Feature	Multi-Devices Stitching, Group Counting, Heat Map, Dwell Time Detection, Regional People Counting, Staff Detection, Children/Adults Differentiation, Filter U-turns		Group Counting, Dwell Time Detection, Regional People Counting, Staff Detection, Children/Adults Differentiation, Filter U-turns	
	Wireless Transmission	Wi-Fi	IEEE 802.11 b/g/n, 2.4GHz (AP Mode for configuration)			
		Technology	-	LTE Cat 4	Wi-Fi HaLow	LoRaWAN®
		Frequency/Band		LTE-FDD: B1/B3/B7/B8/ B20/ B28 WCDMA: B1/B8 GSM/EDGE: B3/B8	915/868MHz	N470/IN865/ EU868/RU864/ US915/AU915/ KR920/AS923- 1&2&3&4
	Physical Characteristics	Power Supply	802.3at PoE+ or DC12V	DC12V		
		Ingress Protection	IP65			
		Color	White/Black			
Installation		Ceiling Mounting, Extended Ceiling Mounting & Lintel Mounting (with Optional VB01 Multifunctional Bracket)				

Smart People Counting That Matters in Buildings & Retail

Model		VS125-P	VS125-L0BEU	
<div><div></div><div></div><div>AI Stereo Vision People Counter</div></div>	Sensor	Sensor	2 x 4MP Sensor (2688 x 1520)	
		Recognition Rate	Up to 99.8%	
		Installation Height	2.2 ~ 6m	
		Required Illumination	0 lux with iR illuminators On	
	Advanced function	Bi-Directional People Counting	Up to 4 detection lines for bi-directional people counting	
		U-turn Filtering	Filter redundant counting of people wandering in the bi-directional people counting areas	
		Regional People Counting & Dwell Time Detection	Up to 4 detection areas (up to 10 decagon for each area) for regional people counting and dwell time detection	
		Children/ Adult Differentiation	Support	
		Gender Recognition	Support	
		Expression Recognition	Under development	
		Multi-Device Stitching	Support up to 8 devices stitching to expand coverage (Under development)	
	Data transmission	Ethernet Port	1 × RJ45 10/100 Mbps (PoE PD)	1 × RJ45 10/100 Mbps(Only used for Multi-Device stitching)
		Network Protocol	MQTT(s), HTTP(s), 802.1x, SSH, NTP, etc.	MQTT(s), HTTP(s), SSH, NTP, etc.
		Frequency Band	-	B1/B3/B5/B7/B8/B20/B28 for EMEA+Australia/ New Zealand
	Others	DI/DO	1/1	
		Wi-Fi	IEEE 802.11 b/g/n, 2.4GHz (AP Mode for configuration)	
	Physical Characteristics	Power Supply	802.3af PD or DC 12V/1A	DC 12V/1A
		Local Storage	Store up to one million data records and supports to export csv file	
		Installation	Ceiling Mounting, Extended Ceiling Mounting & Lintel Mounting (with Optional Multifunctional Bracket)	

Model		VS351	
<div></div> <div>Type-C Version</div> <div>Wireless Battery Version</div> <div>Mini AI Thermopile People Counter</div>	Measurement	Technology	Radar (Battery Version Only) & Thermopile
		Detection Rate	Up to 95% (Single Person: Up to 99%)
		Sensor Adjustable Angle	0°~90°
		Range	-30°C ~ 70°C
		Advanced Features	U-Turn Filtering, Bi-directional People Counting, Side by Side Differentiation
	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
		Frequency	CN470/IN865/RU864/EU868/US915/AU915 /KR920/AS923-1&2&3&4
	Others	Advanced Feature	Data Storage, Data Retransmission, Data Retrievability, Milesight D2D Controller
		Configuration	NFC
	Physical Characteristics	Power Supply	1. 5V/1A by Type-C Port (Both Versions) 2. 4x9000 mAh ER26500 Li-SOCl ₂ Replaceable Batteries (Battery Version Only)
		Battery Life	Around 1.6 Years (30-min Interval, 25°C, 1000 People per Day)
		Installation	Ceiling Mounting, Lintel Mounting

Smart People Counting That Matters in Buildings & Retail

Model		VS360	
<div></div> <div>IR Breakbeam People Counter</div>	Measurement	Technology	IR Breakbeam
		Installation Height	0.7m ~ 1.2m
		Bi-directional Counting	Support
	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
		Frequency	CN470/IN865/EU868/RU864/US915/ AU915/KR920/AS923-1&2&3&4
		Sensitivity	-137dBm
	Others	Advanced Feature	Data Storage, Data Retransmission, Data Retrievability, Milesight D2D Controller
		Screen	1 × OLED Screen for Master Device
	Physical Characteristics	Power Supply	NFC Configuration via Mobile App
		Operating Temperature*	2 x 2700 mAh ER14505 Li-SOCl ₂ Replaceable Batteries for per device
		Battery Life	Around 3 Years (10-min Interval, 2000 People per Day)
		Installation	Wall Mount



See CO₂ and More to Optimize Energy Efficiency and Healthy




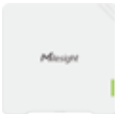

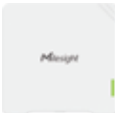

Indoor Air Quality (IAQ) Monitoring Series









Overall Features

- Multi-Sensor in One for Various Scenarios
- Wireless Installation with Anti-theft Protection
- Support Data Storage and Retransmission
- Powered via USB Type-C (AM319(L))
- Multi-years Battery Life (AM102(L)/AM103(L)/AM307(L)/AM308(L))
- Traffic Light Status Indicator for Direct Notification (AM102(L)/AM103(L)/AM307(L)/AM308(L)/AM319(L))
- Support Smart Screen Mode (AM102/AM103/AM307/AM308)
- Hibernation Mode for Ultra-Low Power Consumption (AM102/AM103)

See CO₂ and More to Optimize Energy Efficiency and Healthy

Model		AM102	AM102L	AM103	AM103L	
<div><div></div><div></div><div>2-in-1 IAQ Sensor</div><div></div><div>3-in-1 IAQ Sensor</div></div>	Wireless Transmission	Technology	LoRaWAN®			
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4			
		Mode	OTAA/ABP Class A			
	Measurement	Temperature	± 0.2°C (-20°C ~ 60°C)			
		Humidity	± 2% RH (0% RH~ 100% RH)			
		Carbon Dioxide (CO ₂)	-		± (30 ppm + 3% of Reading), 400 to 5000 ppm	
	Physical Characteristics	Configuration	NFC			
		Power Supply*	2 × 2700 mAh ER14505 Li-SOCl ₂ Replaceable Batteries			
		Battery Life*	Over 7 Years	Over 9 Years	Up to 3 Years	Up to 4 Years
		Display	2.13-inch Black & White E-Ink Screen	-	2.13-inch Black & White E-Ink Screen	-
Alarm System		1 × Traffic Light Status Indicator				
Ingress Protection		IP30				
Dimension		68 × 65 × 20.5 mm (2.68 × 2.56 × 0.81 in)				
Installation		Wall Screw Mounting, 3M Tape Mounting				

* Tested under laboratory conditions and for guideline purposes only.

Model		AM307(L)		AM308(L)	AM319(L)	
<div><div></div><div><h3>7-in-1 IAQ Sensor</h3></div><div><h3>8-in-1 IAQ Sensor</h3></div><div><h3>9-in-1 IAQ Sensor</h3></div></div>	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%RH (0% ~ 100%RH)			
		Motion	Vacant/Occupied (Status)			
		Light	0-60000 Lux (Determine as 6 Levels, 0-5)			
		TVOC (IAQ Rating)	1.00 - 5.00, ±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)*	-	±10% (0 - 1.25 mg/m3)		
		Ozone (O ₃)*	-	±5% FS (0 - 10 ppm)		
	Physical Characteristics	Configuration	NFC, USB Type-C Port			
		Power Supply**	AM307: Around 3 Years AM307L: Around 5 Years	AM308: Around 1 Years AM308L: Around 1.5 Years	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			

* HCHO or O₃ sensor is alternative option and both support replacement.

** Tested under laboratory conditions and for guideline purposes only.

The Workplace of the Future - Safer and Smarter



CoWork Series





Overall Features

- Suitable for Workplace Utilization and Power Consumption Management
- LoRaWAN® Wireless Deployment with Low Power Consumption
- Support Multicast, Overcurrent Protection, Remote and Local Control (WS50x/WS51x/WS523/WS558)
- Mulesight D2D with Communication Latency to <1 Sec (Except WS201)
- Long Battery Life and Wireless Installation for Easy Deployment (Except WS50x/WS51x/WS558)



The Workplace of the Future - Safer and Smarter

Model			WS101
  Smart Button	Wireless Transmission	Technology	LoRaWAN®, Mulesight D2D
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class A
	Physical Characteristics	Power Supply*	Easily Replaceable Battery with over 5-year Battery Life
		Ingress Protection	IP30
		Dimensions	50 × 50 × 18 mm (1.97 × 1.97 × 0.71 in) Button: Φ20 mm (Φ0.79 in)
		Installation	On the Flat Surfaces with Screws or 3M Tapes, Lanyard
	Others	Configuration	NFC
		Button	1 × External Button + 1 × Reset Button (Internal)
		Advanced Feature	Mulesight D2D Controller

* Tested under laboratory conditions and for guideline purposes only.






Model			WS136/WS156
  Smart Scene Panel	Wireless Transmission	Technology	LoRaWAN®, Mulesight D2D
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class A
	Physical Characteristics	Power Supply*	Easily Replaceable Batteries with over 3-Year Battery Life
		Ingress Protection	IP30
		Dimensions	86 × 86 × 14 mm (3.39 × 3.39 × 0.55 in)
		Display	2.9-Inch Black & White E-Ink Screen (WS156 Only)
		Installation	Desktop, 3M Tape Mounting, 86 Box Mounting
	Others	Configuration	NFC
		Button	6 Scene Buttons (Blue Light) & 1 Reset Button (Internal)
		Advanced Feature	Mulesight D2D Controller, Screen Display Customization

* Tested under laboratory conditions and for guideline purposes only.


Model			WS201
  Smart Fill Level Monitoring Sensor	Wireless Transmission	Technology	LoRaWAN®
		Frequency	CN470/ IN865/RU864/EU868/US915/AU915/KR920/AS923- 1&2&3&4
		Mode	OTAA/ABP Class A
	Measurement	ToF FoV	25°(Accuracy± 5°)
		Range&Accuracy	1 ~ 55 cm (Accuracy: ± 1 cm)
		Resolution	1mm (1.0 ≤X ≤15.0cm) 2mm (15.0<X≤ 35.0cm) 3mm (35.0<X≤55.0cm) X = Detection Distance
	Physical Characteristics	Dimension	66 × 38 × 12 mm (2.60 × 1.50 × 0.47 in)
		Configuration	NFC
		Power Supply*	Easily Replaceable Battery with 2-Year Battery Life
		Operation Temperature	-10°C ~ +60°C
		Ingress Protection	IP30
		Installation	On the Flat Surface with 3M Tapes

* Tested under laboratory conditions and for guideline purposes only.



The Workplace of the Future - Safer and Smarter

Model		WS202	
<div><div><div></div><div></div><div></div><div></div></div><div></div><div>PIR & Light Sensor</div></div>	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
		Mode	OTAA/ABP Class A
	Measurement	PIR	120° Horizontal, 100° Vertical, Maximum 8 m
		Light Status	Bright/Dark (Determine 1-60000 lux as Bright or Dark According to Custom Threshold)
	Physical Characteristics	Power Supply*	Easily Replaceable Battery with up to 4-Year Battery Life
		Ingress Protection	IP30
		Dimension	50 × 50 × 23.8 mm (1.97 × 1.97 × 0.94 in)
		Installation	On the Flat Surfaces with Screws or 3M Tapes
	Others	Configuration	NFC
Advanced Feature		Milesight D2D Controller	

* Tested under laboratory conditions and for guideline purposes only.



Model		WS203	
<div><div><div><div><div><div></div></div></div><div><div><div></div></div><div><div></div></div></div><div><div><div></div></div><div><div></div></div></div><div><div><div></div></div><div><div></div></div></div></div><div>LoRaWAN® D2D</div><div><div><div></div></div><div><div></div></div></div><div><div><div></div></div><div><div></div></div></div></div></div> <div></div> <div>Motion & TH Sensor</div>	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/ KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class A
	Measurement	PIR	120° Horizontal, 100° Vertical; Detection Area: Maximum 6 m (Distance)
		Temperature	±0.2°C (-20°C ~ 60°C)
		Humidity	±2% RH (0% RH~ 100% RH)
	Others	Configuration	NFC
		Advanced Feature	Milesight D2D Controller, Data Storage, Data Retransmission
	Physical Characteristics	Power Supply	1 × 4000 mAh ER18505 Li-SOCl ₂ Battery
		Battery Life*	Up to 5 years
Ingress Protection		IP30	
Dimension		73 x 73 x 26 mm (2.87 x 2.87 x 1.02 in) (Without PIR Cover)	
Installation		Wall Screw Mounting, 3M Tape Mounting	

* Tested under laboratory conditions and for guideline purposes only.



Model		WS301	
<div><div></div><div></div><div>Magnetic Contact Switch</div></div>	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
		Mode	OTAA/ABP Class A
	Measurement	Detection Distance	10-15 mm
	Physical Characteristics	Power Supply*	Easily Replaceable Battery with over 5-year Battery Life
		Ingress Protection	IP20
		Dimension	Sensor: 50.5 × 31 × 18.5 mm (1.99 × 1.22 × 0.73 in) Magnet: 30 × 13.5 × 10 mm (1.18 × 0.53 × 0.39 in)
		Installation	On the Flat Surfaces with Screws or 3M Tapes
	Others	Configuration	NFC
		Button	1 × Reset Button (Internal), 1 × Tampering Button
Alarms		Open/Close Status, Tamper	
Advanced Feature		Milesight D2D Controller	

* Tested under laboratory conditions and for guideline purposes only.



The Workplace of the Future - Safer and Smarter

Model		WS302	
<div></div> <div></div> <div>Sound Level Sensor</div>	Wireless Transmission	Technology	LoRaWAN®
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/ KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class A
	Measurement	Sound Level	± 3 dB (0°C to +45°C), 30 dBA to 120 dBA, 35 dBC to 120 dBC
		Frequency Range	30 Hz to 8 kHz
		Weighting	A and C Fast Weighting
		Measurement Unit	SPL Actual, Leq, Lmax
	Physical Characteristics	Power Supply*	Easily Replaceable Batteries with over 4-Year Battery Life (Fast Time Weighting Disabled) And over 1.5 Years (Fast Time Weighting Enabled)
		Ingress Protection	IP30
		Dimension	68 × 65 × 20.5 mm (2.68 × 2.56 × 0.81 in)
Installation		On the Flat Surfaces with Screws or 3M Tapes	
Others	Configuration	NFC	
	Button	1 × Power/Reset Button	



* Tested under laboratory conditions and for guideline purposes only.



Model		WS303		
<div></div> <div></div> <div>Mini Leak Detection Sensor</div>	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D	
		Frequency	CN470/ IN865/RU864/EU868/US915/AU915/ KR920/AS923- 1&2&3&4	
		Mode	OTAA/ABP Class A	
	Measurement	Trigger Condition	Conductive Liquid When Liquid Level Reaches 0.5 mm	
	Physical Characteristics	Configuration	NFC	
		Power Supply*	Easily Replaceable Battery with 5-Year Battery Life	
		Operation Temperature	-10°C to +60°C	
		Ingress Protection	IP67	
		Dimension	63 × 63 × 14 mm	
Installation		3M Tape Mounting, Desktop		

* Tested under laboratory conditions and for guideline purposes only.



Model		WS50x		
<div></div> <div></div> <div>Smart Wall Switch</div>	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D	
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4	
		Mode	OTAA/ABP Class C	OTAA/ABP Class B, Class C to B, Class C
	Electrical	Circuit Type	3-Wire	2-Wire
		Maximum Current	Inductive: 5 A per Gang, Total 10 A Resistive: 10 A per Gang, Total 10 A	
		Rated Load	Max 1000 W per Gang, total 0 ~ 2000 W	Max 1000 W per Gang, total 38 ~ 2000 W
		Measurement	Voltage (VAC), Current (mA), Power Factor (%), Power (W), Power Consumption (kWh)	-
	Physical Characteristics	Dimensions	86 Type: 86 × 86 × 40 mm (3.39 × 3.39 × 1.57 in) 120 Type: 118 × 72 × 46.9 mm (4.65 × 2.83 × 1.85 in)	
		Ingress Protection	IP20	
	Operation	Configuration	NFC	
Switch Control		Local Press or Remote Control		
Advanced Features		Schedule Switch, Switch Lock, Overcurrent Protection, Multicast, D2D Controller, Milesight D2D Agent		

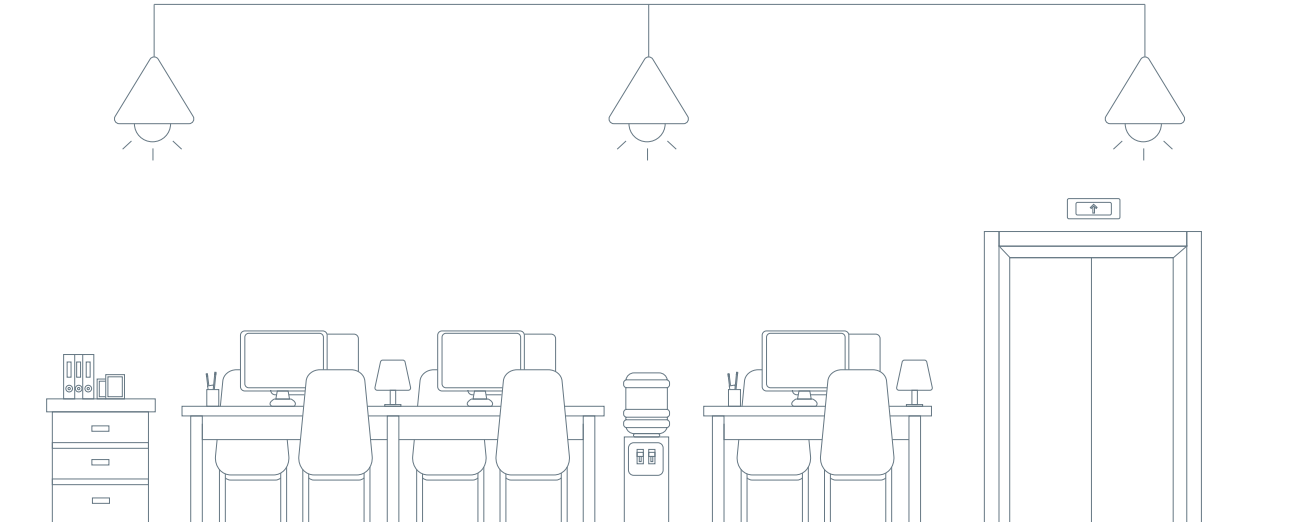
* Tested under laboratory conditions and for guideline purposes only

Model			WS523
<div></div> <div></div> <div>Smart Portable Socket</div>	Wireless Transmission	Technology	LoRaWAN®, Mulesight D2D
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/ KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class C
	Measurement	Socket & Plug Type	US/EU/AU/UK/CN, etc.
		Operating Voltage	100 ~ 250 VAC, 50 ~ 60 Hz
		Max Load Capacity	10 A ~ 16 A (Optional), 250 VAC
		Measurement	Voltage (VAC), Current (mA), Power Factor (%), Power (W), Power Consumption (kWh), ±1 % Accuracy
	Physical Characteristics	Dimensions	110 × 62.3 × 34.6 mm (4.33 × 2.45 × 1.36 in)
		Ingress Protection	IP30
	Others	Configuration	NFC or Downlink
		Switch Control	Button or Remote Control
		Button	ON/OFF, Reset
		Advanced Features	Schedule Switch, Button Lock, Overcurrent Protection/Alarm, Multicast, Power Outage Alert, Mulesight D2D Agent

Model			WS51x
<div></div> <div></div> <div>Smart Wall Socket</div>	Wireless Transmission	Technology	LoRaWAN®, Mulesight D2D
		Frequency	IN865/RU864/EU868/US915/AU915/ KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class C
	Electrical	Socket Type	EU: Type F, with Safety Door FR: Type E, with Safety Door
		Input Voltage	100~250 VAC, 50~60 Hz
		Rated Current	16A (Max)
		Measurement	Voltage (VAC), Current (mA), Power Factor (%), Power (W), Power Consumption (kWh)
	Software	Configuration	NFC or Downlink
		Power Control	Local Press Button or Remote Control
		Advanced Features	Delay Switch, Button Lock, Overcurrent Protection/ Alarm, Multicast, Mulesight D2D Agent
	Physical Characteristics	Ingress Protection	IP20
		Dimensions	Type F: 86.3 × 86.3 × 45.8 mm (3.4 × 3.4 × 1.8 in) Type E: 86.3 × 86.3 × 43.3 mm (3.4 × 3.4 × 1.7 in)

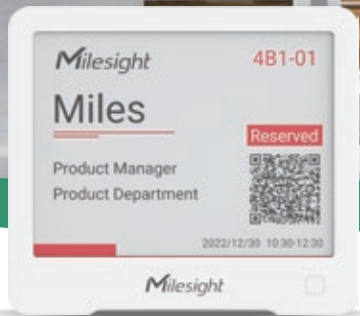
* Tested under laboratory conditions and for guideline purposes only.

Model			WS558-LN	WS558-Switch
<div></div> <div></div> <div>Smart Light Controller</div>	Electrical	Input Voltage	100~240 VAC, 50~60 Hz	
		Output	8 Active Outputs	8 Passive Switches
		Capacitive & Inductive Load	Maximum 5A per Output, Total 16A	Maximum 5A per Switch
		Resistive Load	Maximum 10A per Output, Total 16A	Maximum 10A per Switch
		Electrical Measurement	Voltage (VAC), Current (mA), Power Factor (%), Power (W), Power Consumption (kW·h)	-
		Switch Control	Local Press or Remote Control	
	Wireless Transmission	Protocol	LoRaWAN®, Mulesight D2D	
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/ KR920/AS923-1&2&3&4	
		Mode	OTAA/ABP Class C	
	Physical Characteristics	Dimensions	145 × 90 × 40 mm (5.7 × 3.54 × 1.57 in)	
		Installation	Wall Mounting, DIN Rail Mounting	
	Others	Configuration	NFC, USB Type-C or Downlink	
		Advanced Features	Multicast, Remote Schedule Switch, Overcurrent Protection, Mulesight D2D Agent	





IoT E-ink Display

DS3604 with high-definition e-ink display is great for flexible content presentation in retail, warehouse and logistics management, smart production lines and more.



Overall Features

- Bigger E-ink Screen Featuring Red/White/Black Color Display
- Customized Templates in Multiple Modules and Languages
- Low Power Consumption with up to 5 Years Battery Life
- Open API and a LoRaWAN® Button Enable Various Applications
- Support Local and Remote Control for Bulk Deployment
- LoRaWAN® Wireless Deployment with Low Power Consumption

Model			DS3604
<div>  IoT E-ink Display</div>	Wireless Transmission	Technology	LoRaWAN®
		Frequency	CN470/ IN865/RU864/EU868/US915/AU915/ KR920/AS923- 1&2&3&4
		Mode	OTAA/ABP Class A/Class B (Default OTAA Class B)
	Display	E-Ink Screen	4.2-inch Black & White & Red E-Ink Screen
		Resolution	400 x 300 Pixels
		Refresh Rate	16s (10 ~ 40°C)
	Physical Characteristics	Configuration	NFC
		Battery Life*	Around 5 Years (Class A Mode + 1 Screen Refresh per Day) Around 1 Year (Class B Mode + 12 Screen Refreshes per Day)
		Operation Temperature	0°C ~ +40°C
		Dimension	99 × 87 × 10.5 mm (3.90 × 3.43 × 0.41 in)
		Installation	3M Tape Mounting, Wall Screw Mounting

* Tested under laboratory conditions and for guideline purposes only.

iBox Kit Series

Milesight iBox Kit is designed for users to quickly evaluate the LoRaWAN® technology with testified devices and services. Going comprehensively digital transformation with more certainty, these solutions are the one step before users to scale connected device deployments securely with high reliability.



Overall Features

- Starters Enjoy It for Putting PoCs into Action with Reduced Time & Cost
- Operators Need It for New Projects and Potential Market Demands
- Deployers Love It for Easy to Deploy and Integrate with Multiple NS Platforms

• AM319 • AM307
• AM103 • AM102L
• UG56
• Milesight IoT Cloud

*Enjoy free cloud services for a specified period of time



Indoor Air Quality Solution

iBox IAQ Kit

• WS101 • WS301
• AM103 • WS303
• WS558 • UC300
• UG56
• Milesight IoT Cloud

*Enjoy free cloud services for a specified period of time



Smart Building Solution

iBox Smart Building Kit

• VS121 • VS340
• DS3604 • UG56
• Milesight IoT Cloud

*Enjoy free cloud services for a specified period of time



Smart Office Solution

iBox CoWork Kit

• VS121 • WS101
• WS301 • WS156
• UC100 • UG56
• Milesight IoT Cloud

*Enjoy free cloud services for a specified period of time



Smart Office Solution

iBox CoWork Kit

• WS101 • WS201
• GS301 • VS330
• UC100 • UG56
• Milesight IoT Cloud

*Enjoy free cloud services for a specified period of time



Smart Restroom Solution

iBox Smart Restroom Kit

• EM500-SMTC
• UC511
• UG56
• Milesight IoT Cloud

*Enjoy free cloud services for a specified period of time



Smart Agriculture Solution

iBox Smart Agriculture Kit



Professional Temperature Monitoring

TS Series





Overall Features



- Industrial-grade Design
- Easy Configuration via NFC
- Highly-Accurate Temperature Monitoring
- Support Data Storage and Retransmission
- LoRaWAN® Wireless Deployment with Low Power Consumption
- Food-Grade Enclosure and Probe (TS101)
- Compliance with HACCP and 21 CFR Part 11B (TS30x)

Model			TS101
  Insertion Temperature Sensor	Wireless Transmission	Technology	LoRaWAN®
		Frequency	CN470/ IN865/RU864/EU868/US915/AU915/ KR920/AS923- 1&2&3&4
		Mode	OTAA/ABP Class A
	Measurement	Range	-30°C ~ +70°C (Accuracy: ±0.5°C)
		Resolution	0.1°C
		Configuration	NFC
	Physical Characteristics	Power Supply*	Easily Replaceable Battery with 10-Year Battery Life
		Material	Transceiver: ABS + PC Sensor Probe: 316 Stainless Steel (Food-Grade, Phosphine &Corrosion Resistant)
		Ingress Protection	IP67
		Impact Protection	IK10(Transceiver)
		Dimension	Transceiver: Φ 92 × 92 × 26 mm (Φ 3.62 × 3.62 × 1.02 in) Sensor Probe: Φ 7 × 400 mm (Φ 0.28 × 15.75 in)
		Installation	Insert Installation

* Tested under laboratory conditions and for guideline purposes only.

Professional Temperature Monitoring

Model			TS201
  Cost-Effective Temperature Sensor	Wireless Transmission	Technology	LoRaWAN®
		Frequency	CN470/ IN865/RU864/EU868/US915/AU915/ KR920/AS923- 1&2&3&4
		Mode	OTAA/ABP Class A
	Sensor	Measuring Range	-40°C ~ 125°C
		Accuracy	± 0.5°C(-10°C ~ 85°C), ± 2°C(-40°C ~ -10°C, 85°C ~ 125°C)
		Resolution	0.1°C
		Cable Length	1.5 m
	Others	Configuration	NFC
		Advanced Feature	Data Storage, Data Retransmission, Data Retrieval, Abrupt Temperature Change Alarm
	Physical Characteristics	Battery Life	Around 3 Years (25°C, 10 min Interval, SF10) Around 9 Years (25°C, 10 min Interval, SF7)
		Operating Temperature	TS201 Device: -30°C ~ 55°C (-22°F ~ 131°F) Sensor Cable: -40°C ~ 125°C (-40°F ~ 257°F)
		Ingress Protection	IP67
		Installation	Wall Screw Mounting, Cable-tie Mounting, Magnetic Mounting (Opt.)

Model			TS301	TS302
  LoRaWAN® Temperature Sensor	Wireless Transmission	Technology	LoRaWAN®	
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/ KR920/AS923-1&2&3&4	
		Mode	OTAA/ABP Class A	
	Sensor Connector	Connector Type	5-pin M12 A-Coded Male Connector	
		Connector Number	TS301: 1 × Connector for PT100 Probe or Magnet Switch Sensor TS302: 2 × Connectors for two PT100 Probes or PT100 + Magnet Switch Sensor	
	Others	Configuration	Mobile App (via NFC) or PC software (via USB Type-C)	
		Data Logging	10, 000 Measurements and Supports to Export as CSV or PDF File	
	Physical Characteristics	Ingress Protection	IP65	
		Dimension	109.35 × 75 × 20 mm (4.31 × 2.95 × 0.79 in)	
		Installation	Wall Screw Mounting, Magnetic Mounting (Opt.)	

PT100 Probes*			
Model	B05-125-200	AF10-125-150	A05-500-150
Measurement	± 0.5°C (-40°C~40°C), ± 1°C (40°C~125°C)	± 0.4°C (-40°C~125°C)	± 0.5°C (-50°C~500°C)
Cable Length	2m	1.5m	1.5m

* Please contact us for customized probe options according to your specific requirements.

Magnet Switch Sensor	
Detection Distance	20-30 mm
Cable Length	1.5 m (Customizable)
Dimension	32 × 15 × 8 mm (1.25 × 0.59 × 0.31 in)



Sense the Invisible Danger

GS Series





Overall Features



- Highly-Accurate Monitoring
- Easy Configuration via NFC
- Built-in LED Indicator & Buzzer for Status Indication and Alarming
- LoRaWAN® Wireless Deployment with Low Power Consumption
- Support Data Storage and Retransmission (GS101)

Model			GS101
<div>  Gas Detector</div>	Wireless Transmission	Technology	LoRaWAN®
		Frequency	CN470/RU864/IN865/EU868/US915/AU915/KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class C
	Measurement	Detecting Gas	Methane (CH ₄)
		Alarm Level	8% LEL
		Historical Records Storage	Alarm Records, Alarm Dismissed Records, Device Fault Records, Device Fault Recovered Records, Device Power on Records, Device Power off Records, Device Invalid Records
		Alarm System	Sound (8% LEL), LED Indicators
	Physical Characteristics	Configuration	NFC
		Power Supply	12VDC, 1A through DC Jack Connector
		Ingress Protection	IP30
		Dimension	120 × 85 × 32.5 mm (4.72 × 3.35 × 1.28 in)
		Installation	Wall Mounting

Sense the Invisible Danger

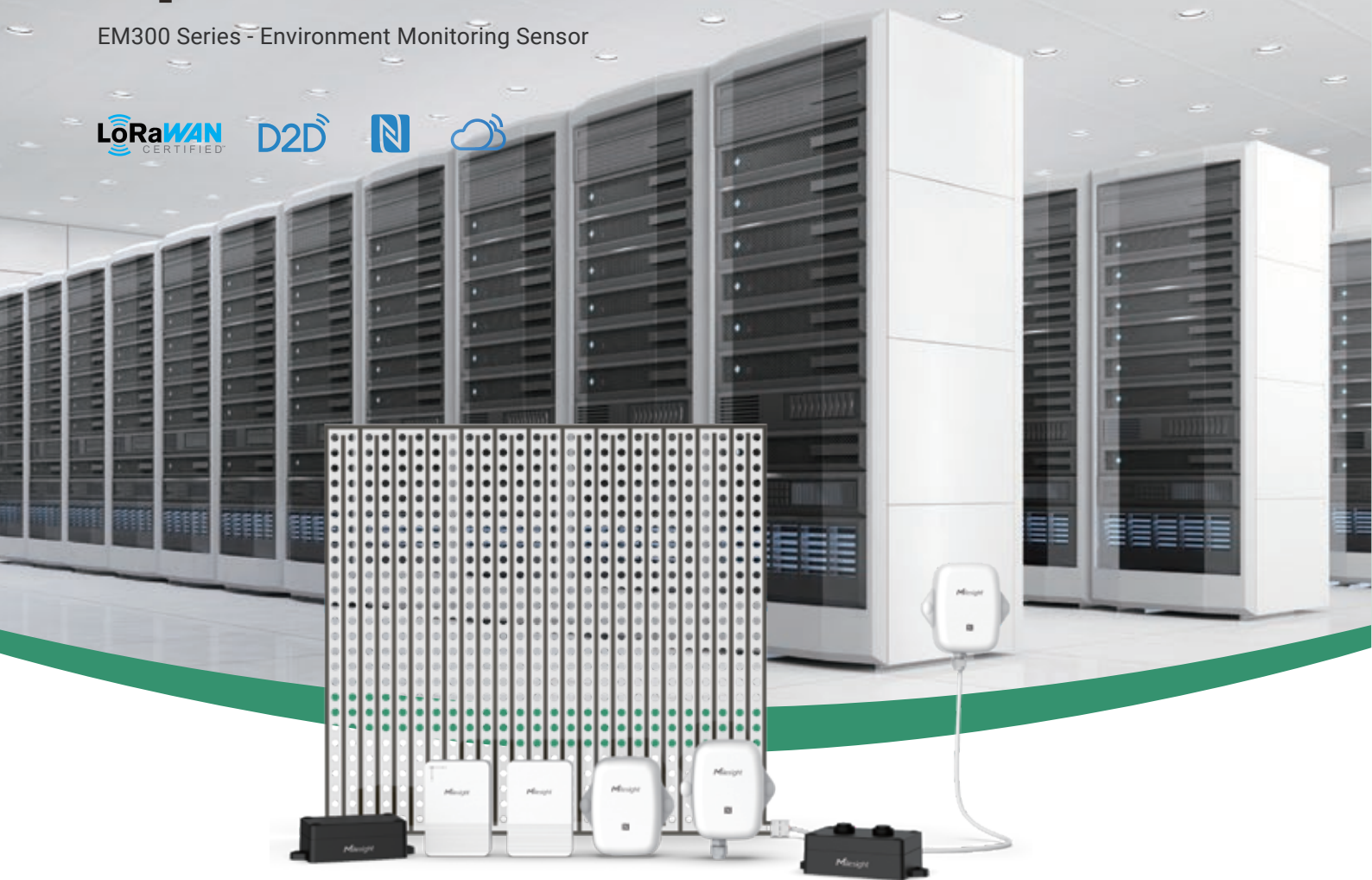
Model			GS301
<div>  Bathroom Odor Detector</div>	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
		Frequency	CN470/RU864/IN865/EU868/US915/AU915/KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class A
	Measurement	Ammonia (NH ₃)	± 5% (-40 - 35°C), 0 ~ 10 ppm
		Hydrogen Sulfide (H ₂ S)	± 5% (-40 - 35°C), 0 ~ 5 ppm
		Temperature	± 0.2°C (-40 - 85°C)
		Humidity	± 2%RH (0 - 100%)
	Physical Characteristics	Configuration	NFC
		Power Supply*	Easily Replaceable Batteries with up to 3-Year Battery Life
		Ingress Protection	IP30
		Dimension	120 × 85 × 32.5 mm (4.72 × 3.35 × 1.28 in)
		Alarm System	1 × Status/Alarm Indicator + 1 × Buzzer
		Installation	Wall Mounting

* Tested under laboratory conditions and for guideline purposes only.

Model			GS601
<div>  Vape Detector</div>	Wireless Transmission	Technology	LoRaWAN®
		Frequency	CN470/RU864/IN865/EU868/US915/AU915/KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class C
	Sensor	Sensor Type & Range	Temperature, -20°C ~ 60°C Humidity, 0% ~ 100% RH Vape Index, 0 ~ 100 TVOC, 0 ~ 2000 µg/m3 PM1.0 & PM2.5 & PM10, 0 ~ 1000 µg/m3
	Others	LED & Buzzer	1 × Traffic Light Status Indicator + 1 × Buzzer
	Physical Characteristics	Power Supply	5V/1A by Type-C Port
		Operating Temperature	-20°C ~ 60°C
		Ingress Protection	IP30
		Dimension	Φ 128 × 40 mm (Φ 5.04 × 1.57 in)
		Installation	Ceiling Mounting

Monitor Conditions and Optimize Controls





EM300 Series - Environment Monitoring Sensor




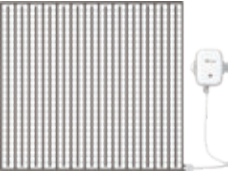


Overall Features

- Rated at IP67
- Industrial-grade Design
- Battery Life up to 5 Years
- Easy Configuration via NFC
- LoRaWAN® Wireless Deployment with Low Power Consumption
- Support Extra Temperature and Humidity Detection (Except UDL&TILT&MLD)

Monitor Conditions and Optimize Controls



Model		EM300-TH		EM320-TH
  Temperature & Humidity Sensor	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D	
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4	
		Mode	OTAA/ABP Class A	
	Measurement	Temperature	±0.3°C (0°C ~ 70°C), ±0.6°C (-30°C ~ 0°C)	±0.2°C (-30°C ~ 60°C)
		Humidity	±3%RH (10%RH ~ 90%RH), ±5%RH (below 10%RH and above 90%RH)	±2%RH (0%RH ~ 100%RH)
  Temperature & Humidity Sensor	Physical Characteristics	Configuration	NFC	
		Power Supply*	Easily Replaceable Battery with up to 10-Year Battery Life	Easily Replaceable Batteries with over 5-year Battery Life
		Material	-	PC + ABS (Food-Grade)
		Operation Temperature	-30°C ~ 70°C	-30°C ~ 60°C
		Ingress Protection	IP67	
		Dimension	88.5 × 85.3 × 27 mm (3.48 × 3.36 × 1.06 in)	85 × 58 × 18 mm (3.34 × 2.28 × 0.70 in)
		Installation	Wall Mounting	Wall or Pole Mounting (Standard Version) Magnetic Adsorption (Magnet Version)

* Tested under laboratory conditions and for guideline purposes only.



Model		EM300-MLD		EM300-SLD	EM300-ZLD
  Membrane Leakage Detection Sensor	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D		
		Frequency	CN470/RU864/IN865/EU868/US915/AU915/KR920/AS923-1&2&3&4		
		Mode	OTAA/ABP Class A		
	Measurement Leakage Detection	Liquid Type	Conductive Liquid (Water, Weak Acid, Weak Base, etc.)	-	
		Trigger Media	400 × 400 × 0.25 mm Printed Leakage-Detecting Film (The size can be customizable)	-	
		Temperature	-	±0.3°C (0°C ~ 70°C), ±0.6°C (-30°C ~ 0°C)	
		Humidity	-	±3%RH (10%RH ~ 90%RH), ±5%RH (below 10%RH and above 90%RH)	
		Trigger Condition	When the Sensing Film Contact Conductive Liquid	When Conducting Liquid Level Reaches 5 mm	
		Cable Length	1000 mm (Customizable)	1.5 m (Customizable)	3 m (Customizable)
  EM300-SLD/ZLD Leak Detection Sensor	Physical Characteristics	Configuration	NFC		
		Power Supply*	1 × 4000 mAh ER18505 Li-SOCL ₂ Battery (Extendable to 2 Batteries)		
		Battery Life*	Up to 10 Years (One hour Leakage per Day, 25°C)		
		Color & Material	White Flame, ABS + PC (Retardant)		
		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 Screw Mounting, 3M Tape Mounting, Cable-Tie Mounting	Wall Mounting	

* Tested under laboratory conditions and for guideline purposes only.



Monitor Conditions and Optimize Controls

Model			EM300-CL
  Capacitive Level Sensor	Capacitive Level Detection	Compatibility	Insulating Non-metallic Containers (Plastic, Glass, Acrylic, etc.)
		Cable Length	1m
	Measurement	Technology	LoRaWAN®
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/ KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class A
	Physical Characteristics	Ingress Protection	IP67
		Configuration	NFC Configuration via Mobile App
		Power Supply	1 × 4000 mAh ER18505 Li-SOCl ₂ Battery
		Battery Life*	Around 10 Years
		Dimension	Transceiver: 105.6 × 85.2 × 27 mm (4.15 × 3.35 × 1.06 in) Electrode Detection Sheet: 505 × 500 × 0.2mm (19.88 × 19.69 × 0.0079 in)
		Installation	Transceiver: Wall Screw Mounting, 3M Tape Mounting Electrode Detection Sheet: Cable-Tie Mounting, 3M Tape Mounting

* Tested under laboratory conditions and for guideline purposes only.





Model			EM300-DI
  Pulse Counter	Wireless Transmission	Technology	LoRaWAN®
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/ KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class A
	Measurement	GPIO	1 x GPIO Interface, Work as Pulse Counter
		Temperature	±0.3°C (0°C ~ 70°C), ±0.6°C (-30°C ~ 0°C)
		Humidity	±3%RH (10%RH ~ 90%RH), ±5%RH (below 10%RH and above 90%RH)
	Physical Characteristics	Configuration	NFC
		Power Supply*	Easily Replaceable Battery 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, 3M Tape Mounting, Cable-Tie Mounting

* Tested under laboratory conditions and for guideline purposes only.



Model			EM300-MCS
  Magnetic Contact Switch	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/ KR920/AS923-1&2&3&4
		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)
	Physical Characteristics	Humidity	±3%RH (10%RH ~ 90%RH), ±5%RH (below 10%RH and above 90%RH)
		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.

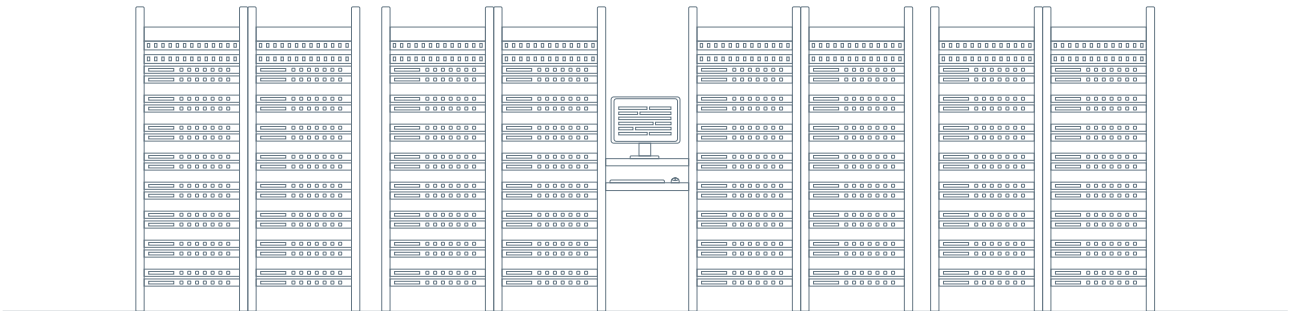
Monitor Conditions and Optimize Controls

Model			EM310-TILT	EM320-TILT
  Tilt Sensor   Tilt Sensor	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	-90° ~ +90° (Accuracy : ±1°)	
		Resolution	0.01°	
	Physical Characteristics	Configuration	NFC	
		Power Supply*	Easily Replaceable Batteries with over 5-Year Battery Life	Easily Replaceable Batteries with over 3-Year Battery Life
		Operation Temperature	-20°C ~ 60°C	-30°C ~ +60°C
		Ingress Protection	IP67	
		Dimension	111 × 62 × 33 mm (4.37 × 2.44 × 1.30 in)	85 × 58 × 18 mm (3.34 × 2.28 × 0.70 in)
		Installation	On the Flat Surfaces with Screws	Wall Mounting, Pole Mounting

* Tested under laboratory conditions and for guideline purposes only.

Model			EM310-UDL
  Ultrasonic Distance/Level Sensor	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.



Revolutionizing Measurement and Monitoring








EM400 Series Distance/Level Measurement Sensor

LoRaWAN® NB-IoT Cat M



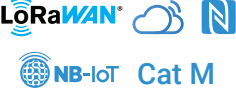

Overall Features

- IP67 Rated for Harsh Environment
- LoRaWAN® & NB-IoT & CAT-M Versions Available
- 3-Axis Accelerometer for Asset Status Management
- Embedded NTC Thermistor for Fire Alarms
- Replaceable Battery Life up to 10 Years
- Easy Configuration via NFC
- Support Pre-set Modes (TLD/MUD)
- Positioning Function Enabled by GNSS Modules (NB-IoT Version)







Model		EM400-TLD		
<div><div></div><div></div><div></div><div>ToF Laser Distance Sensor</div></div>	Wireless Transmission	Technology	LoRaWAN®	NB-IoT/Cat M
		Frequency	CN470/IN865/RU864/EU868/ US915/AU915/KR920/ AS923-1&2&3&4	Cat M1: B1/B2/B3/B4/B5/B8 /B12/B13/B18/B19/B20/B25/ B26/B27/B28/B66/B85 Cat NB2: B1/B2/B3/B4/B5/B8/ B12/B13/B18/B19/B20/B25/ B28/B66/B71/B85
		Mode	OTAA/ABP Class A	TCP/UDP/MQTT/AWS
	Measurement	ToF FoV	27°	
		Range&Accuracy	Range: 2 ~ 350 cm Accuracy: ±2 cm (-20°C~70°C) Resolution:1 mm	
		Temperature	-40°C ~125°C	
		Position	Normal/Tilt	
		Location	-	Longitude & Latitude (GNSS)
	Physical Characteristics	Configuration	NFC	
		Battery Life*	Around 10 years (Standard Mode -10min Interval, Bin Mode -20min Interval, 25°C)	TCP/UDP—Around 10 Years MQTT/AWS—Around 5 Years (4 Times Report Per Day, Per Report Includes 12 Packages with 30-min Collection Interval, 25°C)**
		Ingress Protection	IP67	
		Installation	On the Flat Surface with Screws	

*Tested under laboratory conditions and for guideline purposes only.
**PSM is required for SIM card and will be impacted by cellular base station signals.

Revolutionizing Measurement and Monitoring

Model		EM400-MUD		
<div></div> <div></div> <div>Multifunctional Ultrasonic Distance Sensor</div>	Wireless Transmission	Technology	LoRaWAN®	NB- IoT/Cat M
		Frequency	CN470/ IN865/RU864/EU868/ US915/AU915/KR920/ AS923- 1&2&3&4	Cat M1: B1/B2/B3/B4/B5/B8/ B12/B13/B18/B19/B20/B25/ B26/B27/B28/B66/B85 Cat NB2:B1/B2/B3/B4/B5/B8/ B12/B13/B18/B19/B20/B25/ B28/B66/B71/B85
		Mode	OTAA/ABP Class A	TCP/UDP/MQTT/AWS
	Measurement	Detection Range	3 ~ 450 cm	
		Detection Accuracy	± (1+0.3%*S) cm (-15°C ~ 60°C), S=distance	
		Temperature	-40°C ~125°C	
		Position	Normal/Tilt	
		Location	-	Longitude & Latitude (GNSS)
	Physical Characteristics	Configuration	NFC	
		Battery Life*	Standard Mode: >10 years (10min Interval, 25°C) Bin Mode: >10 years (20min Interval, 25°C) Parking Lot Mode: 5 years (12 Triggers Per Day, 25°C)	TCP/UDP—Around 10 Years MQTT/AWS—Around 5 Years (4 Times Report Per Day, Per Report Includes 12 Packages with 30-min Collection Interval, 25°C)**
		Operation Temperature	-30°C ~ +70°C	
		Ingress Protection	IP67	
		Dimension	118 × 65 × 32.5 mm	
		Installation	On the Flat Surface with Screws	

*Tested under laboratory conditions and for guideline purposes only.
**PSM is required for SIM card and will be impacted by cellular base station signals.

Model		EM400-UDL				
<div></div> <div></div> <div></div> <div>Ultrasonic Distance Sensor</div>	Wireless Transmission	Technology	LoRaWAN®		NB- IoT/Cat M	
		Frequency	CN470/ IN865/RU864/EU868/ US915/AU915/KR920/ AS923-1&2&3&4		Cat M1: B1/B2/B3/B4/B5/B8 /B12/B13/B18/B19/B20/B25/ B26/B27/B28/B66/B85 Cat NB2: B1/B2/B3/B4/B5/B8/ B12/B13/B18/B19/B20/B25/ B28/B66/B71/B85	
		Mode	OTAA/ABP Class A		TCP/UDP/MQTT/AWS	
	Measurement	Model	Standard	Pro	Standard	Pro
		Detection Range	C050: 25 ~ 500 cm C100: 25 ~ 1000 cm	W050: 30 ~ 500 cm W100: 50 ~ 1000 cm	C050: 25 ~ 500 cm C100: 25 ~ 1000 cm	W050: 30 ~ 500 cm W100: 50 ~ 1000 cm
		Detection Accuracy	± (1+0.3%*S) cm, S=distance (- 15°C ~ 60°C)*	± 1% FS (- 30°C ~ 65°C)	± (1+0.3%*S) cm, S=distance (- 15°C ~ 60°C)*	± 1% FS (- 30°C ~ 65°C)
		Temperature	-40°C ~ +125°C			
		Position	Normal/Tilt			
		Location	-		Longitude & Latitude (GNSS)	
		Configuration	NFC			
	Physical Characteristics	Battery Life**	> 10 Years (10min Interval, 25°C)		TCP/UDP—Around 10 Years MQTT/AWS—Around 5 Years (4 Times Report Per Day, Per Report Includes 12 Packages with 30-min Collection Interval, 25°C)***	
		Operation Temperature	-30°C ~70°C			
		Ingress Protection	IP67			
		Installation	On the Flat Surface with Screws			

*This accuracy is applicable to the measuring range of 25~800cm.
**Tested under laboratory conditions and for guideline purposes only.
***PSM is required for SIM card and will be impacted by cellular base station signals.

Reliable Data Collection for Long-term Remote Operation



EM500 Series - Outdoor Environment Monitoring Sensor





Overall Features

- IP67 Rated and UV Resistance
- Replaceable Battery Life up to 10 Years
- Easy Configuration via NFC
- Wide Measuring Range with Higher Accuracy
- LoRaWAN® Wireless Deployment with Low Power Consumption



Reliable Data Collection for Long-term Remote Operation

Model		EM500-CO ₂	
  CO₂ Sensor (4 in 1)	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 (CO ₂)	± (30 ppm + 3% of reading), 400 - 5000 ppm (0°C ~ 50°C, 0~85%RH)
		Temperature	±0.3°C (0°C ~ 70°C), ±0.6°C (-30°C ~ 0°C)
		Humidity	±3%RH (10%RH ~ 90%RH), ±5%RH (below 10%RH and above 90%RH)
		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.



Model		EM500-LGT	
  Light Sensor	Wireless Transmission	Technology	LoRaWAN®
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
		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.

Model		EM500-PP	
  Pipe Pressure Sensor	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.

Reliable Data Collection for Long-term Remote Operation





Model			EM500-PT100
<div></div> <div></div> <div>Industrial Temperature Sensor</div>	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.

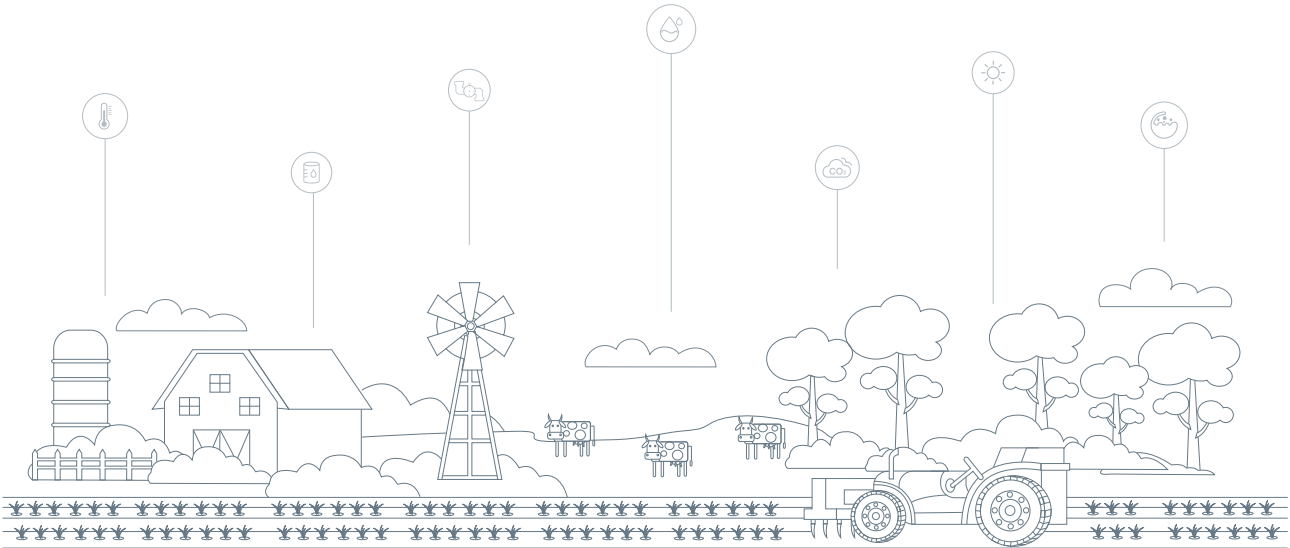
Reliable Data Collection for Long-term Remote Operation

Model			EM500-SMTC
<div></div> <div></div> <div>Soil Moisture, Temperature and Electrical Conductivity Sensor</div>	Wireless Transmission	Technology	LoRaWAN®
		Frequency	CN470/ IN865/RU864/EU868/US915/AU915/ KR920/AS923- 1&2&3&4
		Mode	OTAA/ABP Class A
	Measurement	Moisture	Range: 0% ~ 100% RH Accuracy: ±2%(0~50%), ± 3%(50%~100%) Resolution: 0.01%
		Temperature	Range: -40°C ~ 80°C Accuracy: ±0.5°C Resolution: 0.1°C
		Conductivity	Range: 0~20000 µs/cm Accuracy: ±3%(0~10000 µs/cm), ±5%(10000~20000 µs/cm) Resolution: 1 µs/cm
	Physical Characteristics	Configuration	NFC, USB Type-C Port
		Battery Life*	Built-in 19000 mAh Can be Used for up to 10 Years
		Operation Temperature	-30°C to +70°C
		Cable Length	2m
		Ingress Protection	IP67 (Transceiver)/IP68(Soil Sensor)
		Installation	Pole, wall or DIN Rail Mounting

* Tested under laboratory conditions and for guideline purposes only.

Model			EM500-UDL	EM500-SWL
<div></div> <div></div> <div>Ultrasonic Distance/Level Sensor</div> <div></div> <div></div> <div>Submersible Water Level Sensor</div>	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 & 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	± 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	W050/W100/S050: -30°C ~ 65°C C050/C100: -15°C ~ 60°C	-30°C ~ 70°C (Transceiver) -10°C ~ 70°C (Level Sensor)
		Ingress Protection	IP67	IP67 (Transceiver)/ IP68 (Level Sensor)
		Dimension	156.1 × 71 × 69.5 mm (6.1 × 2.8 × 2.7 in)	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.



Smart Current Transformer



CT Series





LoRaWAN® N

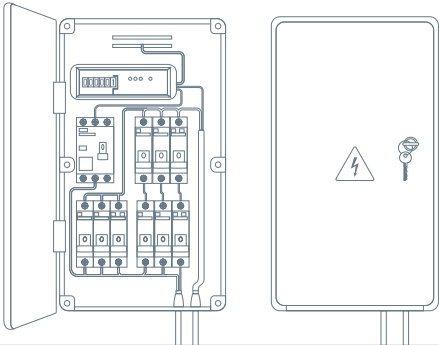


Overall Features

- Powered by the Circuit under Test, No Batteries Required
- Non-intrusive and Quick Installation without Damaging Circuits or Shutting Down the Power Supply
- Support Sampling Frequencies up to 3.3khz for More Accurate Current Measurements
- Determines the General Direction of Energy Consumption and Automatically Calculates Cumulative Ampere-Hour Values Once per Second
- Compact Design Makes It Easy to Install Even in Tight Quarters

Model		CT101		CT103	
<div></div> <div></div> <div>Smart Current Transformer</div>	Wireless Transmission	Technology	LoRaWAN®		
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/ KR920/AS923-1&2&3&4		
		Mode	OTAA/ABP Class A		
	Measurement	Detection Parameter	RMS Current		
		Rated Primary Current	100 A _{rms}	300 A _{rms}	
		Rated Secondary Current	100 A _{rms}	150 A _{rms}	
	Physical Characteristics	Power Supply	Induced Current Power Supply		
		Ingress Protection	IP30		
		Installation	Open Current Clamp, Suspended on the Conductor under Test		
Operating Temperature		-20°C ~ 70°C			
Flammability Rating		UL94-V0			
Storage Temperature		-25°C ~ +80°C			







Model		CT305		CT310		
<div>  Smart Current Transformer</div> <div>  Smart Current Transformer</div>	Wireless Transmission	Technology	LoRaWAN®			
		Frequency	CN470/IN865/RU864/EU868/US915/AU915/ KR920/AS923-1&2&3&4			
		Mode	OTAA/ABP Class A			
	Measurement	Detection Parameter	RMS Current			
		Rated Primary Current	500 A _{rms}		1000 A _{rms}	
		Rated Secondary Current	30 A _{rms}		60 A _{rms}	
		Sampling Frequency	3.3 kHz			
	Temperature Sensor	Sensor Type	NTC			
		Range	20°C ~ 100°C			
		Accuracy	±1 %			
Others	Configuration	Type-C USB				
Physical Characteristics	Power Supply	Induced current power supply				
	Cable Length	1m				
	Installation	Transceiver: Cable-tie Mounting (under integrated mode) CT Clamp: Suspended on the Testing Conductor				








Protect and Manage Critical Assets at All Times

- Highly-Accurate GNSS Positioning
 - Cooperate with Wi-Fi Positioning
 - Support Geofencing
 - IP67 Rated & IK09 Rated
- Provide Motion/Periodic/Timing Modes
 - Easy Configuration via NFC or Bluetooth
 - Support Data Storage and Retransmission
 - Embedded 3-Axis Accelerometer & NTC Thermistor

Model		AT101	
<div></div> <div></div> <div>Outdoor Asset Tracker</div>	Wireless Transmission	Technology	LoRaWAN®
		Frequency	CN470/ IN865/RU864/EU868/US915/AU915 /KR920/AS923- 1&2&3&4
		Mode	OTAA/ABP Class A
	Measurement	Positioning	GNSS Resolution: 0.000001(Longitude/Latitude) Accuracy: 5.0m (Direct Line of Sight)
			Wi-Fi Wi-Fi Parameters: BSSID, RSSI Wi-Fi Standard: 802.11b/g/n 2.4GHz
		Motion	Normal/Tilt
		Temperature	-40°C ~ 125°C
	Others	Configuration	NFC, Bluetooth® 5.3
		Battery Life*	Twice Daily Location Updates - 15+ Years Tenth Daily Location Updates - 8+ Years Hourly Location Updates - 4+ Years
	Physical Characteristics	Ingress Protection	IP67
		Impact Protection	IK09
		Installation	Wall Screw Mounting, 3M Tape Mounting, Cable-tie Mounting

High Capacity, Long Endurance, Plug and Play




- Capacity up to 12000mAh & IP67 Rated & IK08 Rated
 - Data Protection & Plug and Play
- Equip with Heating Film for Protecting Battery in Low-Temperature Environment
 - Up to 32 Hours' Supplement

Model		Type-C Version		M12 Version
<div></div> <div></div> <div>Uninterruptible Power Supply</div>	Power	Power Input	9~20V-2A	
		Input Connector	DC Jack Female Connector	
		Power Output	5V-4A	6~8.4V-1.5A
		Output Connector	Type-C	4-Pin M12 A-Coded Female
		Battery Capacity	4 x 3000mAh Lithium-ion Rechargeable Batteries	
		Battery Supply Time*	6 ~ 32h	

* Tested under laboratory conditions and for guideline purposes only.

Overall Features

- Long-lasting Battery Life
 - 5.72 Inch Full HD Touch Screen
 - Full Frequency Band Testing Capability
- Real-Time Network Signal Testing and Analysis
 - Records Signal Test Results with GPS Location
 - Seamless Report Export and Data Analysis

Model			FT101	
<div></div> <div></div> <div>Milesight Field Tester</div>	LoRaWAN®	Antenna Connector	1 × 50 Ω SMA Female Connector	
		Frequency	CN470/ IN865/RU864/EU868/US915/AU915 /KR920/AS923- 1&2&3&4	
		Sensitivity	-137dBm@125kHz, SF=12	
		Max Output Power	19dBm (470 MHz) /16dBm (868 MHz)/22dBm (915 MHz)	
		Configurable Parameter	Frequency Channel, ADR, Spreading Factor, Tx Power	
		CPU	Octa-core MTK6762, 2 GHz	
	Hardware	Screen	5.72-inch TP LCD Touch Screen	
		Memory	4GB RAM + 64GB ROM	
		Operating System	Android 12.0	
		NFC	Support ISO/IEC 14443A Protocol, Reading Distance: 1-3cm	
		Extendable Storage	1 × Micro SD Slot Support up to 256G	
	Interfaces	Wi-Fi	IEEE 802.11 b/g/n, 2.4 GHz IEEE 802.11 a/n/ac, 5 GHz	
		Bluetooth	Bluetooth 4.0 (BLE)	
		Cellular	SIM Card Slot: 1 × Nano SIM	
			Frequency Bands:	
			LTE FDD: B1/B3/B5/B7/B8/B20 LTE TDD: B38/B39/B40/B41 WCDMA: B1/B2/B5/B8 GSM: B2/B3/B5/B8	
		GNSS	GPS/Glonass/Beidou/Galileo	
		Speaker	8Ω/0.8W	
		Microphone	Sensitivity -42db, Output Impedance 2.2kΩ	
		USB	1 x USB 3.0 Type-C Port for Power & OTG	
		Physical Characteristics	Power Supply	
			Built-in 4.3V/4300mAh Lithium-iron Chargeable Battery 5V by USB Type-C	
			Dimension	
			Φ 128 × 40 mm (Φ 5.04 × 1.57 in)	
		Installation	Ceiling Mounting	


Measure Atmospheric Conditions Precisely

IoT Weather Station



Overall Features

- IP65 Rated for WTS Sensors & IP67 Rated for WTS Hub
- Research-Grade Measurement
- Solar-Powered & Chargeable Batteries Backup for Better Operation
- Support Normal Work for 7 Days without Sunlight
- Support Retransmission for Reliable Communication
- Store Capacity with 19, 000 Sets of Historical Data Records

Model			WTS506
 IoT Weather Station	WTS Sensors	Temperature	±0.3°C, (-40°C ~ 85°C)
		Humidity	±3% RH (0% ~ 100%)
		Wind Direction	±3° (0° ~ 360°), 1°
		Wind Speed	±0.3 m/s or ±3% (0 ~ 60 m/s)
		Barometric Pressure	±0.5 hPa (500 ~ 1100 hPa)
		Rainfall	±0.5 mm (< 10 mm), ±5 %(>10 mm)
	WTS Hub	LoRaWAN® Frequency	CN470/RU864/IN865/EU868/US915/ AU915/KR920/AS923-1&2&3&4
		LoRaWAN® Work Mode	OTAA/ABP Class A
	Solar Panel	Open-Circuit Voltage	18 V (± 0.3 V)
		Rated Voltage	15 V (±0.3 V)
		Maximum Power	15 W (±5%)
	Physical Characteristics	Configuration	NFC, USB Type-C Port
		Power Supply	Solar Powered (15 W, 1 A) & 2 × 2550 mAh Replaceable Batteries Backup
		Ingress Protection	IP65 (WTS Sensors), IP67 (WTS Hub)
		Dimension	φ160 x 263 x φ73 mm 116 × 116 × 45.5 mm (WTS Hub) 343 × 283 × 16.5 mm (Solar Panel)
		Installation	Pole Mounting (WTS Sensor, Solar Panel) Screw Mounting (WTS Hub)

Bring Data Acquisition & Remote Control with Ease

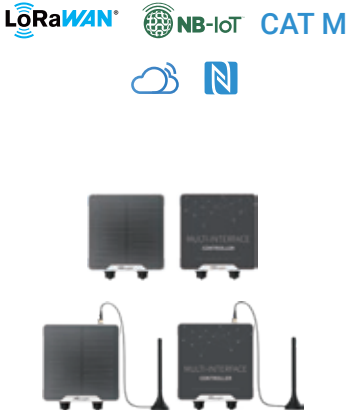
IoT Controller




Overall Features


- Wide Measuring Range with Higher Accuracy
- LoRaWAN® Wireless Deployment with Low Power Consumption
- Integrated Rich Interfaces (UC300/UC50x/UC51x)
- Data Collection up to 16 Registers for Various Usage (UC100/UC300)
- Autonomous Operation when the Network is Unavailable (UC100/UC300)
- Milesight D2D with Communication Latency to <1 Sec (UC100/UC300/UC51x)
- Solar Powered and Built-In Batteries for Flexible Power Supply Options (UC50x/UC51x)
- IP67 Rated and UV Resistance Enclosure with M12 Connectors (UC50x/UC51x)


Bring Data Acquisition & Remote Control with Ease

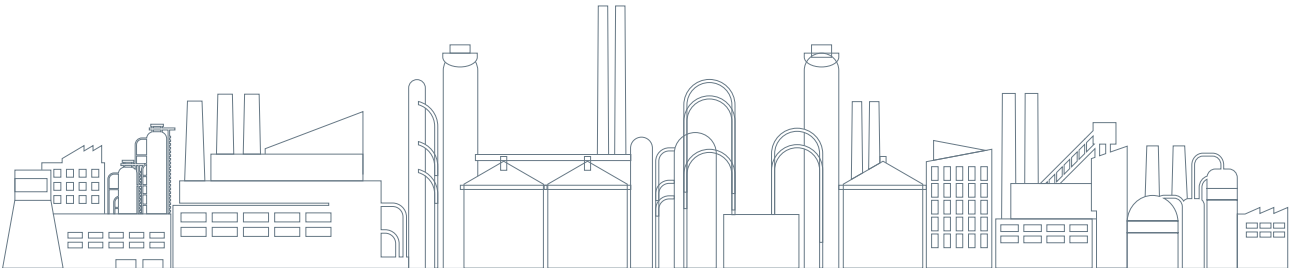
Model			UC501	UC502
 Multi-Interface Controller	LoRaWAN® Model	Technology	LoRaWAN®	
		Antenna	Internal Antenna or External Antenna (Hardware Optional) External Antenna (EA) Version: 1 × 50 Ω SMA Female Connector	
		Frequency	CN470/IN865/EU868/RU864/US915/AU915/ KR920/AS923-1&2&3&4	
		Mode	OTAA/ABP Class A, Class C	OTAA/ABP Class A
	Cellular Model	Technology	NB-IoT/Cat. M	
		Antenna	Internal Antenna	
		Application Mode	TCP/UDP/MQTT/AWS	
	Data Interfaces	Interface Type	M12 A-Coded Male	
		IO Port	2 × GPIO	
		Serial Ports	1 × RS232 or RS485 (Switchable) (Transparent/Modbus RTU)	
		Analog Input	2 × 4 ~ 20 mA (or 0 ~ 10 V) (Switchable)	
		SDI-12	1 × SDI-12 (V1.4)	
		Power Output	2 × 3.3 V@Max 100mA, 2 × 5/9/12 V@Max 100 mA (Switchable)	
		Configuration	NFC	
	Physical Characteristics	Power Supply	① 2 × Chargeable Batteries ② Solar Powered (6 V, 1.7 W) ③ 5 ~ 24 VDC	① 3 × 9000 mAh Replaceable Batteries ② 5 ~ 24 VDC
		Operation Temperature	-20°C ~ +60°C	
		Ingress Protection	IP67	
		Dimension	116 × 116 × 45.5 mm (4.56 × 4.56 × 1.79 in)	
		Installation	Wall or Pole Mounting	

Model			UC511	UC512
 LoRaWAN® Solenoid Valve Controller	Wireless Transmission	Technology	LoRaWAN®	
		Antenna	Internal Antenna or External Antenna (Hardware Optional) External Antenna (EA) Version: 1 × 50 Ω SMA Female Connector	
		Frequency	CN470/IN865/EU868/RU864/US915/AU915/ KR920/AS923-1&2&3&4	
		Mode	OTAA/ABP Class A, Class B, Class C, Class C to B	OTAA/ABP Class A, Class B
	Data Interfaces	Interface Type	M12 A-Coded Male	
		Solenoid Interface	2 × Solenoid Interfaces, 12 VDC Switchable	
		GPIO Interface	2 × GPIO Interfaces (Digital Input, Pulse Counter)	
	Physical Characteristics	Configuration	NFC, USB Type-C Port	
		Power Supply	① Solar Powered (6V, 1.7W) ② 2 × Chargeable Batteries ③ 5-24 VDC (EA Version Only)	3 × 9000 mAh Replaceable Batteries
		Operation Temperature	-20°C ~ +60°C	
		Ingress Protection	IP67	
		Dimension	116 × 116 × 45.5 mm (4.56 × 4.56 × 1.79 in)	
		Installation	Wall or Pole Mounting	

Bring Data Acquisition & Remote Control with Ease

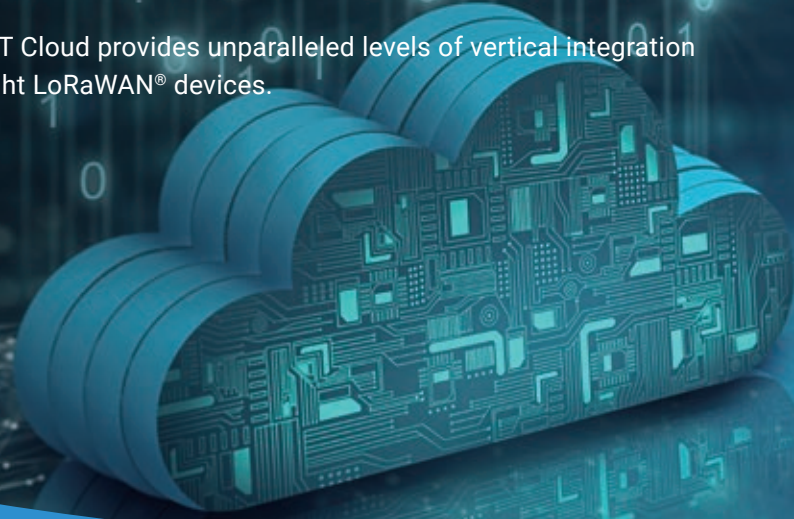
Model			UC100
 Modbus to LoRaWAN® IoT Controller	Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
		Frequency	CN470/IN865/EU868/RU864/US915/AU915/ KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class C
		Advanced Feature	Milesight D2D Controller/Agent
	Data Interfaces	Connector	3.5 mm Terminal Block Connector
		Port	1 × RS485
		Protocol	Modbus RTU, Support Reading 16 Register Values
	Physical Characteristics	Configuration	USB Type-C Port
		Power Supply	① 5 ~ 24 VDC by Terminal Block ② 5 VDC by Type-C Port
		Power Consumption	< 0.5 W
		Ingress Protection	IP30
		Dimension	70 × 45 × 13 mm (2.75 × 1.77 × 0.51 in)
		Installation	Desktop, Wall Mounting

Model			UC300
 LoRaWAN®/4G IoT Controller	LoRaWAN® Model (Option A)	Technology	LoRaWAN®, Milesight D2D
		Frequency	CN470/IN865/EU868/RU864/US915/AU915/ KR920/AS923-1&2&3&4
		Mode	OTAA/ABP Class C
		Advanced Feature	Milesight D2D Controller/Agent
	Cellular Model (Option B)	Network	4G LTE/3G/2G
		Application Mode	TCP/UDP/MQTT/AWS/Milesight IoT Cloud/SMS
	Data Interfaces	Interface Type	3.5 mm Terminal Block
		IO	4 × DI + 2 × DO
		Serial Port	1 × RS232(Transparent) + 1 × RS485(Transparent, Modbus RTU)
		Analog Input	2 × 4 ~ 20 mA, 2 × 0 ~ 10 V, 2 × PT100 RTD Input
	Physical Characteristics	Configuration Port	USB Type-C port
		Built-in	Watchdog, Timer
		Power Supply	5 ~ 24 VDC
		Ingress Protection	IP30
		Dimension	93 × 70 × 22 mm (3.66 × 2.76 × 0.87 in)
		Installation	Desktop, Wall Mounting, DIN Rail Mounting



Milesight IoT Cloud

Milesight IoT Cloud provides unparalleled levels of vertical integration with Milesight LoRaWAN® devices.



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DeviceHub

Milesight DeviceHub is a platform which is designed to provide a high-efficiency, low maintenance solution to easily deploy Milesight IoT devices (especially industrial cellular routers) across multiple locations, reducing complexity and increasing productivity.

- Large Scale Deployment
- Real-Time Monitoring
- Comprehensive Report



MilesightVPN

MilesightVPN is a web-based VPN monitoring and management platform

- Intuitive Web GUI
- Connection Status Overview
- Easy to Setup VPN Tunnel
- Access to Remote Devices Securely
- Support up to 1,000+ Connected Devices

