Pulse Counter

Featuring LoRaWAN®

EM300-DI



EM300-DI is a compact LoRaWAN® pulse counter which transforms traditional water meters into wireless intelligent meters. With IP67 waterproof design, it is applicable in various harsh application environments.

In addition to LoRaWAN® technology with low power consumption, it has a built-in high-capacity battery available for several years without replacement. Moreover, EM300-DI is compatible with both Milesight LoRaWAN® gateway and Milesight Development Platform to achieve remote monitoring and visualized smart data management to achieve the purpose of saving water.

EM300-DI is suitable for both indoor and outdoor applications such as agricultural irrigation, industrial water use, property meter reading and numerous scenarios.

◆ Features

- Flexible counting configuration to enable, stop, clear accumulated values
- Support digital filtering that filters interference signals to ensure more accurate counters
- Support to calculate water consumption and send water flow/outage alarms
- Embedded with temperature and humidity sensors for environment monitoring
- IP67 waterproof enclosure for harsh environment applications
- Ultra-wide-distance transmission up to line of sight of 10km
- Store historical records and support retransmission to prevent data loss
- Support Milesight D2D protocol to enable ultra-low latency and direct control without gateways
- A built-in 4000 mAh replaceable battery and works for 5 years without replacement

- Equipped with NFC for easily configuration
- Compliant with standard LoRaWAN® gateways and network servers
- Quick and easy management with Milesight IoT Cloud and Milesight Development Platform

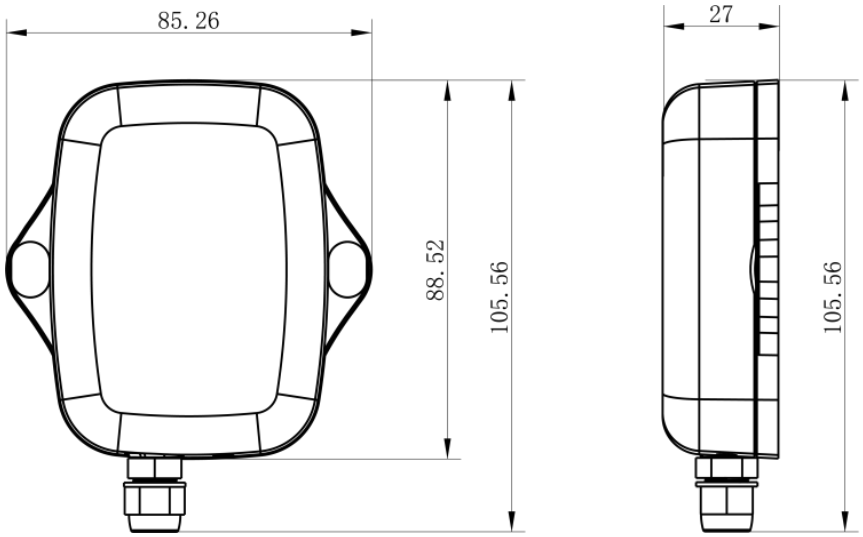
◆ Specifications

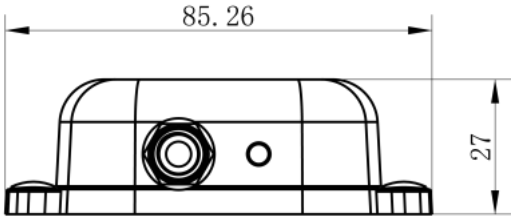
Wireless Transmission	
Technology	LoRaWAN®, Milesight D2D
Antenna	Internal Antenna
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
Tx Power	16dBm(868 MHz)/20dBm(915 MHz)/19dBm(470 MHz)
Sensitivity	-137dBm @300bps
Mode	OTAA/ABP Class A
Measurement	
GPIO	
Port	1 × GPIO Interface, Dry Contact
Work Mode	Pulse Counter, Digital Input
Input Frequency	≤ 2000 Hz
Minimum Pulse Width	250 μs
Cable Length	1 m (Customizable)
Wire Connection	3.5mm
Applicable Meters	Reed switches meters or any other passive pulse meters
Temperature	
Range	-30°C to + 70°C
Accuracy	0°C to + 70°C (+/- 0.3°C), -30°C to 0°C (+/- 0.6°C)
Resolution	0.1°C
Humidity	
Range	0% RH to 100% RH
Accuracy	10% to 90% RH (+/- 3%), below 10% and above 90% RH (+/- 5%)
Resolution	0.5% RH
Others	
LED	1 × LED Indicator (Internal)
Button	1 × Power/Reset Button (Internal)
Software	
Power On & Off	NFC, Power Button (Internal)
Configuration	NFC via Mobile App, Downlink

Advanced Feature	Milesight D2D Controller, Data Storage (1,000 entries), Data Retransmission, Data Retrievability, Temperature Threshold Alarms, Water Flow/Outage Alarms
Physical Characteristics	
Power Supply	1 × 4000 mAh ER18505 Li-SOCL$_2$ Battery (8000 mAh Version Optional)
Battery Life*	5 years (10 min interval, 25°C)
Operating Temperature	-30°C to +70°C
Relative Humidity	≤95% (non-condensing)
Material & Color	ABS + PC(Flame Retardant), White
Weight	114.2g (With 1 battery and wire)
Ingress Protection	IP67
Dimension	105.6 × 85.2 × 27 mm (4.15 × 3.35 × 1.06 in)
Installation	Wall Screw Mounting, 3M Tape Mounting, Cable-Tie Mounting
Approvals	
Regulatory	CE, FCC, ISED, RCM, Telec
Environmental	RoHS

* Tested under laboratory conditions and for guideline purposes only.

◆ Dimensions (mm)




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