

Ultrasonic Distance Sensors

0,30 - 5 meter (MPC5121) or
0,25 - 8 meter (MPC6106)

MPC5121 / MPC6106



Ultrasonic Distance Sensors designed for objects distance or level detection in harsh environments and transmitting data using wireless technology. With this low power consumption technology, they can work up to 10 years with 19000 mAh battery. Combining with a MobiCom Pro robust gateway and an IoT Cloud solution, users can manage all sensor data remotely and visually.

The distance sensors are widely used for outdoor applications like flood monitoring, granary level monitoring, etc.

◆ Features

- Object distance or level detection without touch
- Ultra-wide-distance transmission up to line of sight of 10km
- IP67 waterproof enclosure for harsh environment applications
- Built-in 19000 mAh replaceable battery and work for 10 years without replacement
- Store historical records locally and support retransmission
- Equipped with NFC for easy configuration
- Compliant with standard MobiCom Pro gateways and network servers
- Quick and easy management with an IoT Cloud solution

◆ Scenarios

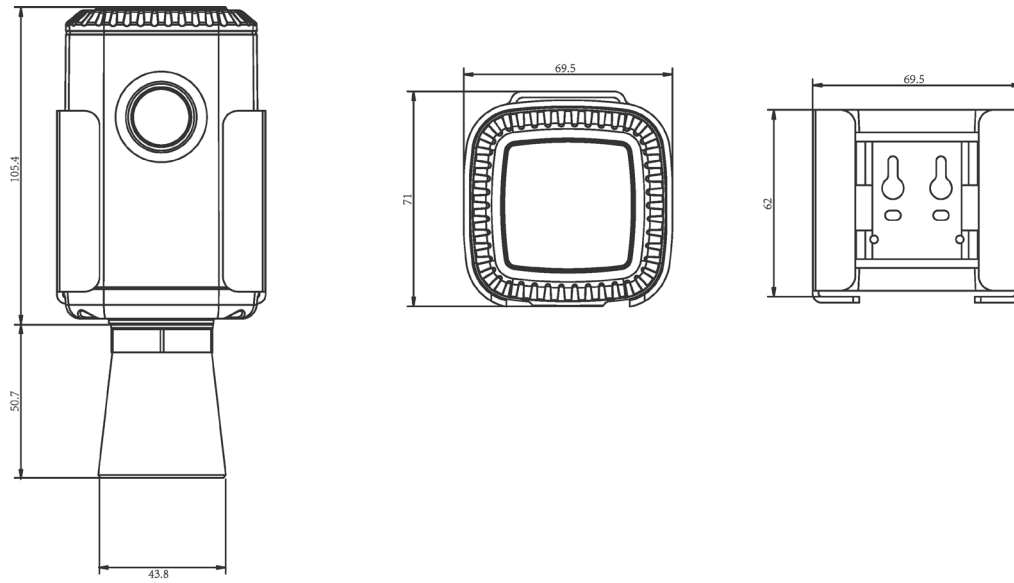
- Water level monitoring
- Flood monitoring
- Level/depth monitoring in tanks
- Manhole cover monitoring

◆ Specifications

Wireless Transmission	
Technology	LoRaWAN®
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
Tx Power	16dBm(868MHz)/20dBm(915MHz)/19dBm(470MHz)
Sensitivity	-137dBm @300bps
Mode	OTAA/ABP Class A
Measurement	
Range & Accuracy	MPC5121: 0.3 - 5 m, $\pm 1\%$ FS
	MPC6106: 0.25 - 8 m, $\pm (1+0.3\%*S)$ cm, S=distance
Resolution	1 mm
Operation	
Power On & Off	NFC, Power Button (Internal)
Configuration	Mobile App(via NFC) or PC software (via USB Type-C)
Advanced Feature	Data Storage, Data Retransmission, Data Retrievability, Threshold Alarm, Change Alarm, D2D Controller
Physical Characteristics	
Power Supply	1 × 19000 mAh ER34615 Li-SOCL ₂ Battery
Battery Life*	10 years (10 min interval, 25°C)
Operating Temperature	W050/W100: -30°C to +65°C
	C050/C100: -15°C to +60°C
Relative Humidity	0%RH to 80%RH (non-condensing)
Ingress Protection	IP67
Dimension	156.1 × 71 × 69.5 mm (6.1 × 2.8 × 2.7 in)
Installation	Pole, wall or DIN Rail Mounting
Approvals	
Regulatory	CE, FCC, RoHS, ISED, Telec
EMC	EN 55032, EN 55035
EMS	IEC 61000-4-2 Level 3, IEC 61000-4-3 Level 2, IEC 61000-4-8 Level 4
Radio Frequency	FCC Part 15B, FCC Part 15.247, EN 300 330, EN 301 489-1/3, EN 300 220-1/2
Safety	EN62368-1

* Tested under laboratory conditions and for guideline purposes only.

◆ Dimensions(mm)



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