









**Product Datasheet** 

# MANHOLE SENSOR

#### Overview

NETOP Manhole sensor is a long range wireless sensor which can be used for Manhole opened/closed application that provide manhole cover's status information. This sensor is fully compatible with LPWAN technology by using LTE-M(Cat M1). The standard version of this sensor is powered by two replaceable 3.6 V AA sized battery (included with purchase).

### **Key Features**

- Real plug & play
- Easy to mount & install
- Maintenance free install & forget
- Excellent Extended Range in Buildings and Underground
- Easy deployment utilizing cellular system
- Micro SIM(default) or Chip SIM Card(depend on request)
- **Ultra Low Power Consumption**
- Certifications: CE, RoHS



### Communication Specs

- The sensor uses LPWAN technology; LTE-M(Cat M1) for connectivity
- Supported bands including B1/ B2/ B3/ B4/ B5/ B8/ B12/ B13/ B18/ B19/ B20/ B26/ B28/ B39
- Internet Protocol Feature: Support IPv4/TCP/UDP
- Full duplex communication
- Extended Coverage: 10-15km with 164 dB maximum coupling loss (MCL)
- Antenna Types: Internal(default) or External(depend on request) Antenna

# Mechanics Data Security AES-128 Power Supply Housing: ABS Dimensions: 90 x 55 mm AA Battery 3.6 V Li-SOCl2-Saft LS 14500 (2 pieces) **Indicators** Operating temperature: -40°C to +85°C RGB Status LED (on board)





















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# Sensor Specifications

Output Open or close

**Data Transmission Period Every detection** 

## Certifications & Reliability

**Applications** 

- CE
- EN 62479
- EN60950
- EN 301 489-1
- EN 301 489-17
- EN 300 328

**Manhole Applications** 





