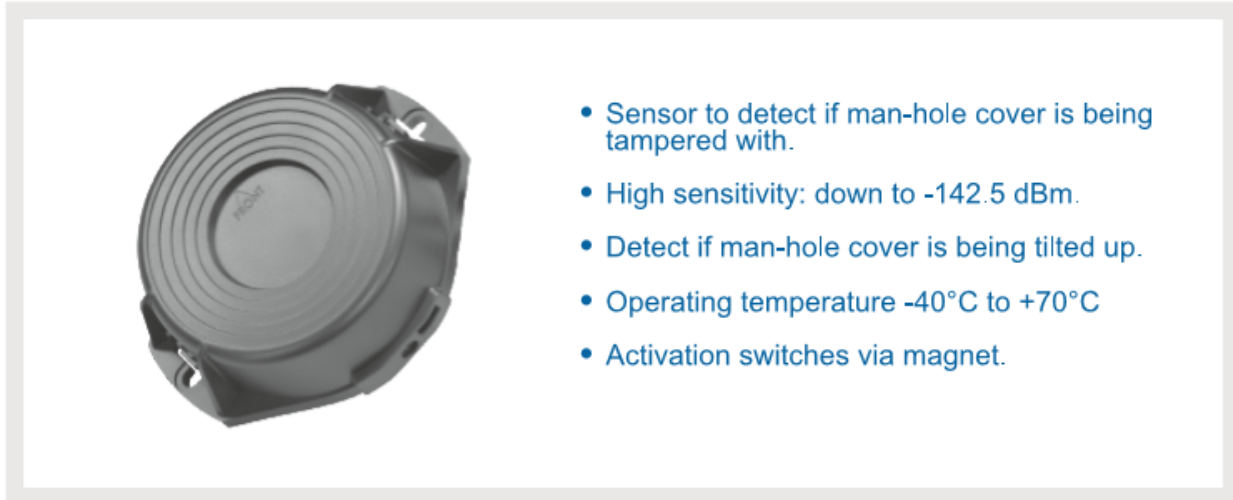


Manhole Cover State Sensor

Model Number: WSMS-125X321IS

Main Features:



This Manhole Cover State Sensor is designed to detect the state (tilt) of a manhole cover. It communicates with the IoT AP/Gateway using a LoRaWAN protocol standard for long range wide area (LPWAN) deployments. Because of its long range, high penetration and high sensitivity capabilities, it is a much more cost effective to deploy as it minimizes the number of required AP/Gateways. Moreover, it prolongs battery time comparing to other solutions because of the LoRaWAN low power and star topology nature.

The Manhole Cover State Sensor can alert for tampering or for opening (and tilting) the manhole cover. It integrates a 3-axis G-sensor and a temperature sensor. The manhole sensor reports battery level together with the other sensors data. It also sends a periodical keep-alive update messages.

The Manhole Cover State Sensor usages include vehicle and pedestrian protection from open pit, assets protection of communication shafts and cover protection from steal thefts.

Specification

Wireless Freq. Band: 915-917MHz complies with the Israeli MoC spec (Models for other region are also available)	
Channels / Bandwidth: 6 / 125KHz	
LoRa RF Chip: Semtech SX-1276	Modulation: Based on IEEE 802.15.4g (FSK / CSS)
Tx Power: 25/100mW (Depending on used channel)	Rx Sensitivity: -142dBm
Operation Temperature: -40°C ~ 70°C	Supply Voltage: 3.3V
Protection Requirement: IP68	Internal Battery: 2x 2500mAh
Dimensions: 142 x 113 x 42.5mm	Weight: 0.32 kg