

SEZA



SEZO HM

Hatch and Door Monitoring

Monitors the opening of manhole covers, doors, and other structural barriers

LTE-M Technology

Long-range, low-power network designed for IoT with high data transmission speed

Anti-Tamper Protection

Detects tampering attempts on the device

Battery-Powered

Two 6000mAh batteries provide long-lasting power

Satellite Geolocation

Precise tracking of the device's location

Integration with Orange Live Objects

Easy data viewing and analysis

Compatibility with Any NO/NC Sensor

Allows for various applications

Weather Resistance

IP67 enclosure ensures protection against water and dust



Application Examples



Manhole Cover Monitoring

SEZO HM can be installed in **sewer manholes** to monitor their opening and closing. This allows urban infrastructure managers to respond quickly to unauthorized openings, preventing theft and vandalism.

End Device IoT

Health & Security

Hatch Monitoring

Smart Building



Water Meter Well Monitoring

SEZO HM can be used to **monitor water meter well covers**, enabling quick detection of openings and securing access to water infrastructure.

Indoor/Outdoor

IoT Comfort

Anti-Tamper Protection

Weather Resistance

Application Examples



Waste Disposal Site Security

Installing sensors on the hatches and gates of waste disposal sites allows for remote access monitoring, crucial for maintaining security and regulatory compliance.

End Device IoT

Health & Security

Hatch Monitoring

Smart Building



Pump Station Monitoring

The device can monitor access to water and sewage pump stations, providing immediate alerts for unauthorized access attempts or malfunctions.

Indoor/Outdoor

IoT Comfort

Anti-Tamper Protection

Weather Resistance

SEZO HM - TECHNICAL SPECIFICATIONS

DESCRIPTION	<ul style="list-style-type: none"> • Compact sensor designed for monitoring the opening of hatches and doors, providing protection for critical infrastructure. • Suitable for both indoor and outdoor environments. Communication via LTE-M protocol, bands B8 and B20. • Optional satellite geolocation. • Integrated with Orange Live Objects platform.
MEASURED PARAMETERS	Hatch status, device location, tamper alarm
OPERATING TEMPERATURE	-30°C to 60°C
MEASUREMENT RANGES AND ACCURACIES	Hatch status: Open/Closed Geolocation: Accuracy up to a few meters
COMMUNICATION PROTOCOLS	LTE-M; microSIM slot (optional SIM on chip MFF2)
FREQUENCY AND RADIO POWER	LTE-M band, up to 21 dBm
DATA TRANSMISSION INTERVAL	Default 24h or event-triggered (configurable OTA)
POWER SUPPLY	2x high-power 3.6V lithium batteries (ER26500M)
HOUSING AND MOUNTING	IP67 polycarbonate enclosure, mounting elements for flat surfaces or poles
WEIGHT	334 g (body), 380 g (body with mounting brackets)
DIMENSIONS	Width: 110 mm, Height: 95 mm, Depth: 60 mm



About WiRan

WiRan Sp. z o.o. is a company providing R&D services on a B2B basis to national and international clients in the space, maritime, railway, industrial, and IoT sectors. Our expertise lies in Radio Frequency and Wireless technologies, the development of electronic parts, fast prototyping, feasibility studies, certifications, and EMC testing. Founded in 2002, we have been looking back at over 20 years as a HW design office—supporting our diverse clients from the conception through prototyping to product quality development of electronic devices. You can find our designs mounted around Tricity and soon also in space (satellite communication modules), just to name a few. WiRan offices and laboratories are currently located in Gdynia, Poland.

About SEZO

SEZO is a suite of products best described as long-range IoT solutions, customizable to client needs. SEZO products are based on LoRaWAN™ and LTE-M / NB-IoT technology and can be tailored by clients according to their requirements.

