WaterMatica

SMART MANHOLE COVER

Surface Security. Underground Intelligence.



BENEATH THE SURFACE. WITHIN SIGHT.

watermatica.com

WHAT HAPPENS BENEATH THE SURFACE?

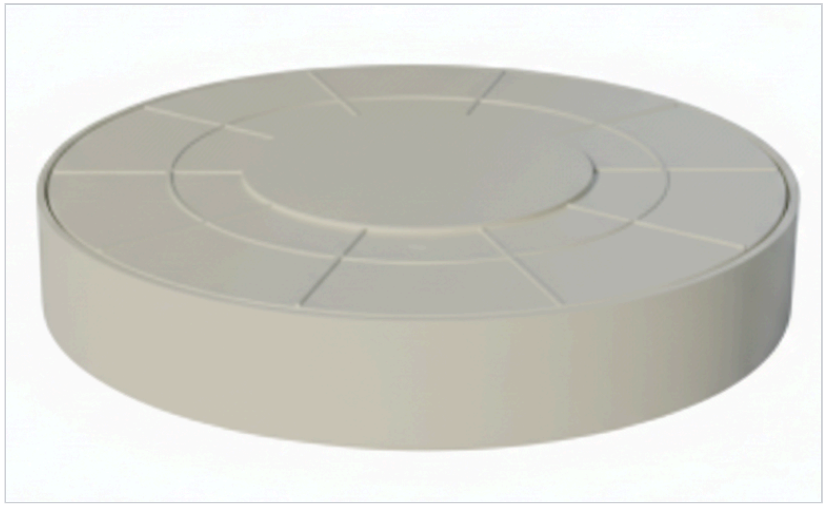
Critical infrastructure. Often out of sight.

Beneath every street, essential infrastructure keeps a city moving. But a displaced cover or an unnoticed disturbance can turn an overlooked access point into a serious risk.

Turn Every Manhole into a Monitoring Point.

WaterMatica's Smart Manhole Cover solution connects cover security and wastewater monitoring, helping teams understand underground conditions and respond to emerging risks.

It transforms a passive access point into a connected monitoring point, helping operators detect changes and respond with better information.



- Movement
- Vibration
- Temperature
- Wastewater level

PROTECT. MONITOR. RESPOND.

Cover Security

Detect cover opening, lifting and tampering to identify potential unauthorised access.

Underground Monitoring

Track wastewater levels and sudden changes to improve visibility across underground infrastructure.

Flood & Backflow Warning

Receive alerts when monitored levels exceed critical thresholds, helping teams prioritise inspections and response.

Remote Visibility

Review connected locations, measurements and events through central monitoring dashboards.

Know When Something Moves

TILT DETECTION · VIBRATION SENSING

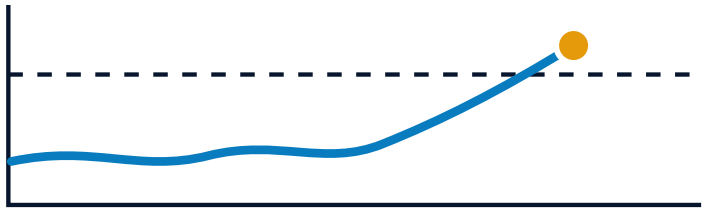
When the cover is lifted or tilted, sensing detects the movement. Vibration monitoring can also indicate possible tampering, helping teams identify events that deserve attention at the surface.

- **Cover movement detected**
- **Vibration event detected**

Monitor Conditions Below

TEMPERATURE MONITORING AND ANOMALY ALERTS

Below ground, temperature sensing monitors the shaft environment. Abnormal changes can flag conditions that need investigation, adding another layer of awareness around infrastructure that is usually out of sight.



FROM COVER TO CLOUD

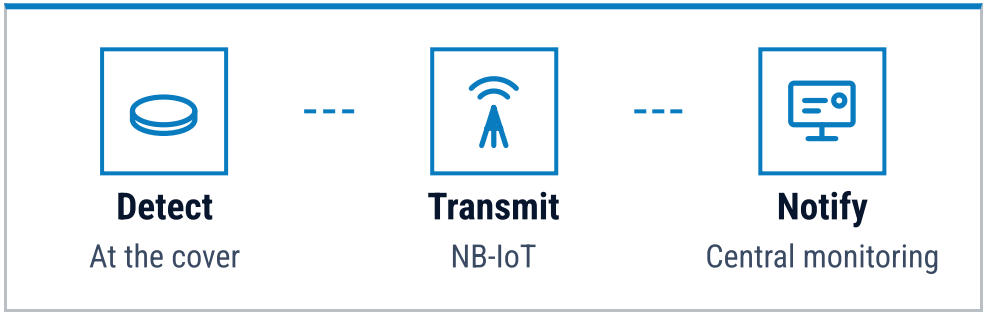
Field sensors capture changes at the manhole. Wireless connectivity brings measurements and events into monitoring software, supporting alerts, event records and reporting.

SENSE → CONNECT → MONITOR → ACT

From Event to Alert

NB-IOT CONNECTIVITY

Events are transmitted through NB-IoT to a central monitoring system. Field detection becomes an actionable notification, bringing the monitored location and the reported condition to the attention of responsible teams.



Clearer Information. Better-Informed Response.

IDENTIFY THE LOCATION. REVIEW THE EVENT.

Operators can review the event and identify where an inspection may be needed. This supports a more informed response, whether the concern is a displaced cover, suspected interference, or an unusual temperature change.



CONNECTED PROTECTION ACROSS INFRASTRUCTURE

From streets and utility networks to airports, ports and industrial facilities, connected monitoring helps organisations keep watch over access points that protect essential underground systems and the people around them.

- **Streets & Highways**
- **Utility Networks**
- **Airports & Ports**
- **Industrial Facilities**

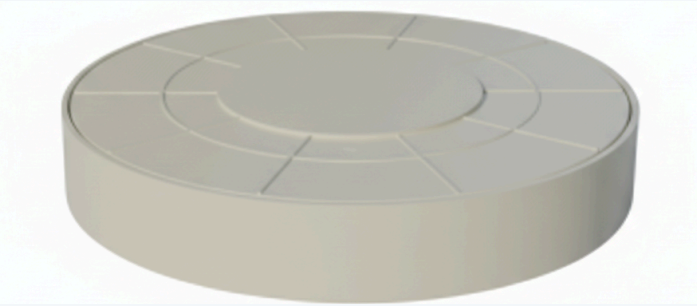
Key Benefits

- Cover opening and tampering detection
- Wastewater level monitoring
- Critical threshold alerts
- Location-based infrastructure visibility
- Event history and basic reporting
- Better-informed maintenance decisions

DESIGNED FOR FIELD DEPLOYMENT

- **Battery-powered operation**
- **NB-IoT with eSIM**
- **Integrated sensing**

Battery-powered operation, integrated sensing and NB-IoT connectivity support field deployment. The result is practical visibility into cover security and shaft conditions, helping teams prioritise attention where it is needed.



WaterMatica

MAKE THE UNSEEN VISIBLE.

Built for Connected Infrastructure

For municipalities, wastewater utilities and infrastructure operators.

Monitoring scope and sensor configuration are defined around each installation's requirements.

Discover smarter underground monitoring.

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SCAN TO VIEW BROCHURE