MANOID©

Professional Robots - www.manoid.fr

MQ 02

SENTINEL BACKPACK

Inspection, monitoring and security system for industrial sites, airport zones, property complexes and private warehouses

Technical data

Manoïd robot model: MQ02

Dimensions: 820 × 430 × 570 mm

Weight: 50 kg

Autonomy: up to 2.5 hours

Protection rating: IP66 (MQ02) and IP65 (Backpack)

Payload: 15 kg

Operating temperature: -20°C to +55°C

Navigation: advanced autonomous

Embedded AI: Vision Sentinel AI, NIS2 security, no cloud

Not ATEX certified

ADVANTAGES

- All-terrain and all-weather capability (IP67 / 316L stainless steel IP68 – defence version)
- Agility, 24/7 autonomy
- Presence detection
- Alert triggering
- Threat verification (alarm validation)
- Multi-site fleet management
- Private Kinetic Mesh (no dependency on telecom operators)

-Native NIS2 compliance

- 100% EU technology stack digital sovereignty)

Embedded equipment & sensors

- 4K HD PTZ camera with ×30 zoom
- IR thermal camera 640 × 480
- 360° fisheye camera
- 3D LiDAR — site mapping and volumetric intrusion detection
- Multi-gas detector
- RTK GPS + IMU — autonomous navigation without signal
- Directional microphone — suspicious sound detection
- Private Kinetic Mesh connectivity + 4G/5G + LoRa

MISSIONS

Specific domains (3): Industry / OIV (Operators of Vital Importance) and sensitive sites / Defence and DGA

Missions : (non-exhaustive list):

-Perimeter surveillance

- 24/7 programmed autonomous patrols
- Inspection of instruments and meters
- Detection of gas leaks and thermal anomalies
- Monitoring indicators and levels
- Monitoring ICPE zones and hazardous storage areas
- Inspection of high-voltage sites — areas inaccessible to humans
- Detection of corrosion and structural degradation
- Surveillance of critical infrastructure operators: airports, ports, stations, data centres
- Access control to restricted areas
- Detection of abandoned objects and suspicious packages
- Reconnaissance prior to law enforcement intervention
- Security perimeter for sensitive events
- Interface with national C2 security systems
- Patrol of military bases — external perimeter
- Reconnaissance before engagement / threat confirmation

-Surveillance of sensitive areas

-Vehicle inspection in control zones

-Light CBRN detection — combat gases

-STANAG links — NATO interoperability

99.7%	3X	24h/24	IP67	NIS2	<10ms	<18 mois
Inspection accuracy	Faster detection	Autonomous	Protection	Compliant	Kinetic Mesh	Typical ROI

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