



MANOID®

Our Vision

An operational solution for local authorities and operators!

The MANOID MQ02 is an all-terrain industrial robot designed to secure interventions, facilitate access to complex technical areas, and optimize monitoring and inspection operations.

Our Values

**PROTECT
OPTIMIZE
SECURE**

Every year, thousands of high-risk operations are carried out in walkable sewer networks, wastewater treatment plants, technical galleries, and industrial environments. MANOID drastically reduces human exposure to hazards through autonomous or remotely operated robotics.



MANOID®

Autonomous and Sealed
Professional Robots





MQ02 highlight:
2 hot-swappable batteries for
extended autonomy

The MQ02

The **MANOID MQ02** is an all-terrain industrial robot designed to secure interventions, facilitate access to complex technical areas, and optimize monitoring and inspection operations.

It is intended for local authorities, infrastructure operators, and industrial operators facing difficult, constrained, or hazardous environments.

(Networks – technical structures – industrial sites – restricted access areas)

A Prevention and Decision-Support Tool

The MANOID MQ02 enables intervention **before human entry**, within a framework of prevention, control, and operational safety:

- Technical reconnaissance of complex access areas
- Remote visual inspection and condition assessment
- Monitoring of sensitive or constrained sites



Key Advantages:

- **Reduced personnel exposure**
- **Improved decision-making**
- **Optimized field operations**



Industrial Robustness & Field Reliability

Designed for intensive use, the MANOID MQ02 guarantees maximum reliability:

- IP66 protection rating
- Operating temperature: -20°C to +55°C
- Bidirectional front/rear lighting
- 96-line high-precision LiDAR
- Hot-swappable batteries
- RF image transmission
- Remote updates (OTA)

Embedded Intelligence & Autonomous Navigation

- Dual 64-bit industrial processor
- Peripheral vision through point cloud technology
- Omnidirectional obstacle avoidance
- Autonomous navigation in complex environments

Modular and Scalable Architecture

- Optional professional extensions
(Backpacks)

Key Performance Specifications

2 hot-swappable batteries for extended autonomy

- **Payload:** max 15 kg
- **Total weight (with battery and equipment):** max 50 kg
- **Operating time with equipment:** up to 2.5 hours (with both batteries charged)
- **Charging time:** 1.5 to 2 hours per battery
- **Maximum speed:** up to 5 m/s peak
- **Dimensions (standing):** 820 × 430 × 570 mm
- **Protection rating:** IP66
- **Operating temperature:** -20°C to +55°C
- **Interfaces:** 72 V power supply, Gigabit Ethernet
- **Data storage capacity:** 128 GB / RAM 16 GB

Benefits for Decision-Makers and Operators

- ✓ Enhanced personnel safety
- ✓ Easier access to complex technical areas
- ✓ Optimized inspection and monitoring operations
- ✓ Reduced heavy intervention costs
- ✓ Sustainable and scalable investment



All-Terrain Mobility in Real Conditions

Thanks to its agile technology, the MANOID MQ02 easily overcomes:

- Rough or unstable terrain
- **Wet or slippery areas**
- Steps up to **25 cm**
- Occasional obstacles up to **80 cm**
- Slopes up to **45°**
- Confined spaces (**50 cm** passage width)

Its gait automatically adapts to the terrain, without operator intervention.

Compact and Quickly Deployable

Only 33 kg: transportable by a single operator
Simple and fast deployment
Easy access to tunnels, galleries, and pipelines
Effective alternative to heavy machinery in sensitive areas

An agile tool for technical departments and operational teams.



MANOID[©]

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“L'eau est notre domaine et l'innovation notre ADN. Si cela n'existe pas encore alors nous allons l'inventer !”

“Water is our domain and innovation our DNA. If it does not yet exist, we will invent it.”

S. Dumonceaux



Contact us

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