

ROBEE
Series M

HUMANOID
COGNITIVE
ROBOT

DESIGNED BY
OVERSONIC
FOR HEALTHCARE

09/2025





A HEALTHCARE SYSTEM UNDERGOING TRANSFORMATION

The healthcare sector is undergoing unprecedented transformation. The growing shortage of qualified personnel, increasing care needs, and an aging population are making it increasingly difficult to guarantee timely, high-quality care. Healthcare workers, forced to cope with increasingly heavy workloads, risk burnout, which translates into stress, exhaustion, and less continuity of care.

These challenges, which are not only organizational in nature, have a profound impact on patient well-being and the sustainability of healthcare systems. A new balance is needed: combining human skills with technological tools capable of managing repetitive and support activities, allowing professionals to focus their time and energy on the more complex and higher value-added aspects of care. In this scenario, cognitive robotics and artificial intelligence represent a concrete opportunity to transform care models, while improving efficiency, safety, and the quality of patient relationships.

RoBee M was created to become an operational partner in hospitals, rehabilitation centers, and facilities for the elderly. Thanks to its cognitive platform, it is able to understand the context, interact naturally with people, and adapt to the specific needs of healthcare activities. It does not replace staff, but supports them by taking on repetitive tasks or continuous monitoring, thereby reducing stress and promoting more attentive and personalized care.

The robot assists patients with rehabilitation exercises, encourages cognitive stimulation, and independently accompanies them between wards or care areas. It monitors vital signs, communicates data to staff, and integrates with existing information systems in the facilities. Its ability to move safely in shared environments makes it a reliable ally, while voice interaction and constant presence help improve the patient experience, reducing feelings of loneliness and ensuring continuous support.

Oversonic Robotics Srl Società Benefit is a software company that designs and develops cognitive computing systems, with a particular focus on robotics applications. Founded in 2020, the company established its technological and production center in Carate Brianza (MB) and operates from two additional sites: a representative office in Milan and an operational office in Rovereto (TN), within the Mechatronics Hub of Trentino Sviluppo.

The company employs a team of 65 people, including about 50 software, mechanical, and electronics engineers from various parts of the world. While naturally oriented toward international collaboration, the company maintains a strong Italian identity, offering products that represent the creativity and ingenuity of Italian entrepreneurship and technological know-how.



Contact us for a demo

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Key features

Autonomous navigation in complex healthcare environments

Rehabilitation assistance and support for neuromotor exercises

Vital sign detection and continuous monitoring

Natural voice interaction with patients and operators (voicebot)

Software integration with clinical systems and electronic records

Up to 8 hours of battery life with fast inductive charging

Advanced connectivity (Wi-Fi 6 and 5G-ready)

Constant presence to support staff and patients



Side



Leg squat



Rear



Arm reach



Body

Weight	Up to 80 kg
Height	154 - 175 cm
Footprint	45 * 45 cm
Arm reach	80 cm

Navigation base

Maximum speed	1.2 m/s
Maximum slope	8%
Legs	3+3 DoF
Navigation mode	Differential drive
Wheels	2, front traction

Manipulation

Repeatability	±0.5 mm
Cognitive accuracy	±5 mm
Deterministic accuracy	±2 mm
Single arm max. payload	3 kg
Double arm max payload	6 kg

Connectivity

Wireless	WiFi 6, 5G ready
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Power

Batteries included	2
Battery type	Lithium ion
Battery autonomy	Up to 8 hours (typical usage)
Auto recharge	Inductive
Supply voltage	AC 230 V

Work environment

Type	Indoor
Ground flatness	<5 mm/m ²
Operating T range	0 — 45 °C
Transport/storage temperature	-10 — 55 °C
Max. altitude	< 2000 m

Integrated sensors

Navigation	Lidars and cameras
Vision & video streaming	Depth cameras

Audio

Speakers	60 W
Microphone	Cardiod
Voicebot	Included

ISO	27001:2013
Machine directive	2006/42/CE - D.Lgs 17/2010
GDPR	Compliant

