

Tactile Mobile Robot

PROTOTYPE

Tactile Mobile Robot is an advanced mobile research robot system optimized for teleoperation, mobile manipulation and embodied AI research. Designed for seamless integration with Franka Research 3, it enables quick research deployment.



1. Native Franka Compatibility

Tactile Mobile Robot is natively compatible with the Franka ecosystem. Mechanical, electrical, and software interfaces are pre-configured, allowing seamless integration with FR3 and FR3 Duo setups — drastically reducing time to first experiment.

2. Real-time Control via FCI

TMR supports high-frequency control at 1 kHz via Franka Control Interface (FCI), fully integrated with ROS 2. This allows precise, low-latency motion control and force interaction, making the platform suitable for demanding tasks such as teleoperation, reactive manipulation, and mobile AI research.

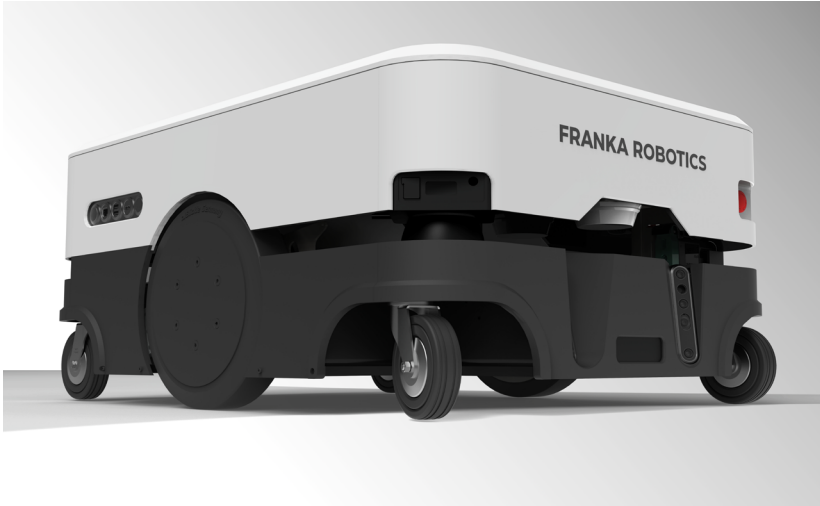
3. Modular and Extensible Design

Designed with research flexibility in mind, the TMR features a mobile base equipped with standardized mounting points and interface ports. This enables easy attachment and powering of additional sensors, actuators, or custom components tailored to their specific use cases.

Interested in TMR?
Contact our team!

<https://franka.de/mobile-fr3-duo>





Dimensions

800x580x294 mm



Payload

100 kg



Max Speed

1.75 m/s



Operating Time

~8 h at 460 W



Embedded Sensors

2x Lidars,
4x Cameras,
1x IMU



Computing Platform

Nvidia Jetson
AGX Orin



Connectivity

Wi-Fi, Ethernet,
USB, Bluetooth



Control Freq.

1 kHz
(FCI)

Franka Robotics GmbH
Frei-Otto-Straße 20
80797 Munich
Germany

Interested in TMR?
Contact our team!

<https://franka.de/mobile-fr3-duo>

