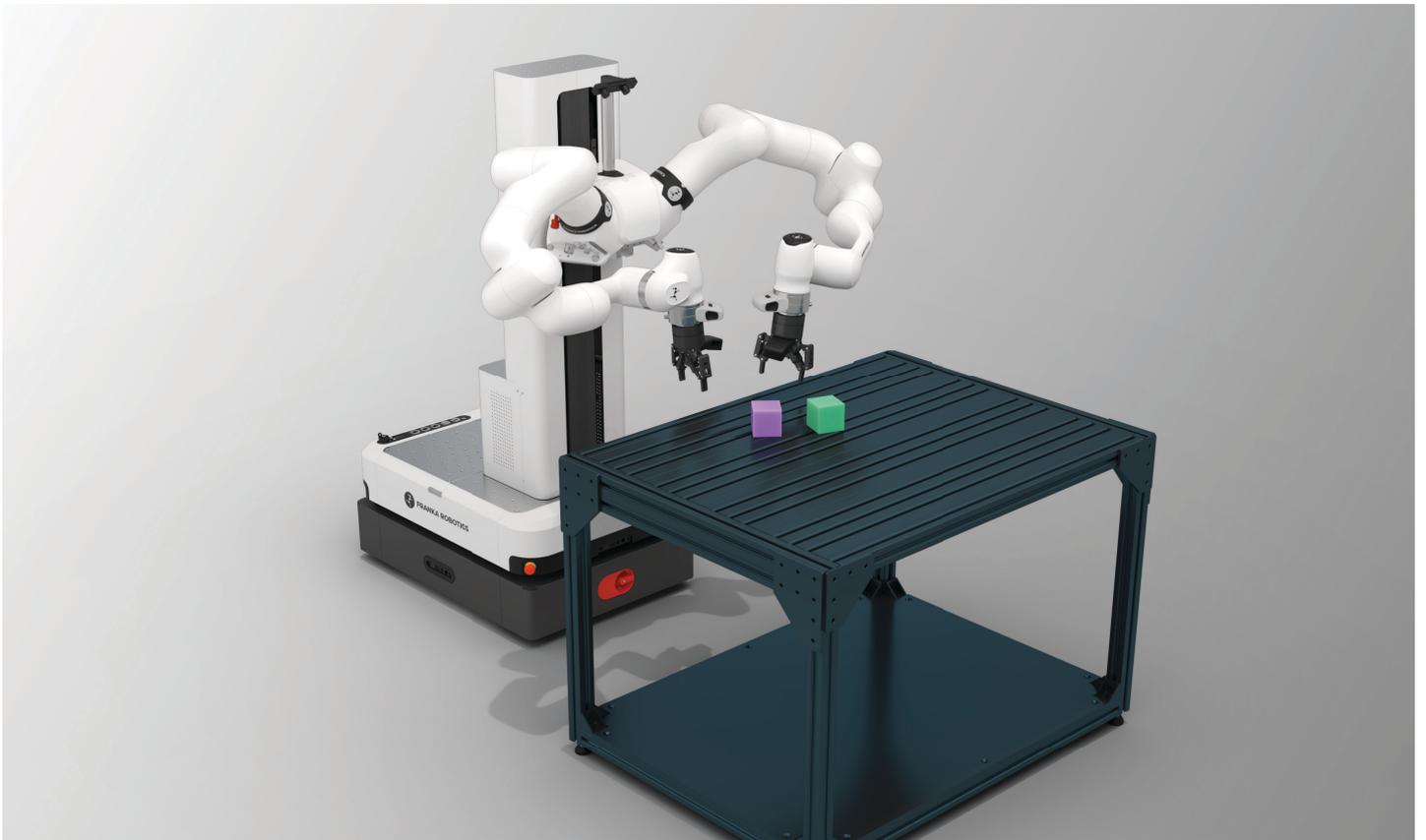


# Mobile FR3 Duo

## Prototype

Mobile FR3 Duo extends the FR3 Duo reference platform into mobile environments by integrating it with Tactile Mobile Robot (TMR). It combines dual-arm manipulation, rich perception, and omnidirectional mobility into a single embodied AI system – enabling data collection and policy execution beyond fixed workcells.



## 1. FR3 Duo on the Move

Mobile FR3 Duo unifies teleoperation, dataset generation, and policy execution in dynamic environments. By combining the optimized dual-arm kinematics of FR3 Duo with the omnidirectional base of TMR, it enables whole-body coordination for real-world manipulation tasks.

## 2. Integrated Mobile Manipulation

Mechanical, electrical, and software interfaces are pre-integrated. The system is delivered as a coherent architecture, drastically reducing integration time compared to assembling base and manipulation separately. Researchers can focus on experimentation rather than system engineering.

## 3. Advanced Perception & Extensibility

Mobile FR3 Duo inherits TMR's full sensor suite – LiDAR, cameras, IMU – and combines it with FR3's tactile sensitivity and vision and manipulation accessories for FR3 Duo. Standardized mounting points allow extension with additional sensors, compute units, or task-specific tools, ensuring adaptability for evolving research needs.

Interested in Mobile FR3 Duo?

Learn more!

<https://franka.de/product-prototypes>





Base Dimensions  
800x580x294 mm



Reach per Arm  
855 mm



Payload  
100 kg (Base)  
3 kg (per Arm)



Max Speed  
1.75 m/s



Embedded Sensors  
14x Arm Torque  
Sensors, 2x Lidars,  
7x Cameras, 1x IMU



User PC  
NVIDIA Jetson  
AGX Orin



Connectivity  
Wi-Fi, Ethernet,  
USB, Bluetooth



Control Freq.  
1 kHz  
(FCI)

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Koppstraße 12  
81379 Munich  
Germany

Interested in Mobile FR3 Duo?  
Contact our team!

<https://franka.de/contact>

