

Product Description

The Omni Automation TMRC is a powered roller conveyor that mounts on top of the MiR 100 or MiR 200 Mobile Robot. The MiR 100 or 200 robot with a TMRC top module can autonomously transport product, materials, supplies, parts or good in Manufacturing Facilities, Institutions and Warehouses.

When the mobile robot arrives at a destination the conveyor top modules is signaled through a Wi-Fi or Bluetooth data interface to either unload the cargo or to receive the cargo. Sensors on the TMRC top module signal the MiR robot to continue on its mission once the cargo is received or discharged.



Using additional sensors, the TMRC can be programmed to discharge or receive multiple loads at a single or multiple destinations. These top modules can discharge or receive loads from existing conveyor systems using our **ORP** Interface module. We also offer motorized roller docking conveyors that will communicate directly with the TMRC top modules for a Plug & Play installation.

Specifications

TMRC

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Conveyor Dimensions	Conveyor length is 36" long, available conveyor widths are 15", 18" and 24".
Top of Roller Elevation	Once mounted on the top of the MiR robot these conveyors can be built to a Top of Roller elevation from 26" to 36".
Roller Speed	The Roller speeds are adjustable from 20 FPM to 120 FPM with acceleration and deceleration adjustable controls.
Roller Drive System	The rollers are driven by a 24 VDC motor driven roller.
Roller Diameter	Each roller is 1.9" in diameter.
Weight Capacity	The maximum conveyor payload capacity is up to 75 lbs.
Communications	These top modules communicate with the MiR robot and the host system by Wi-Fi or Bluetooth.
Operator Interfaces	Touchscreen operator interfaces are optionally available and can be mounted to the Top Module.
Sensors	Each top module includes one photoelectric sensor to detect the presence of the payload. Additional sensors are available.
Battery	Second MiR battery required. Up to 8 hours between charges.
Options	Options include a belted conveyor with a variety of belt types, fixed stops to prevent payload from exiting one end, docking sensors, custom conveyor lengths, widths and elevations are available, additional batteries for extended run time.

Contact Omni Automation for information on additional top modules or custom top modules.

Mobile Robots



The **MiR100™** is a safe, cost-effective mobile robot that quickly automates your internal transportation and logistics. This 100kg payload robot optimizes workflows, freeing staff resources so you can increase productivity and reduce costs. This robot has a towing capacity of 300kg.



The **MiR200™** is a safe, cost-effective mobile robot with a 200kg payload capacity. This mobile robot has a towing capacity of 500kg.

Common Top Modules

TMRC



The Omni Automation **TMRC** is a powered roller conveyor that mounts on top of these robots. A mobile robot with a **TMRC** top module can autonomously transport product, materials, supplies, parts or good in Manufacturing Facilities, Institutions and Warehouses.

TMSU



The Omni Automation **TMSU** is a top module that provides adjustable shelving positions for autonomously transporting product, materials, supplies, parts or good in Manufacturing Facilities, Institutions and Warehouses.

TMROR



The Omni Automation **TMROR** is a top module with a robotic arm that performs various tasks throughout a facility. These robotic arms utilize a Collaborative Robot with a payload capacity of up to 10 KG. These robots can be used to retrieve product, perform manufacturing tasks, or work along-side humans in industrial manufacturing.

TMBC



The Omni Automation **TMBC** is a powered belt conveyor that mounts on top of these mobile robots. A mobile robot with a **TMBC** top module can autonomously transport product, materials, supplies, parts or good in Manufacturing Facilities, Institutions and Warehouses.

Contact Omni Automation for information on additional top modules or custom top modules.