

MiR Hook 100 TM



Increase the efficiency of internal transportation tasks with an extended-payload MiR100 Hook mobile robot. MiR Hook 100 TM is a user-friendly and efficient mobile robot top module for fully automated pick-up and towing of carts in production, logistics and healthcare environments.

Designated use

Autonomous Mobile Robot (AMR) with hook

For fully-automated pick-up and delivery of carts

Dimensions

Length (highest to lowest positions of hook arm) 1275 to 1180 mm / 50.2 to 46.5 in

Width 580 mm / 22.8 in

Height (lowest to highest positions of hook arm) 550 to 900 mm / 21.7 to 35.4 in

Height above floor	Robot: 50 mm / 2 in - Gripping height: 80-350 mm / 3.1-13.8 in
Weight (without load)	98 kg / 216 lbs
Length (Gripper bar)	Minimum 300 mm / 11.8 in
Thickness (Gripper bar)	15 to 25 mm / 0.59 to 0.98 in

Color

RAL color	RAL 9010 / Pure White
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Towing capacity

Load incl. cart	Up to 300 kg / 661 lbs at <1 % incline - 200 kg / 441 lbs at 5% incline
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Speed and performance

Running time (depending on load)	8-10 hours or 15-20 km / 9.3-12.4 mi
Maximum speed	1.5 m/s (5.4 km/h) / 4.9 ft/s (3.6 mph)
Turning radius (without cart)	520 mm / 20.5 in (around center of robot)
Swinging radius (with cart)	Total length of robot and cart plus 550 mm / 21.7 in
Positioning accuracy (placing cart)	+/- 200 mm / 7.9 in from center of position, 10° accuracy
Turning torque (released brake)	8-10 Nm
Turning torque (unreleased brake)	70-80 Nm (2.5 Amp), 110-130 Nm (4.0 Amp)
Product design life	5 years or 20.000 hours, whichever comes first

Power

Battery	Li-NMC, 24 V, 40 Ah
Charging time	Up to 3 hours (0-80%: 2 hours)
External charger	Input: 100-230 V ac, 50-60 Hz Output: 24 V, max 15 A

Environment

Ambient temperature range (humidity 10-95% non-condensing)	+5°C to 40°C
IP class	IP 20

Communication

WiFi	Dual-band wireless AC/G/N/B
Bluetooth	4.0 LE, range: 10-20 m / 32.8-65.6 ft
I/Os	USB and Ethernet

Cart

Length	500 to 2400 mm / 20 to 94.5 in
Width	400 to 1500 mm / 15.7 to 59 in
Height	200 to 2000 mm / 7.9 to 78.7 in