Peer Robotics

Designed to Work with Humans

RM500

RM500 SPECIFICATIONS

GENERAL

Product Design Life	5 years or 2000 battery cycles, whichever earlier

DIMENSIONS

L*W*H	34*24*12 in (850*600*300 mm)
Ground Clearance	0.4 in (10 mm)
Payload Surface Size	32*24 in (805*600 mm)
Weight (w/o Payload)	190 lbs (86 Kgs)
Max Loading Height	47 in (1200 mm) above robot top plate
Wheels	2-Driving (6 in Dia.), 4-Caster (4 in Dia.)

PAYLOAD

Payload	1100 lbs (500 Kgs) (Directly placed on robot)

SPEED & PERFORMANCE

Max Speed (with Full Load)	2.4mph (1.0 m/sec)
Max Acceleration (with Full Load)	0.5 m/sec^2
Traversable Gap & Step Tolerance	0.4 in (10 mm)
Turning Radius	0 mm (Zero turning radius)
Max Incline/Decline - Gradablity	3°
Position Accuracy	+/-0.4 in (10 mm) to docking +/-2 (50 mm) in to position
Active Operation Time (w/ Payload)	Up to 8 hrs
Active Operation Time (w/o Payload)	Up to 11 hrs
Standby Time (Robot is on & idle)	Up to 16 hrs

POWER

Battery Type	Li-ion 24VDC, 76Ah
Charging Time	Up to 4 hrs
Battery Swapping	Standard
Power for External Peripherals	24VDC 2A; 22-29.2V 20A
Automatic Charging	Optional - Docking Charging Station

ENVIRONMENT

Operating Temperature Range	+41°F to +113°F (+5°C to + 45°C)
Environment	For indoor use only
Floor Conditions	Max step 0.4 in (10 mm); Max gap 0.4 in (10 mm)

COMPLIANCE

Safety Standard for Industrial Vehicles	CE, ISO 3691-4, EN 1175

COMMUNICATION

WiFi	802.11ax Dual-Band a/b/g/n/ac
I/O Connections	2 Digital Inputs. 2 Digital Outputs (GPIO)
Ethernet	Gigabit Ethernet
USB	USB 3.0 via. Type A Socket (1.5A)

DRIVE, SENSOR & SAFETY

Driving System	Differential Drive
Safety Laser Sensor & Range	2Pcs - Lidars: 360°; 30 m (98 ft)
Camera Module	4Pcs - 3D-Cameras; 2 Front and 2 Back
Navigation Side	Front & Reverse

LIGHT & AUDIO

Audio	Buzzer
Light	8 Signal Lights (2 each on 4 corners)

NAVIGATION

User Assisted Mapping	Yes
Obstacle Avoidance	Yes
Virtual No-Go Zones	Yes
Landmark Based Localization	Yes
Dashboard Based Communication	Yes

HUMAN ROBOT INTERACTION

Learning by Demonstration (User Path Teaching)	Yes
Human Detection (User Force Feedback)	Yes
Reactive Control (User Controlled Collaboration)	Yes

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PEER ROBOTICS SOLUTIONS

Trolley Movement Solution

The Trolley Movement Solution allows our users to automate the movement of their material within the shop floors. Our unique approach allows our customers to create a personalized trolley as per their requirement.

Bin Movement Solution

The Bin Movement Solution is a groundbreaking approach to optimizing logistics and material handling in the manufacturing sector. This solution is designed to change the way assembly kits are supplied from warehouses to assembly lines, enhancing efficiency and reliability.

Pallet/Shelf Movement Solution

The Pallet/Shelf movement solution is a versatile approach to help our customers move pallets or shelfs in their shop floors with the same compact platform. Increasing efficiency and reducing the need for forklifts in compact spaces.

Machine Tending Solution

Machine Tending is an innovative solution designed to reduce the asset cost and increase the overall equipment efficiency. With a single mobile manipulator, our users can automate feeding or tool changing in several machines at once.

Revolutionize Closed Loop Automation

At Peer Robotics, our mission is to revolutionize manufacturing with simple, affordable, and intelligent solutions. Our collaborative mobile robots have the unique ability to learn from humans in real-time. Making it simple for anyone to work with our robots, whether you're a first-time user or a seasoned engineer. Our collaborative technology ensures not only instant deployment but also the flexibility to re-deploy at your convenience.

INDUSTRIES

- AUTOMOTIVE
- MACHINING
- PHARMACEUTICALS
- ELECTRONICS
- \+ MANY MORE

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