



MUVRO TECHNOLOGIES



AUTONOMOUS MOBILE ROBOTS

AMR aDS-R

Intralogistic Robotics Solution

MOVE TO THE NEXT LEVEL



MAKE IN INDIA



MT-MKT-RO-03, V1.1

www.muvro.in

INTRODUCTION

The Muvro aDS-R Autonomous Mobile Robot (AMR) series is an advanced material handling solution built to automate internal logistics in dynamic industrial environments. These AMRs transport payloads safely and efficiently across factory floors and warehouses without needing fixed infrastructure like conveyors. Featuring LiDAR-based natural navigation, they autonomously detect and avoid obstacles for smooth, real-time routing. With bi-directional movement, smart docking, and modular payload attachments, they adapt easily to diverse industrial needs. VDA 5050 compliance ensures seamless communication and coordination among multiple robots. The scalable, intelligent platform aligns with Industry 4.0 standards to boost productivity and reduce manual labor. Its plug-and-play design enables fast deployment, while high customization supports complex operational demands. Muvro aDS-R delivers agile, autonomous, and intelligent automation for modern logistics.



WHY MUVRO ?

Muvro is fortunate to have great customers who return to us for innovations to enhance their production processes. We never take this for granted and work hard to keep all customers happy. We know that keeping them happy is extremely important, so our goal is to deliver systems and service reliably and consistently. Muvro believe in Flexibility and modularity which reflect in our solutions. We have diverse product range with us to develop extremely flexible systems for great outcome.

- Lucrative Automation
- Excellent Service Support
- Proven Designs
- Modular & Custom Systems
- Less Delivery Time
- Commitment Delivers
- Futuristic and Scalable Integration
- Obsession of Excellence
- Crafted with Passion

BENEFITS

The Muvro aDS-R AMR series offers a range of impactful benefits tailored to modern industrial needs. It delivers cost-effective automation by minimizing labor expenses and infrastructure investments, while significantly boosting overall throughput. By increasing productivity, the robots accelerate material movement and ensure a continuous supply to workstations, enhancing process efficiency. Safety is a top priority, with built-in obstacle detection and safety protocols that protect both personnel and equipment, creating a more secure workplace. The platform's customization and adaptability allow it to accommodate various attachments and configurations, making it suitable for a wide range of applications. Additionally, the system is highly scalable, supporting facility-wide deployment and future integration thanks to VDA 5050 compliance. These features collectively enable faster ROI and long-term savings, as businesses benefit from reduced downtime, lower error rates, and optimized operations.



Enhanced operational efficiency



Cost-effective automation



Increased productivity



Improved workplace safety



Customization & adaptability



Scalable solutions for growth



Faster ROI and long-term savings

APPLICATIONS

- **Automotive Manufacturing Automation** – Material movement for engine assembly, chassis marriage, and line feeding.
- **Warehouse and Intralogistics Operations** – Autonomous transport of raw materials and finished goods.
- **Electronics and Consumer Goods Handling** – Safe delivery of components and bins to workstations.
- **Pharmaceutical and Chemical Transfer** – Sterile and secure movement in cleanroom and hazardous environments.
- **Paint and Coating Plant Automation** – Transport of solvents and chemicals with high safety.
- **FMCG and E-Commerce Fulfillment** – High-speed parcel movement for order sorting and staging.
- **General Manufacturing Support** – Automated transfer of tools, jigs, fixtures, and WIP materials.



E-Commerce



Cold Chain



Retail



Part Supply



FMCG

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KEY FEATURES

Dynamic Navigation
in Crowded Spaces

Advance Traffic
Management Control

Highly Capable
LiDAR System

Heavy Load
Automation

Visual & Auditory
Signaling



Intuitive Web-Based
Interface

Intelligent Alert
System

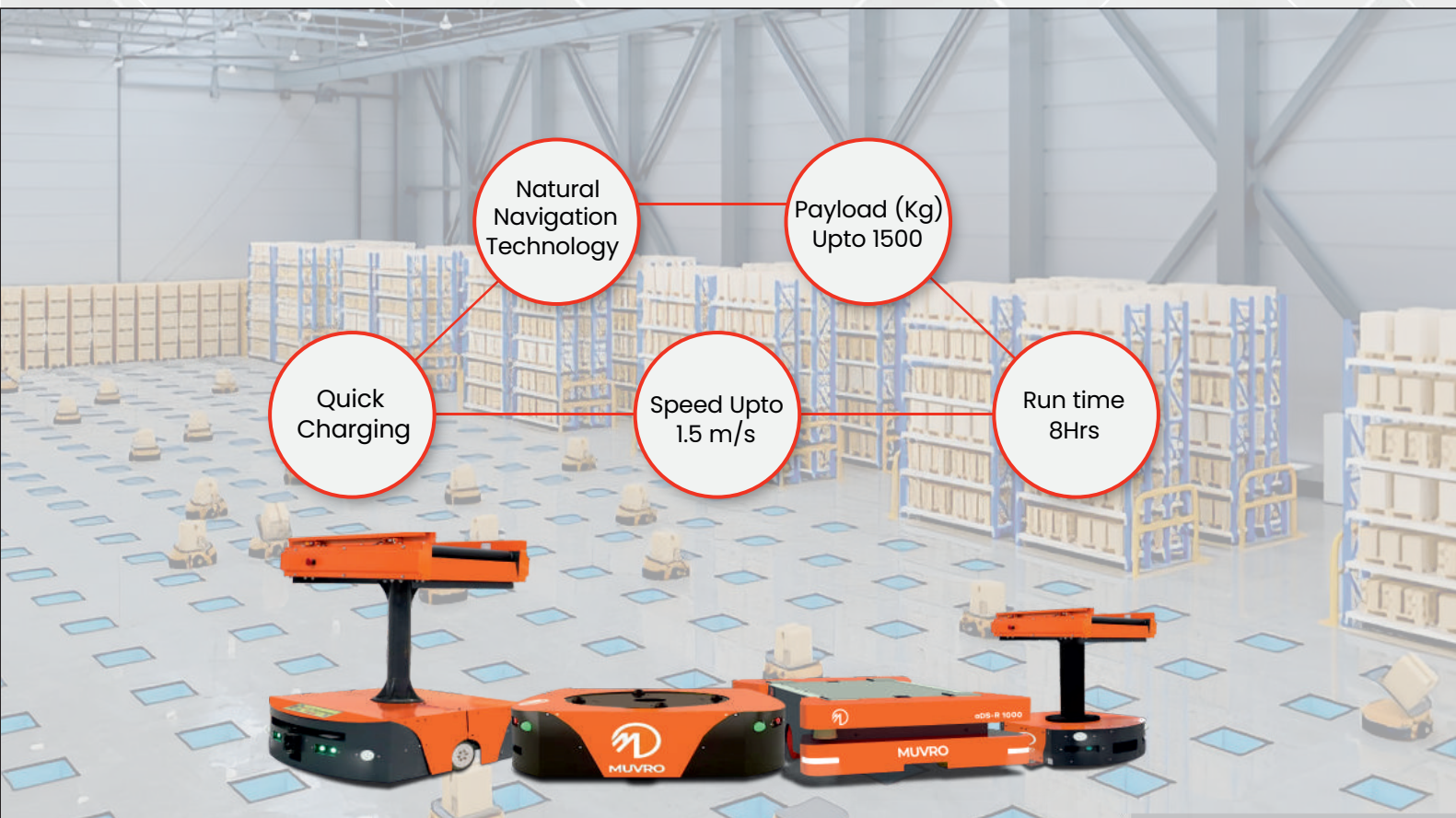
Efficient Mapping &
Spatial Awareness

Obstacle Detection &
Auto Deceleration

Quick Charging

Custom Attachments
Options

Built-in Safety
Features



SPECIFICATIONS

Specification	AMR (aDS-100)	AMR (aDS-200)	AMR (aDS-500)	AMR (aDS-1000)	AMR (aDS-1500)
Payload Capacity (kg)	100	200	500	1000	1500
Navigation Technology	Natural Navigation / LiDAR Based	Natural Navigation / LiDAR Based	Natural Navigation / LiDAR Based	Natural Navigation / LiDAR Based	Natural Navigation / LiDAR Based
Max Speed (No Load)	90 m/min	90 m/min	90 m/min	60 m/min	60 m/min
Movement	Bi-directional	Bi-directional	Bi-directional	Bi-directional	Bi-directional
Stopping Accuracy	±50 mm	±50 mm	±50 mm	±50 mm	±50 mm
Stopping Accuracy (Feature Base)	±10 mm	±10 mm	±10 mm	±10 mm	±10 mm
Power Source	48V DC	48V DC	48V DC	48V DC	48V DC
Battery Capacity (Ah)	20 Ah	20 Ah	40 Ah	60 Ah	60 Ah
Charging System	Battery Swap / Opportunity Charging	Battery Swap / Opportunity Charging	Battery Swap / Opportunity Charging	Battery Swap / Opportunity Charging	Battery Swap / Opportunity Charging
Run Time @ Single Charge	6 hours	6 hours	6 hours	6 hours	6 hours
Drive Configuration	Differential Drive	Differential Drive	Differential Drive	Differential Drive	Differential Drive
Floor Deviation	1.2° with load	1.2° with load	1.2° with load	1.5° with load	1.5° with load
Dimensions (L x W x H mm)	600 x 500 x 250	700 x 600 x 280	1100 x 750 x 350	1350 x 1100 x 395	1640 x 1150 x 395
Attachments	Lifter, Unit Load, Conveyor	Lifter, Unit Load, Conveyor	Lifter, Unit Load, Conveyor	Lifter, Unit Load, Conveyor	Lifter, Unit Load, Conveyor
Safety Features	Obstacle detection, emergency stop, and auto deceleration	Obstacle detection, emergency stop, and auto deceleration	Obstacle detection, emergency stop, and auto deceleration	Obstacle detection, emergency stop, and auto deceleration	Obstacle detection, emergency stop, and auto deceleration



“ **DIGITAL** TRANSFORMATION VISION
WITH CLEAR **OUTCOMES** ”

AMR

ATTACHMENTS

Lifter (Manual / Semi-Auto / Auto)

Designed to lift payloads to various operational heights.

- Ideal for shelf loading, workstations, or ergonomic part positioning.
- Streamlines vertical transfer tasks without fixed lifting equipment.

Unit Load Carrier (Tray / Bin Rack / Fixture)

A flexible top-mount platform for carrying containers, bins, or custom fixtures.

- Best for transporting work-in-progress parts and finished goods.
- Easily reconfigurable for different payloads.

Conveyor Attachment (Chain / Roller / Inline / Perpendicular)

Integrated conveyor module mounted on the AMR for automated material handoff.

- Aligns with stationary conveyors at workstations.
- Available in inline or perpendicular configurations for process flexibility.





Few of our most valued customers >

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Industry 4.0

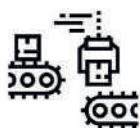


INDUSTRY 1.0

Mechanization,
steam power,
weaving loom



1784



INDUSTRY 2.0

Mass production,
assembly line,
electrical energy



1870

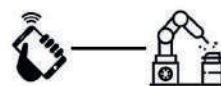


INDUSTRY 3.0

Automation,
computers and
electronics



1969



INDUSTRY 4.0

Cyber physical
systems, internet of
things (IoT),
networks



Today

GLOBAL PRESENCE:

INDIA FACTORY : Plot No.- 1195, Main Road, National Highway - 34, Merta, Ghaziabad - 201003, (UP)

INDIA | USA | JAPAN | GERMANY | S.KOREA | THAILAND | MEXICO | AUSTRALIA | BRAZIL



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