goat. Robotics

# "Empowering Industries with Autonomous Mobility"

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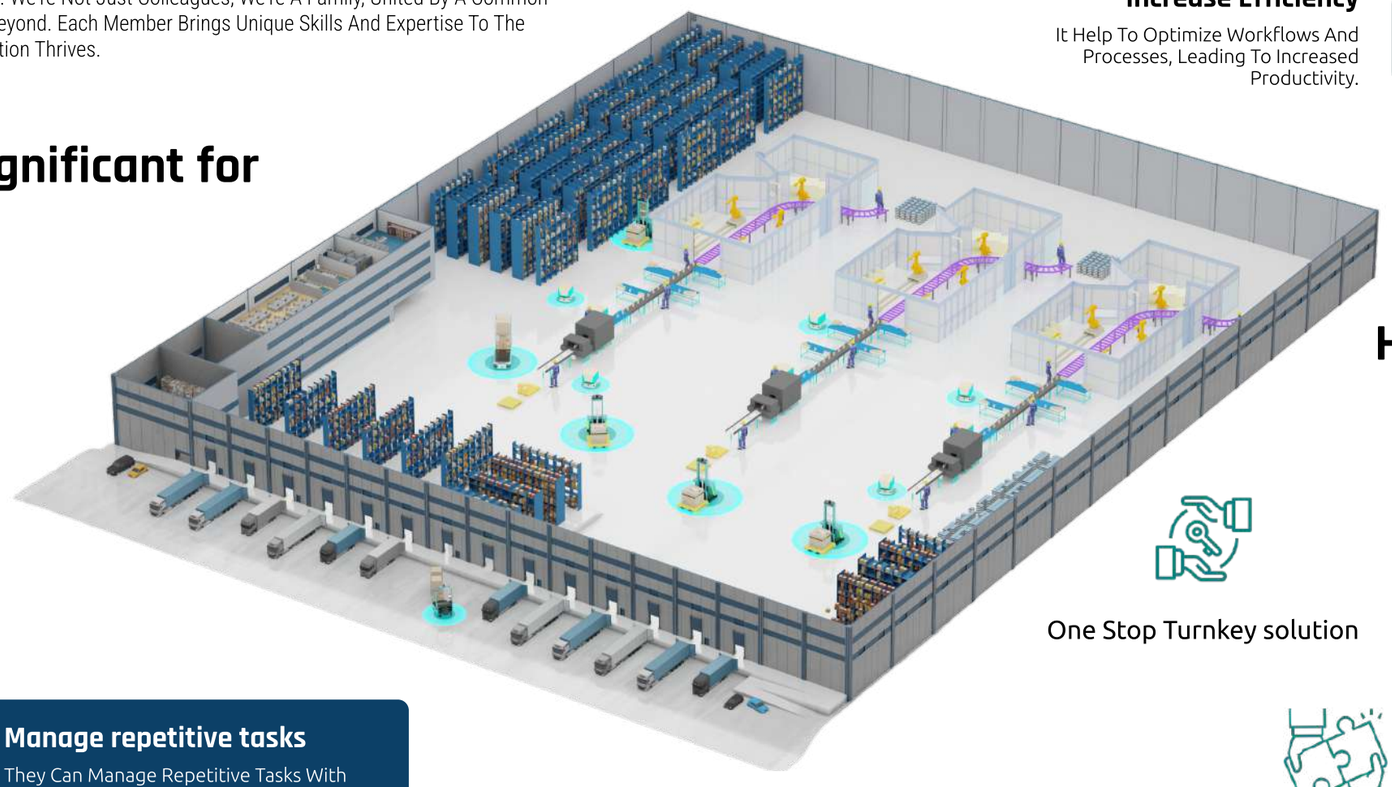
# About Us

GOAT ROBOTICS Is More Than Just A Company; It's A Beacon Of Innovation And Automation In India. Our Team Is Driven By A Passion To Revolutionize Industries, From Education To Heavy Industries, Through Our Powerful Mobile Robots. These Robots Can Handle Payloads Of Up To Several Tons, Making Them A Cornerstone Of The Make In India Initiative.

What Sets Us Apart Is Our Strong And Energetic Team. We're Not Just Colleagues; We're A Family, United By A Common Goal To Elevate The Future Of Robotics In India And Beyond. Each Member Brings Unique Skills And Expertise To The Table, Creating A Dynamic Environment Where Innovation Thrives.



# What makes AMRs significant for the business?

Industrial Robots Have Helped To Boost Productivity, Safety, And Time Savings. Robots Can Produce Incredibly Accurate, Consistent, And High-Quality Work Without Needing Breaks Or Holidays Off. Industrial Robots Also Help To Remove Workers From The Hazardous Environments And Back Breaking Labor.

### Improve accuracy

Robots Can Be Used To Automate Tasks That Are Prone To Human Error, Which Will Result In A More Consistent Product

### Multi-staged application

A Single Robot Can Be Used To Handle Multiple Stages Of A Process In Sectors. This Will Save Time And Money

### Manage repetitive tasks

They Can Manage Repetitive Tasks With Precision And Speed, Freeing Up Human Workers For More Complex Tasks

# How can AMRs solve unique business problems?

Robots Are Typically Used In Manufacturing And Automotive Industries To Automate Welding, Painting, And Assembling Tasks. They Can Help Increase Efficiency And Accuracy And Reduce The Time And Labor Required To Complete Tasks.

### Increase Efficiency

It Help To Optimize Workflows And Processes, Leading To Increased Productivity.

### Provide Data

It Can Be Used To Monitor & Analyse Data And Provide 24/7 Customer Support.

### Reduce Cost

Automating The System Enables Saving Time And Money And Maintaining High Quality.

# How we Unique from other AMR Provider?

One Stop Turnkey solution

Tailor-made approach

Cost effective

Supports Wide variety of Integration

Cloud control & Fleet Management

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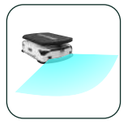
# SLAM Based Autonomous Mobile Robot

## GT 100/250/400

- Conveyor
- Towing
- Cobot
- Shelf
- Lifting

A 100/250/400kg Payload Industrial Robot For Material Management, Adaptable To Any Application Layer, Features Robust Construction And Modular Design. It Accommodates Heavy Loads Using Powerful Motors And Actuators (If Lifting Operation Is Required). The Robot Supports Various End Effectors, Facilitating Diverse Tasks. Equipped With A Sophisticated Control System. It Can Be Used For Seamless Integration With External Devices And Systems If Needed. Safety Measures Include Obstacle Avoidance And Emergency Stop Functionalities. Connectivity With Wi-Fi Enable Seamless Communication With Manufacturing Environments. Designed For Scalability And Flexibility, It Effortlessly Integrates Into Evolving Industrial Setups, Enhancing Efficiency And Adaptability Across Sectors.

**SLAM Capability**
Dynamic Path Planning

**Precise Localization**
±5 Cm

**Robust Construction**
Designed For Industry Use

**Obstacle Avoidance**
15 Cm

**No Need Of New Alteration During Deployment**

**Carrying Capacity Options**
100/250/400 Kg

**Manufacturing:** Streamlines material handling tasks on assembly lines, aiding in loading and unloading heavy components.

**Warehousing:** Optimizes inventory management by efficiently moving and organizing pallets and containers.

**Aerospace:** Supports manufacturing processes by transporting aircraft parts & materials within production facilities.

**Automotive:** Assists in vehicle assembly processes, handling large components and sub-assemblies.

**E-commerce:** Improves order fulfillment processes in e-commerce warehouses by automating picking, packing, and shipping tasks.

**Logistics:** Enhances distribution processes by automating order picking, packing, and sorting operations.

**Pharmaceuticals:** Enhances efficiency in pharmaceutical manufacturing by automating material handling and product packaging.

**Food and Beverage:** Facilitates packaging, palletizing, and sorting tasks in food processing plants and beverage distribution centers.



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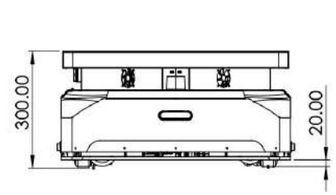
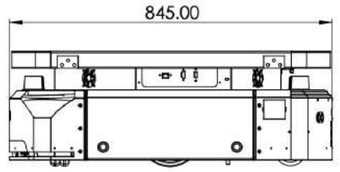
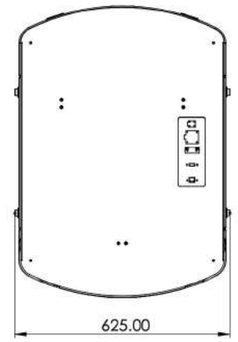
# TECHNICAL SPECIFICATION GT 100/250/400



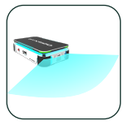




| | |
|---|---|
| **ROBOT DIMENSION & WEIGHT** | |
| LENGTH X BREADTH X HEIGHT (L X B X H) | 845 * 625 * 300 (mm) |
| SELF WEIGHT | 80 kg / 120 kg / 140kg |
| GROUND CLEARANCE | 20 mm |
| TURNING RADIUS | Zero degree In-place rotation |
| SUSPENSION | Passive traction rocker |
| **PERFORMANCE & BATTERY** | |
| MAX. PAYLOAD | 100 Kg / 250 Kg / 400KG |
| MAX SPEED | 1.2 / 1 meter per second |
| MAX TURNING SPEED | 45 Degree per second |
| POSITIONING ACCURACY | *+/-5 cm |
| MIN.AISLE WIDTH | 950 mm |
| **POWER SUPPLY** | |
| BATTERY TYPE / CAPACITY | LiFePO4 / 48Volt DC /35 Ah\| 40Ah \| 40 Ah |
| RUNNING TIME | 8 HRS |
| CHARGING TIME & TYPE | 4 Hrs / Manual or Autonomous |
| **CONTROL SYSTEM AND SENSOR** | |
| PROCESSOR | Intel chipset |
| OPERATING SYSTEM | UBUNTU |
| CONTROL MODES | Autonomous / manual / Guided |
| COMMUNICATION | WIFI - 802.11 a/b/g/n/ac, 2.4 Ghz & 5 Ghz with antenna and Bluetooth |
| SENSORS | 1X Lidar, 1X IMU, 2X Encoder, 1 X depth camera, optional ultrasonic sensors, optional bumper sensor |
| STANDARD LEAD OUTS | USB, External Emergency Port, ON/Off and Reset switch |
| **ACCESSORIES** | |
| MANUAL CHARGER | Default |
| AUTONOMOUS CHARGER DOCKER | Optional |
| LIFTING/ CONVEYOR/TOWING/ SHELF STRUCTURE SYSTEMS | Optional |
| **NAVIGATION** | |
| AUTONOMOUS MODE | SLAM + Visual |
| OBSTACLE AVOIDANCE | Pause play mode / Avoidance mode |
| PATH PLA NNING | Defined path or natural navigation |
| **SAFETY** | |
| OBSTACLE AVOIDANCE | Laser scanner / Depth camera / ultrasonic sensor |
| EMERGENCY SAFETY | Bumper sensor / Emergency stop button |
| **ENVIRONMENT** | |
| OPERATING TEMPERATURE | 5 to 40 Deg celcius |
| HUMIDITY | 95% Non Condensing |
| AMBIENT TEMPERATURE | Near level (3%) |
| IP RATING | IP 21 |

# SLAM Based Autonomous Mobile Robot

## GTX 500/1000/1500

The 500/1000/1500 Kg Payload Industrial Robot Embodies Unparalleled Strength And Adaptability In Material Handling. With Robust Construction And Modular Design, It Seamlessly Integrates Into Diverse Industrial Applications. Powered By Potent Motors And Actuators, It Manages Heavy Loads With Precision And Reliability. Adaptable End Effectors Cater To A Broad Range Of Tasks, While Advanced Navigation Ensures Obstacle Avoidance For Smooth Movement. Safety Features, Including Collision Detection, Prioritize Workplace Security. Wi-Fi Connectivity Enables Seamless Communication Within Manufacturing Environments, Enhancing Operational Efficiency. Scalable And Flexible, It Effortlessly Adapts To Evolving Industrial Needs, Ensuring Optimized Productivity And Performance Across Sectors.

**SLAM Capability**
Dynamic Path Planning

**Precise Localization**
±5 Cm

**Robust Construction**
Designed For Industry Use

**Obstacle Avoidance**
15 Cm

**No Need Of New Alteration During Deployment**

**Carrying Capacity Options**
500/1000/1500 Kg

**Manufacturing:** Streamlines material handling tasks on assembly lines, aiding in loading and unloading heavy components.

**Warehousing:** Optimizes inventory management by efficiently moving and organizing pallets and containers.

**Aerospace:** Supports manufacturing processes by transporting aircraft parts & materials within production facilities.

**Automotive:** Assists in vehicle assembly processes, handling large components and sub-assemblies.

**E-commerce:** Improves order fulfillment processes in e-commerce warehouses by automating picking, packing, and shipping tasks.

**Logistics:** Enhances distribution processes by automating order picking, packing, and sorting operations.

**Pharmaceuticals:** Enhances efficiency in pharmaceutical manufacturing by automating material handling and product packaging.

**Food and Beverage:** Facilitates packaging, palletizing, and sorting tasks in food processing plants and beverage distribution centers.



# TECHNICAL SPECIFICATION GTX 500/1000/1500

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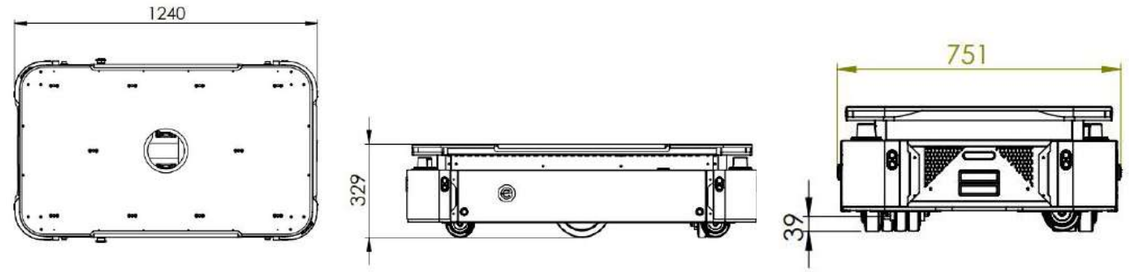
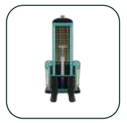



| | |
|---|---|
| **ROBOT DIMENSION & WEIGHT** | |
| LENGTH X BREADTH X HEIGHT (L X B X H) | 1240 * 750 *329 (mm) |
| SELF WEIGHT | 170 Kg / 185Kg / 200Kg |
| GROUND CLEARANCE | 39 MM |
| TURNING RADIUS | Zero degree in place |
| SUSPENSION | Passive traction rocker |
| **PERFORMANCE & BATTERY** | |
| MAX. PAYLOAD | 500 Kg / 1000Kg / 1500kg |
| MAX TURNING SPEED | 45 / 30 Degree per second |
| MAX SPEED | 1.2 / 1 meter per second |
| BATTERY TYPE | Lithium-Ion Battery |
| POSITIONING ACCURACY | *+/- 5CM |
| MIN.AISLE WIDTH | 1100 mm |
| **POWER SUPPLY** | |
| BATTERY TYPE / CAPACITY | LiFePO4 / 48Volt DC / 50Ah |
| RUNNING TIME | 8 Hr |
| CHARGING TIME & TYPE | 4 Hrs / Manual or Autonomous |
| **CONTROL SYSTEM AND SENSOR** | |
| PROCESSOR | Intel chipset |
| OPERATING SYSTEM | UBUNTU |
| CONTROL MODES | Autonomous / manual / Guided |
| COMMUNICATION | WIFI - 802.11 a/b/g/n/ac, 2.4 Ghz & 5 Ghz with antenna and Bluetooth |
| SENSORS | 2X Lidar, 1X IMU, 2X Encoder, 2 X depth camera, optional ultrasonic sensors, optional bumper sensor |
| STANDARD LEADOUTS | USB, External Emergency Port, ON/Off and Reset switch |
| **ACCESSORIES** | |
| MANUAL CHARGER | Default |
| AUTONOMOUS CHARGER DOCKER | Optional |
| LIFTING/ CONVEYOR/TOWING/ SHELF STRUCTURE SYSTEMS | Optional |
| **NAVIGATION** | |
| AUTONOMOUS MODE | SLAM + Visual |
| OBSTACLE AVOIDANCE | Pause play mode / Avoidance mode |
| PATH PLA NNING | Defined path or natural navigation |
| **SAFETY** | |
| OBSTACLE AVOIDANCE | Laser scanner / Depth camera / ultrasonic sensor |
| EMERGENCY SAFETY | Bumper sensor / Emergency stop button |
| **ENVIRONMENT** | |
| OPERATI G TEMPERATURE | 5 to 40 Deg celcius |
| HUMIDITY | 95% Non condensing |
| ALLOWABLE SLOP | Near level (3%) |
| IP Rating | IP21 |

# SLAM Based Autonomous Forklift

## GT-XP 1000

**Load Type**

The GTXP 1000 Is An Indoor Robot Designed For Robust Material Handling Within Industrial Settings. With An Impressive Carrying Capacity Of Up To 1 Ton, It Efficiently Manages Heavy Loads, Enhancing Productivity In Various Manufacturing Environments. Specifically Engineered To Lift Pallets For Material Movement, It Streamlines Operations And Optimizes Workflow Efficiency. The GTXP 1000 Combines Strength And Precision, Ensuring Reliable Performance In Demanding Industrial Applications. Its Compact Design And Indoor Capabilities Make It Well-Suited For Navigating Confined Spaces And Crowded Production Floors. With The GTXP 1000, Industries Can Achieve Heightened Efficiency And Streamline Material Handling Processes With Ease.

**SLAM Capability**
Dynamic Path Planning

**Precise Localization**
±5 Cm

**Robust Construction**
Designed For Industry Use

**Obstacle Avoidance**
15 Cm

**No Need Of New Alteration During Deployment**

**Carrying Capacity Options**
Handles Up To 1 Tons

**Manufacturing:** Streamlines material handling tasks on assembly lines, aiding in loading and unloading heavy components.

**Warehousing:** Optimizes inventory management by efficiently moving and organizing pallets and containers.

**Logistics:** Enhances distribution processes by automating order picking, packing, and sorting operations.

**Automotive:** Assists in vehicle assembly processes, handling large components and sub-assemblies.

**Aerospace:** Supports manufacturing processes by transporting aircraft parts & materials within production facilities.

**Food and Beverage:** Facilitates packaging, palletizing, and sorting tasks in food processing plants and beverage distribution centers.

**Pharmaceuticals:** Enhances efficiency in pharmaceutical manufacturing by automating material handling and product packaging.

**E-commerce:** Improves order fulfillment processes in e-commerce warehouses by automating picking, packing, and shipping tasks.



# TECHNICAL SPECIFICATION GT-XP1000

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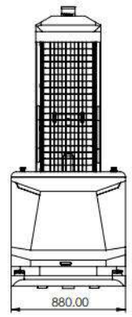


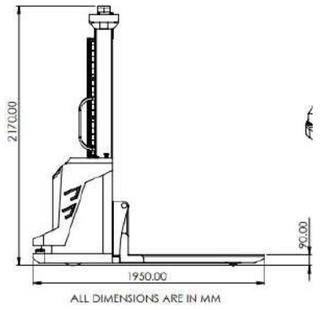


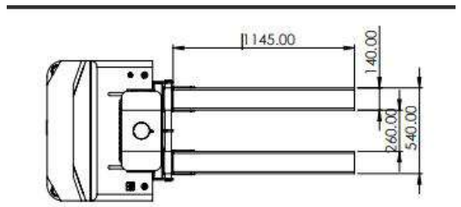


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|---|---|
| **ROBOT DIMENSION & WEIGHT** | |
| LENGTH X BREADTH X HEIGHT (L X B X H) | 1940 * 880 *2170 (mm) |
| SELF WEIGHT | 850 Kg |
| GROUND CLEARANCE | 20 mm |
| TURNING RADIUS | 1200 mm Radius |
| SUSPENSION | Passive |
| **PERFORMANCE & BATTERY** | |
| MAX. PAYLOAD | 1000 kg |
| MAX SPEED | 1 meter per second |
| MAX TURNING SPEED | 30 degree per sec |
| POSITIONING ACCURACY | *+/- 5CM |
| MIN.AISLE WIDTH | 1300 mm |
| **POWER SUPPLY** | |
| BATTERY TYPE / CAPACITY | LiFePO4 / 48Volt DC / 60Ah |
| RUNNING TIME | 6 Hr |
| CHARGING TIME & TYPE | 3 Hrs / Manual or Autonomous |
| **CONTROL SYSTEM AND SENSOR** | |
| PROCESSOR | Intel chipset |
| OPERATING SYSTEM | UBUNTU |
| CONTROL MODES | Autonomous / manual / Guided |
| COMMUNICATION | WIFI - 802.11 a/b/g/n/ac, 2.4 Ghz & 5 Ghz with antenna and Bluetooth |
| SENSORS | 1X 3D Lidar, 2X2D Lidar 1X IMU, 2X Encoder, 2 X depth camera, optional ultrasonic sensors, optional bumper sensor |
| STANDARD LEADOUTS | USB, External Emergency Port, ON/Off and Reset switch |
| **ACCESSORIES** | |
| MANUAL CHARGER | Default |
| AUTONOMOUS CHARGER DOCKER | Optional |
| LIFTING/ CONVEYOR/TOWING/ SHELF STRUCTURE SYSTEMS | Optional |
| **NAVIGATION** | |
| AUTONOMOUS MODE | SLAM + Visual |
| OBSTACLE AVOIDANCE | Pause play mode / Avoidance mode |
| PATH PLA NNING | Defined path or natural navigation |
| **SAFETY** | |
| OBSTACLE AVOIDANCE | Laser scanner / Depth camera / ultrasonic sensor |
| EMERGENCY SAFETY | Bumper sensor / Emergency stop button |
| **ENVIRONMENT** | |
| OPERATI G TEMPERATURE | 5 to 40 Deg celcius |
| HUMIDITY | 95% Non condensing |
| ALLOWABLE SLOP | Near level (3%) |
| IP Rating | IP21 |

# SLAM Based Autonomous Outdoor logistics

## GT-XT 1000



The GTT 1000 Is A Versatile Robot Engineered For Material Movement Across Industrial Settings. With A Remarkable Towing Capacity Of Up To 1 Ton, It Efficiently Transports Heavy Loads, Offering Enhanced Productivity. Designed To Seamlessly Attach To Any Trailer, It Streamlines Material Movement Processes Within Industries. Its Adaptability Extends To Both Indoor And Outdoor Environments, Offering Flexibility Across Various Operational Landscapes. The GTT 1000 Embodies Reliability And Efficiency, Providing Seamless Integration Into Diverse Industrial Workflows. Whether Navigating Tight Indoor Spaces Or Outdoor Terrains, This Robot Optimizes Material Handling Operations, Ensuring Smooth And Efficient Logistics Management.

**SLAM Capability**
Dynamic Path Planning

**Precise Localization**
±5 Cm

**Robust Construction**
Designed For Industry Use

**Obstacle Avoidance**
15 Cm

**No Need Of New Alteration During Deployment**

**Carrying Capacity Options**
Handles Up To 1 Tons

**Manufacturing:** Streamlines material handling tasks on assembly lines, aiding in loading and unloading heavy components.

**Warehousing:** Optimizes inventory management by efficiently moving and organizing pallets and containers.

**Logistics:** Enhances distribution processes by automating order picking, packing, and sorting operations.

**Automotive:** Assists in vehicle assembly processes, handling large components and sub-assemblies.

**Aerospace:** Supports manufacturing processes by transporting aircraft parts & materials within production facilities.

**Food and Beverage:** Facilitates packaging, palletizing, and sorting tasks in food processing plants and beverage distribution centers.

**Pharmaceuticals:** Enhances efficiency in pharmaceutical manufacturing by automating material handling and product packaging.

**E-commerce:** Improves order fulfillment processes in e-commerce warehouses by automating picking, packing, and shipping tasks.



# TECHNICAL SPECIFICATION GT-XT1000

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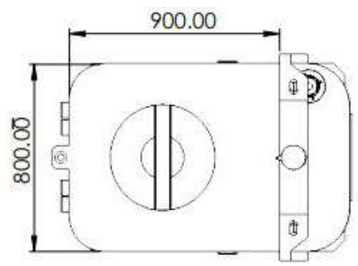


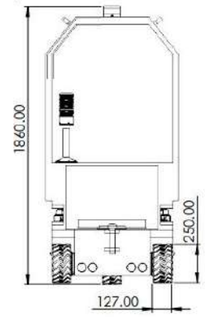


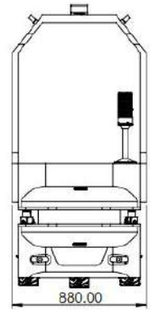


| | |
|---|---|
| **ROBOT DIMENSION & WEIGHT** | |
| LENGTH X BREADTH X HEIGHT (L X B X H) | 1275 * 800 *1900 (mm) |
| SELF WEIGHT | 350 Kg |
| GROUND CLEARANCE | 120 mm |
| TURNING RADIUS | 800 mm Radius |
| SUSPENSION | Passive |
| **PERFORMANCE & BATTERY** | |
| MAX. PAYLOAD | 1000 kg |
| MAX SPEED | 1.5 meter per second |
| MAX TURNING SPEED | 30 degree per sec |
| POSITIONING ACCURACY | *+/- 5CM |
| MIN.AISLE WIDTH | 1200 mm |
| **POWER SUPPLY** | |
| BATTERY TYPE / CAPACITY | LiFePO4 / 48Volt DC / 80Ah |
| RUNNING TIME | 8 Hr |
| CHARGING TIME & TYPE | 4 Hrs / Manual or Autonomous |
| **CONTROL SYSTEM AND SENSOR** | |
| PROCESSOR | Intel chipset |
| OPERATING SYSTEM | UBUNTU |
| CONTROL MODES | Autonomous / manual / Guided |
| COMMUNICATION | WIFI - 802.11 a/b/g/n/ac, 2.4 Ghz & 5 Ghz with antenna and Bluetooth |
| SENSORS | 1X 3D Lidar, 2X2D Lidar 1X IMU, 2X Encoder, 1 X depth camera, optional ultrasonic sensors, optional bumper sensor |
| STANDARD LEADOUTS | USB, External Emergency Port, ON/Off and Reset switch |
| **ACCESSORIES** | |
| MANUAL CHARGER | Default |
| AUTONOMOUS CHARGER DOCKER | Optional |
| LIFTING/ CONVEYOR/TOWING/ SHELF STRUCTURE SYSTEMS | Optional |
| **NAVIGATION** | |
| AUTONOMOUS MODE | SLAM + Visual |
| OBSTACLE AVOIDANCE | Pause play mode / Avoidance mode |
| PATH PLA NNING | Defined path or natural navigation |
| **SAFETY** | |
| OBSTACLE AVOIDANCE | Laser scanner / Depth camera / ultrasonic sensor |
| EMERGENCY SAFETY | Bumper sensor / Emergency stop button |
| **ENVIRONMENT** | |
| OPERATI G TEMPERATURE | 5 to 40 Deg celcius |
| HUMIDITY | 95% Non condensing |
| ALLOWABLE SLOP | Near level (3%) |
| IP Rating | IP21 |

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# Nex-Gen

Ready to take your manufacturing to the next level?

2024