



# "Empowering **Industries** with

Autonomous Mobility"



### **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.

One Stop Turnkey solution



#### 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



### How we Unique from other **AMR Provider?**







Cost effective



Supports Wide variety of Integration



Cloud control & Fleet Management







### SLAM Based Autonomous **Mobile Robot**











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.

















Lifting



SLAM Capability Dynamic Path Planning



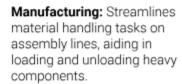
Precise Localization ±5 Cm



Robust Construction **Designed For Industry Use** 



Obstacle Avoidance 15 Cm



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



No Need Of New Alteration **During Deployment** 



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

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

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

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

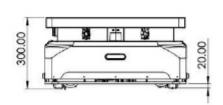
Logistics: Enhances distribution processes by automating order picking, packing, and sorting operations.

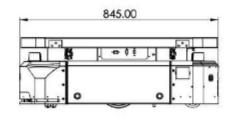
Pharmaceuticals: Enhances efficiency in pharmaceutical manufacturing by automating material handling and product packaging.

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

## **TECHNICAL** SPECIFICATION GT 100/250/400









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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

100 Kg / 250 Kg / 400KG MAX. PAYLOAD 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 1X Lidar, 1X IMU, 2X Encoder, 1 X depth camera, optional ultrasonic

USB, External Emergency Port, ON/Off and Reset switch

sensors, optional bumper sensor

STANDARD LEAD OUTS

### **ACCESSORIES**

SENSORS

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



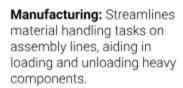
Precise Localization



Robust Construction Designed For Industry Use



Obstacle Avoidance



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



No Need Of New Alteration During Deployment



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

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

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

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

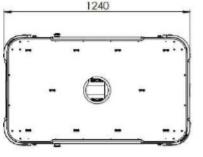
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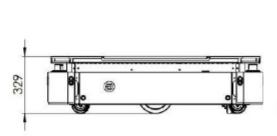
Pharmaceuticals: Enhances efficiency in pharmaceutical manufacturing by automating material handling and product packaging.

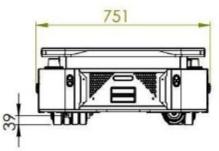
Food and Beverage: Facilitates packaging, palletizing, and sorting tasks in food processing plants and beverage distribution centers.

## **TECHNICAL** SPECIFICATION GTX 500/1000/1500









#### **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 **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

WIFI - 802.11 a/b/g/n/ac, 2.4 Ghz & 5 Ghz with antenna and Bluetooth COMMUNICATION SENSORS 2X Lidar, 1X IMU, 2X Encoder, 2 X depth camera, optional ultrasonic

1100 mm

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















Load Type





SLAM Capability Dynamic Path Planning



Precise Localization



Robust Construction Designed For Industry Use



Obstacle Avoidance 15 Cm

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

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



No Need Of New Alteration During Deployment



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

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

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

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

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

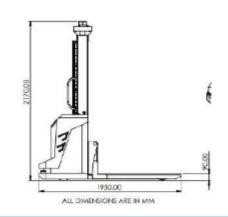
Pharmaceuticals: Enhances efficiency in pharmaceutical manufacturing by automating material handling and product packaging.

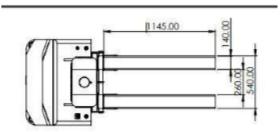
E-commerce: Improves order fulfillment processes in e-commerce warehouses by automating picking, packing, and shipping tasks.

## **TECHNICAL** SPECIFICATION GT-XP1000









USB, External Emergency Port, ON/Off and Reset switch

#### **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

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 **POWER SUPPLY**

TURNING RADIUS

BATTERY TYPE / CAPACITY LiFePO4 / 48Volt DC / 60Ah

RUNNING TIME

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

1200 mm Radius

1300 mm

STANDARD LEADOUTS

MANUAL CHARGER Default AUTONOMOUS CHARGER DOCKER Optional LIFTING/ CONVEYOR/TOWING/ SHELF STRUCTURE SYSTEMS Optional

#### **NAVIGATION**

**ACCESSORIES** 

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

Load Type

### SLAM Based **Autonomous Outdoor logistics**





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



Robust Construction Designed For Industry Use



Obstacle Avoidance

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

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



No Need Of New Alteration **During Deployment** 



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

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

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

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

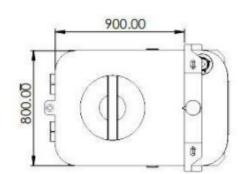
Food and Beverage: Facilitates packaging, palletizing, and sorting tasks in food processing plants and beverage distribution centers.

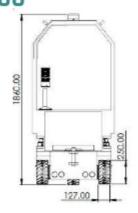
Pharmaceuticals: Enhances efficiency in pharmaceutical manufacturing by automating material handling and product packaging.

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

## **TECHNICAL** SPECIFICATION GT-XT1000







Passive



#### **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

#### 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

SUSPENSION

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 URUNTU

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

IP21

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

IP Rating

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%)

