RGROBOTIX



Custom Warehouse Solutions

BIG BUDDY

Robust I Versatile I Safe

Big Buddy - A Customizable AGV



The Big Buddy is a dual direction AGV is designed to enhance operational efficiency with its advanced maneuverability and robust safety features. This AGV is adept at handling intersections and navigating complex pathways, thanks to its ability to turn in place and smoothly process tape crosses.

Safety and Sensors

- Turn-in-Place Capability: Precise and agile,
 Big Buddy can rotate around its center axis,
 enabling sharp turns and navigation in tight
 spaces.
- Magnetic Tape Guidance: Reliably follows
 predefined magnetic tape paths, ensuring
 consistent and repeatable routes.

Performance and Navigation

- Front and Rear Safety Lidars: Equipped with advanced lidar sensors at both ends, Big Buddy provides unparalleled obstacle detection and avoidance, ensuring a safe working environment.
- Dedicated Pathway Recognition: Specialized in traversing on magnetic tape, if it loses the path it will come to a safe and controlled stop.







Custom Warehouse Solutions



Power and Charging

- Battery Management: Engineered for endurance, Big Buddy's Lithium Iron Phosphate (LifePO4) battery system is designed for extensive use and is easily accessible for maintenance or hot swapping.
- Opportunity Charging: Charge with ease anytime Big Buddy is at a charging station. Contactless or Spring Contact charging solutions are available.

Communication Protocols

- **Short Range Radio** Big Buddy can be programmed for up to 8 unique locations. Great for simple point A to B material handling.
- Long Range Radio Up to 64 unique locations, basic traffic management and data reporting. Great for 3PL's that need more complex maneuvers but unable to access customer networks.
- **Wifi** The sky is the limit. If you can think it Big Buddy can do it.







Ra MQTT

TECHNICAL SPECIFICATIONS

RUNTIME

10 HOURS

SAFETY

• ESTOPS (FRONT/BACK)

DIRECT LOAD CAPACITY

2500 LBS

100 DBA ANNUNCIATOR

TOWING CAPACITY

5000 LBS

 STATUS/SAFETY LIGHTS (FRONT/BACK)

AGV WEIGHT

600 LBS

• SAFETY LIDAR (FRONT/BACK)

SIZE

62.5 x 44 X 12 IN



51745 Filomena Drive | Shelby Township, MI 48315 586.265.2376 | info@rgrobotix.com rarobotix.com





RG ROBOTIX

Custom Warehouse Solutions



Options and Add-On's

Tunnel

- Selecting a Lift from Big Buddy's option menu allows the AGV to tunnel under pallets/materials, physically lift them up in place, transport them, and finally deposit them at the location desired.
- Big Buddy's lift height is dynamic and can adjust to target height needed to successfully pick up and move your product.
- Lift sizes can be customized to your product specifications. Big or small, Big Buddy's versatile lifts allow for a wide range of sizes of products to be moved from point, A, to point B, and back again.





- Big Buddy's tunneling option allows the AGV to attach itself onto a customizable LHF (Load Handling Frame) cart via a specialized hitch system. Big Buddy is now ready to tow your materials/products to the desired location.
- RG can provide you with a LHF cart that meets your specific needs, or we can integrate your existing LHF into your customized towing system solution.





- Big Buddy's conveyor option allows the AGV to seamlessly integrate with your existing powered or non-powered conveyor material movement system.
- Big Buddy will approach your conveyor(s), align itself with the end point, communicate its needs, and finally execute the command by picking up and transporting the materials/products from your conveyor(s) to the desired location.









