

**TOSHIBA**

# Shelf Transporting Autonomous Mobile Robots (AMRs)

for Goods-to-Person Warehouse Operations



## Advantages

### Reduce physical strain

No need to walk around a large warehouse looking for goods.

### Reduce human errors

Reduce picking errors with color coded intuitive picking.

### Flexibility and Scalability

Change system according to change of items, work flow, or peak times.

## Leave it to Toshiba's AMRs to "find and transport goods"

Before

Increased risk of delays and errors due to accumulated fatigue from walking and searching of items.



Collect containers  
Check order list

Find location  
Move to rack

Check and pick  
required goods

Place in container  
Double check list

Move to the  
sorting area

Multiple work steps

After

Much faster picking of goods. Reduced risks of work delays and errors, due to less work steps.



\*GTP: Goods-to-Person

AMR moves to the bottom of the shelf

Lifts the shelf and moves to work station

Check list and goods, then pick required quantity

Significantly reduced work steps

## Smart, flexible, and easy to use

Easy

### Color coding to prevent picking operation errors

Color-coded shelf racks improves visibility of the precise location of the goods to pick. Pictures and instructions are shown on the operator screen for intuitive picking. Ergonomic station layout enhances efficiency of the work procedure.

Lamp indicates location and number of goods to store.



Operator screen displays description of goods and instructions

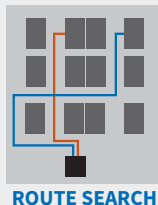


Above Example : Pick 3 pieces from A01 shelf and store to B11 box.

Smart

### Optimized shelf positioning and route selection

Real-time rearrangement of shelf positions for the best route to the work stations, generated from order lists.



Flexible

### System alignment

Rearrange picking orders according to actual operations. Prioritize urgent orders and shipments. Integrate with existing systems.



## AMR specifications

Dimensions	L980 x W680 x H245 mm (L38.58 x W 26.77 x 9.65 in.)	Stopping accuracy	±10 mm (±0.4 in.)
Weight	160 kg (352.74 lb.)	Battery	Lithium ion DC48V/27Ah
Maximum load	800 kg (1,763.7 lb.)	Wireless communication	WiFi 2.4G (Optional: WiFi 5G, 5G, infrared)
Transport speed	2.2 m/sec. (86.61 in./sec.)	Power supply	3-phase 200V/10A

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