

L-CART AGV



AUTOMATED EFFICIENCY BOOSTER

- ▶ 1100 - 3500 lb. Capacity
- ▶ 24-Volt DC Brushless Motor
- ▶ RFID Tags for Command Structure
- ▶ Wireless Connectivity
- ▶ Built to Fit Your Needs



ACBE5-10S | ACBE8-16D

SIMPLY DELIVER

THE TOYOTA L-CART AGV. Your path to increased productivity. The L-Cart AGV excels at tedious, repetitive material-handling tasks — reducing labor costs and human error in the process. Maneuvering precisely through narrow aisles and manufacturing plants, it's an ideal automated delivery solution.

1100 – 3500^{LB.}

CAPACITY



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- ▶ ACBE8D
- ▶ ACBE16D
- ▶ Dual Drive (2 drive units)

L-CART AGV ADVANTAGES

- ▶ **LOW-COST FLEXIBILITY** in an efficient, user-friendly cart that's adaptable for your specific application
- ▶ **SIMPLE VEHICLE PROGRAMMING** via PC-based software with a spreadsheet-like interface
- ▶ **COMPLETE TRAFFIC CONTROL & TRACKING** of all AGVs in your fleet with simple, powerful, flexible software

WIRELESS CONNECTIVITY

24^v

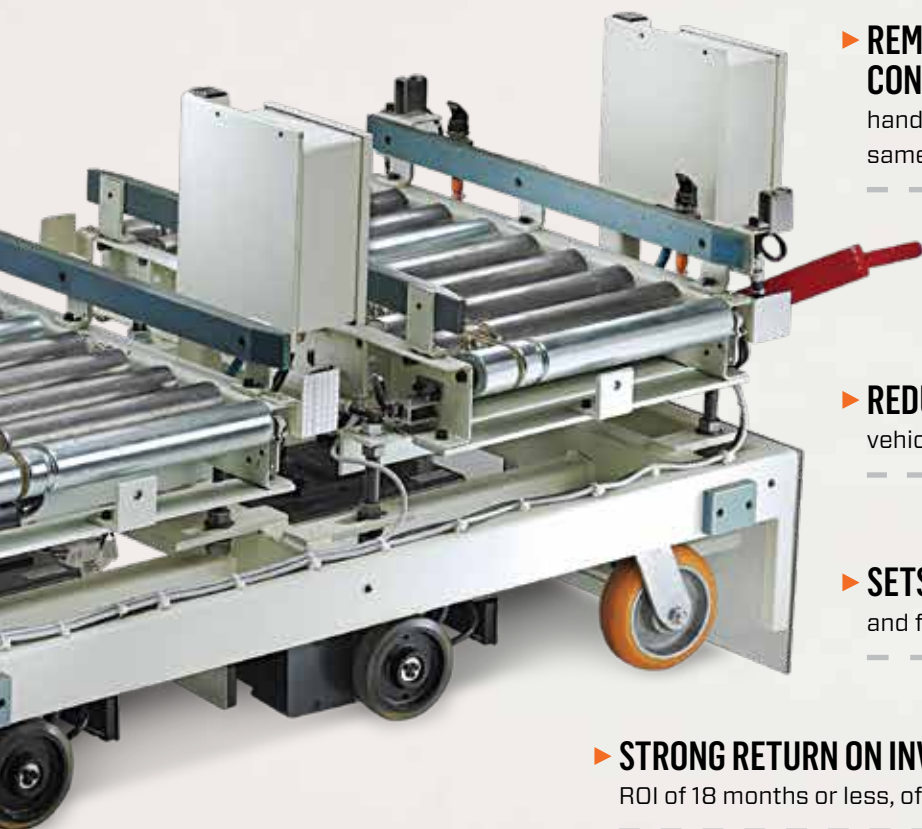
DC BRUSHLESS MOTOR

- ▶ ACBE8D
- ▶ ACBE16D





▶ ACBE5S
▶ ACBE10S



▶ **REMOVES VARIABLES FOR INCREASED CONSISTENCY** compared to manned material handling — always takes same route, same timing, same speed, same notifications

▶ **REDUCES OR ELIMINATES DAMAGE** to products, vehicles and facility

▶ **SETS EFFICIENT PACE** similar to an assembly line and frees up the operator for more value-added jobs

▶ **STRONG RETURN ON INVESTMENT** with typical ROI of 18 months or less, offsetting labor costs



▶ ACBE5S
▶ ACBE10S

MATERIAL, WELL HANDLED

Purchasing a Toyota AGV arms you with a full material-handling system geared for high efficiency, productivity and reliability. Toyota provides assistance to help you customize decisions about navigation methods, path selection, traffic control options and system controls. Enabling your business to get more done, while saving time and money.

LIKE CLOCKWORK

Your daily warehouse routine can be anything but routine. Especially when it involves high levels of forklift traffic in heavily populated areas. A Toyota AGV system replaces uncertainty with clockwork proficiency for repetitive jobs involving long horizontal travel distances, simple loading/unloading processes, level floors and multi-shift operation.

TOYOTA EXPERTISE

Every AGV installation comes with the valuable counsel and expertise of Toyota's Productivity and Automation Consultants, the same people and systems responsible for automating all of Toyota's North American manufacturing facilities.

AN INVESTMENT THAT PAYS YOU BACK

Toyota AGVs are designed to function as crucial components of well-thought-out integrated systems that work together to deliver intuitive, dependable performance day after day. Toyota AGVs don't require a lot of service. But when they do need service, it's fast and easy — by design. And legendary Toyota quality means more productivity over the life cycle of your AGV, along with lower repair costs.

PREDICTABLE PERFORMANCE YOU CAN BANK ON

The Toyota L-Cart AGV. A one-time purchase that pays long-term returns. Reducing labor costs. Increasing productivity. Eliminating expensive — and sometimes dangerous — employee errors. Delivering predictably productive performance day after day, year after year. For results you can bank on. Best of all, it's a Toyota — proven the most dependable and reliable line of material-handling equipment you can buy.

L-CART AGV

CAPACITY
1100 – 3500 LBS.

MAXIMUM DRAWBAR PULL
101 LBF.

VOLTAGE
24

INDUSTRIES



Beverage



Distribution



Food Processing



Food Storage



General Manufacturing



General Warehousing



Retail

TRUCK SPECIFICATIONS

MODEL NUMBERS

GENERAL DATA			ACBE5S	ACBE10S	ACBE8D	ACBE16D	
Electrical System			24-Volt				
Guidance Method			Magnetic Induction				
Travel Direction			Forward Only	Forward Only	Forward / Reverse	Forward / Reverse	
Maximum Weight Capacity ¹			lb (kg)	1102 (500)	2205 (1000)	1764 (800)	3527 (1600)
Maximum Drawbar			lbf (kgf)	66 (30)	132 (60)	101 (46)	198 (90)
Speed	Maximum	m/min	60	30	60	30	
	Settings		3 Programmable Speeds				
Travel Instruction Method			Multi-Route Controller				
Steering Method			Differential (2 driving wheels)				
Braking Method			Electromagnetic				
Drive Unit Up/Down Method			Push-Button Powered Lift				
Circuit Protection			Drive Motor Overload				
Minimum Turning Radius			in (mm)	24 (600)			
Overall AGV Weight (with batteries)			lb (kg)	75 (34)			
Drive Train Specifications			Motor	DC Brushless Stepper Motor			
			Wheels	Urethane Drive Wheels (5" dia. x 1" wide)			
			Torque Transfer	Gear to Gear Direct Drive "No Chains"			
Dimensions	L x W x H for Drive Unit	in (mm)	13.8 x 13.9 x 9.4 (351 x 355 x 239)				
	L x W x H for Control Box	in (mm)	15.7 x 13.7 x 4.7 (400 x 350 x 120)				
Floor Conditions	Slope	%	2 or Less				
	Step (ridge)	mm	5 or Less				
	Gap (crack)	mm	20 or Less				
	Waviness	mm	10 or Less Over the Length of AGV				
Working Environment	Temperature	F (C)	32 – 104 (0 – 40)				
	Humidity	%	20 – 05 RH (no condensation)				
	Outdoor Use		Prohibited				

BASE KIT

- Industrial PC with enclosure
- RF module (radio) 900 MHz
- Drive unit
- Laser optical scanner
- CAT 3 safety circuit
- 3-color stack light
- Melody box & chime
- Voltmeter
- RFID read/write head

ACCESSORIES

- LIAISON – traffic control software (optional kiosk with industrial PC available)

- Magnetic guide tape – 2" wide x 100' roll
- Magnetic guide bar – 1/4" x 3/8" x 20' roll
- Protective tape for guide path – 4" wide x 164' long (multiple colors available)
- RFID tag – 22 mm x 3 mm
- 24V/40-amp battery charger (requires 110V power supply)
- Automatic battery charging station (includes 2-contact floor plate, 20V/40-amp battery charger, 10' wire lead for floor plate)

OPTIONAL

- Automatic battery charging contacts

CUSTOM INTEGRATION

Lifts, conveyors, actuators, etc. can be integrated to custom fit the L-Cart AGV to your process. PLC with Ethernet can be linked with RF wireless to give you full control of navigation and functions.

¹ Including vehicle weight. Weight capacity is an estimate ONLY. Actual capacity depends on dolly configuration (shape, size, weight, casters).



COUNT ON THE LEADER

- ▶ Toyota leads in quality, durability, reliability and value, thanks to advanced technology and the world-renowned Toyota Production System.
- ▶ With the broadest and most complete set of material-handling solutions in the industry, Toyota Dealers specialize in meeting all of your needs — from a single forklift to an entire fleet.
- ▶ Toyota's industry-leading network of dealers backs every forklift with proven product support. Resources include factory-trained service technicians, Toyota Genuine Parts, and flexible leasing and financing packages through Toyota Industries Commercial Finance.

- ▶ Toyota forklifts have ranked No. 1 in safety and quality since 2002, according to studies conducted by Peerless Research Group.

For more information, including full specs, see your Toyota Dealer or ToyotaForklift.com.

