

## Automatic Guided Vehicle/Guided Cart

# MODEL DC-25i

Universal-use, Attachment-configured, Chassis **Low Transfer or Towing Conveyance** 25,000 Pounds Standard Capacity Virtual Path™ 'Tape-free/Target-free' Navigation

Savant Automation's DC-25i AGV is a low profile, universal use, attachment-configured load transporter. Because it is modular, it can be provided with various attachments to adapt to load pick/drop & transport needs.

Versatile Application: The DC-25i is ideal for demanding material transportation applications, including use in manufacturing, distribution, hospitals, etc. It can be configured with powered roller or lift /lower deck, utilized for towing strings of carts, and can integrate with other automated system processes.

The vehicle is ideal for transporting loads between work cells, from picking areas to shipping, receiving to storage, buffers to line feed locations, as well as supporting input/output of stretch wrappers and palletizers or used in assembly line applications. This highly maneuverable AGV can safely travel in high traffic and in tight, space-restricted areas

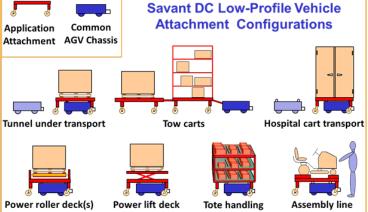
Savant Virtual Path™: The DC-25i utilizes a highly reliable and accurate, navigation system employing an inertial sensor chip to compare AGV heading and positional data to a virtual route CAD map in the vehicle's memory. It is ideal for all environments. especially where damage magnetic/optic floor tape, floor cut slots or line-of-sight dependent laser reflective wall targets, or wall-reliant lidar natural/contour technologies are not practical or desirable.

Existing or New Facility Use: Savant 'Virtual Path' AGV systems requires minimal installation time, can be quickly changed and safely operate in people corridors.

System Control: The AGV control system can operate in standalone mode or be integrated with a user's PLC/IT/ production control system networks. AGV call & dispatch can be provided via load sensors, local call devices or cart RFID tags. The Savant system controls support interface with elevators, robots, conveyors, doors, etc.

iQ-CAN™: (intelligent Quick Configurable AutomatioN™): The DC-25i is available with Savant's visual-based control system. iQ-CAN utilizes a standard graphical PC program to configure AGV system path/operation without software coding, provides system design simulation and visual confirmation of operation before installation or change





#### Standard Features:

- Fully automated operation
- Onboard or remote dispatching Elevator interface
- Auto-return to battery charge area when battery is low
- · Diagnostic mode for fast, easy troubleshooting
- · Easy access to user controls
- Remove/Enter anywhere along path without resetting system controls
- Pendant for manual operation
- Steel frame construction

#### Options:

- Automatic cart elevation
- Automatic reversing
- Remote system management and vehicle dispatching
- Automatic charging
- Turn signals
- **Custom load handling** configurations
- Voice annunciation

## Warning and Safety Devices:

- Programmable safety laser scanner
- Emergency stop buttons
- · Audio beeper while in motion
- · Flashing warning lights while in motion
- · Location-selectable speed, horn & light settings

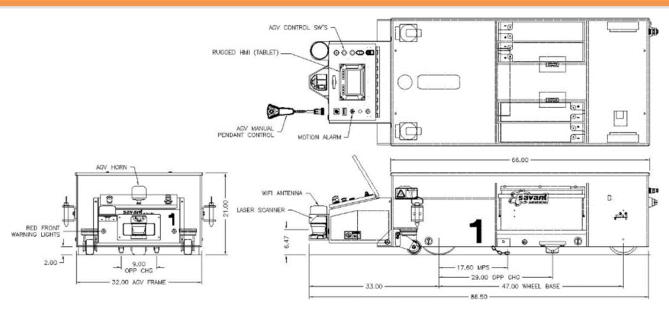
### **Display/Control Panel:**

- · Industrial grade tablet
- Status (on path, low battery, error messages etc.) and prompts for operator actions
- · Easy to customize (route assignments, etc.)



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## **Mechanical Specifications**

Capacity (gross)	25,000 lbs. (cart or powered deck)
Ramp Capacity	Up to 6% with reduced capacity
Load Type	Application specific Attachments: Platform Cart, Towing, Roller Conveyor, Chain Conveyor, Shuttle or Lift Deck
Drive	Single wheel steer/drive
Steering	Steered-wheel with fixed load wheels
<b>Drive Motor</b>	AC motor Schambuller RNA35
Drive Wheel	13.9" (353mm) diameter x 5" (127mm) wide Vulcolan
Caster Wheels	10" (254mm) diameter x 3" (76,.2mm) wide
Frame	Unitized structural steel
Brake	Electric, fail-safe
Manual Operation	Pendant control
Approx. Weight	2,500 lbs. empty
Automatic Speed	200 fpm max. (61 mpm);16 speed ranges, programmable area speeds
Turning Radius	4' minimum (approximates pivot about inside rear wheel)

## **Controls Specifications**

	Controls	Microprocessor, CAN bus
	Electrical System	48-volt power
	Navigation System	"Virtual" wireless navigation (inertial - 'tape/target-free')
	Communication	sWiFi, 900 or 450MHz RF bands
	Safety	Multi-range, selectable profile safety- rated laser sensor(s)
•	Nominal Positioning Accuracy	± 1" (25.4mm) longitudinal, ± 1" (25.4mm) latitudinal Tighter tolerances - optional
	Battery System	Maintenance-free, TPPL battery set with discharge sensor
	Battery AH	Four (4) 12V, 186 AH amp-hour
	Battery Cycle	8 hours minimum, based on standard duty cycle of 20% idle, 40% in motion full speed loaded, 40% in motion full speed unloaded.
	Charging Method	Automatic (Fast) charging or optional built-in charger













NOTE

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE BASED ON PRODUCT IMPROVEMENTS OR TECHNICAL REQUIREMENTS.

FORM: 0622DC-25i