

### Stainless Body for Hospitals & Clean Rooms

### 2,000 Pounds Standard Capacity

### Virtual Path™ 'Tape-free/Target-free' Navigation

Savant Automation's DC-10S Automatic Guided Vehicle is a compact load transporter. It is similar to Savant's DC-10 but with a stainless body. The new generation design incorporates the latest technologies and features that customers have stressed are important for automated material handling systems. The AGV can be provided with various configurations to adapt to most any application.

**Drive Under 'Tunnel' Cart Transportation:** The DC-10S has an extremely low profile allowing it to drive under pre-positioned carts. This is ideal for hospital cart transportation or clean room systems where the work pieces are on their own carts and in applications where carts need to be picked up and dropped off automatically.

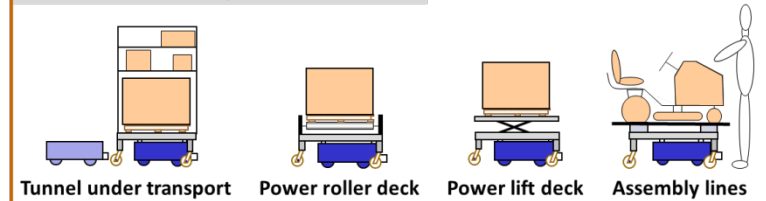
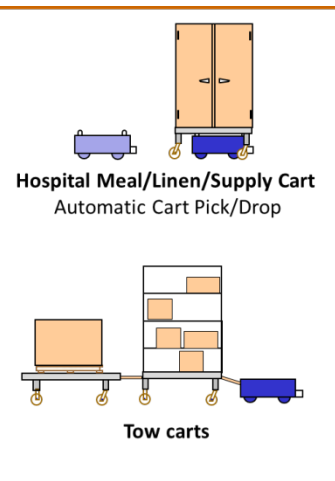
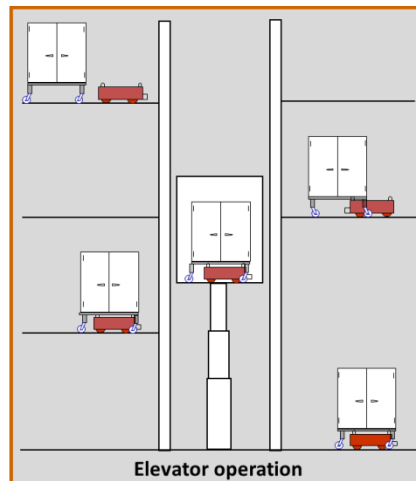
**Cart/Material Transportation:** The DC-10S is suitable for many cart and material transportation applications. The vehicle is very low-profile allowing it to drive under ('tunnel') a cart and activate capture pin to move carts to destination or when equipped with an optional powered lift, it elevates a cart or load from stand for transport. Because the vehicle is completely low-profile (no raised tower), it can enter a cart from the front or rear and most importantly, it can tunnel under a row of staged carts for tight cart storage queuing purposes.

**Existing or New Facility Use:** A Savant AGV system requires minimal installation effort and because of the vehicle's small size, it requires minimal space to maneuver. Systems can be easily installed in existing facilities, interface with existing elevators and safely operate in people corridors.

The DC-10 utilizes the state-of-the-art **Savant Virtual Path™** navigation employing a solid state inertial sensor to compare AGV heading and positional information to a CAD route map in the vehicle's memory. This is ideal for environments where magnetic/optic floor tape or laser reflective wall targets are not desirable or practical. The onboard vehicle computer controls navigation, communication, drive control, load deck and safety systems.

**System Control:** The AGV control system can operate independently, be integrated with a user's IT network or interface with PLC networks and other control systems. Remote AGV call & dispatch can be provided via cart sensors, local call devices and cart RFID tags.

The DC-10 is available with Savant Automation's revolutionary **iQ-CAN™** system controls. iQ-CAN (intelligent Quick Configurable Automation) utilizes a standard PC program that permits quick, easy system design, and allows users to easily make changes to their own systems.



### Savant Low-Profile Vehicle Configurations

#### Standard Features

- Fully automated operation
- SMART vehicle control logic
- Auto-return to battery charge area when battery is low
- Diagnostic mode for fast, easy troubleshooting
- Easy access to user controls
- Remove/Enter on path anywhere without resetting controls
- Pendant for manual operation
- Steel frame construction

#### Warning and Safety Devices

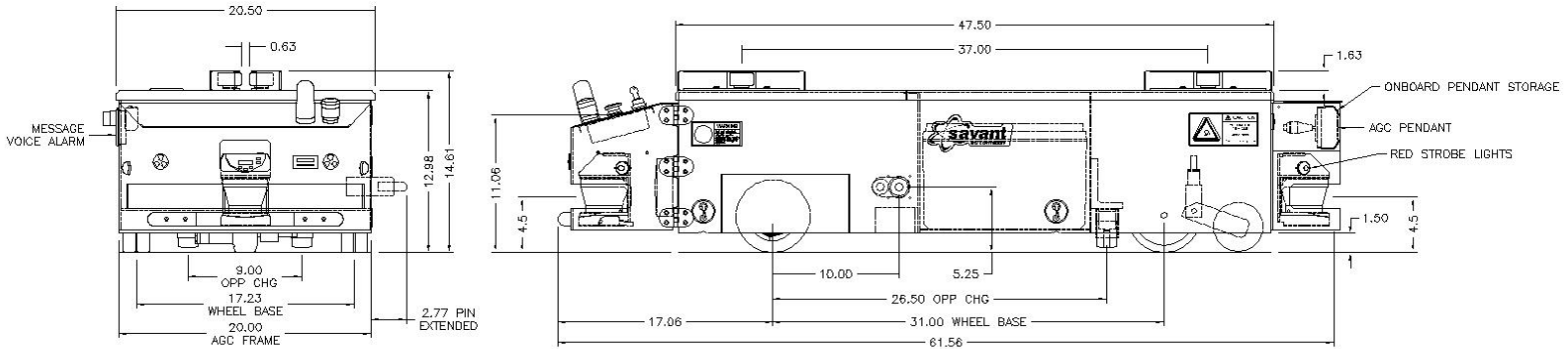
- Programmable safety laser scanner
- Emergency stop buttons
- Audio beeper while in motion
- Flashing warning lights while in motion

#### Options

- Automatic cart elevation
- Elevator interface
- Automatic reversing
- iQ-CAN™ system controls
- Remote vehicle management and dispatching
- Automatic charging
- Turn signals
- Custom load handling configurations
- Voice annunciation

#### Display/Control Panel Features

- Easy to read, 40 characters by 2 line display or industrial grade tablet.
- Status, prompts and error messages displayed
- Displays AGV's current status (on path, low battery, etc.)
- Easy to customize



### Mechanical Specifications

<b>Capacity (gross)</b>	2,000 lbs. (cart or powered deck)
<b>Ramp Capacity</b>	Up to 6% with reduced capacity
<b>Load Type</b>	Application specific: Tunnel/Pinned Platform Cart, Towing, Roller Conveyor, Chain Conveyor, Shuttle or Lift Deck
<b>Drive Configuration</b>	Single wheel steer/drive
<b>Steering Configuration</b>	Steered-wheel with fixed load wheels.
<b>Drive Motor</b>	.13 kw permanent magnet motor
<b>Drive Wheel</b>	5.9" (159mm) diameter x 2" (50mm) wide Vulcolan
<b>Caster Wheels</b>	6" (152mm) diameter x 2" (50mm) wide
<b>Frame</b>	Unitized structural steel - Stainless body
<b>Brake</b>	Electric, fail-safe
<b>Manual Operation</b>	Pendant control
<b>Approx. Weight</b>	400 lbs. empty
<b>Speed in Automatic</b>	200 fpm max. (61 mpm, 2.3 mph); 16 speed ranges, reduced speeds in required areas
<b>Turning Radius</b>	3' minimum (approximates pivot about inside rear wheel)

### Controls Specifications

<b>Controls</b>	Microprocessor, CAN bus
<b>Electrical System</b>	24-volt power
<b>Navigation System</b>	"Virtual" wireless navigation (inertial - 'tape/target-free')
<b>Communications</b>	Via Radio Frequency (RF)
<b>Routing and Traffic</b>	"Smart" vehicle control logic
<b>Battery System</b>	Maintenance-free, TPPL battery set with discharge sensor
<b>Nominal Positioning Accuracy</b>	± 1" (25.4mm) longitudinal, ± 1" (25.4mm) latitudinal Tighter tolerances - optional
<b>Battery Information:</b>	
<b>Battery AH</b>	Two (2) 12V, 89 amp-hour sealed (maintenance free)
<b>Battery Cycle</b>	8 hours minimum, based on standard duty cycle of 20% idle, 40% in motion full speed loaded, 40% in motion full speed unloaded.
<b>Charging Method</b>	Automatic (Fast) charging or optional built-in charger

