

# CREFORM NSI SLIM AGV SERIES, SIMPLE YET SOPHISTICATED.



Made in USA



The NSI Slim series AGV is a high performance, automated tugger designed to streamline material movement in lean manufacturing applications. Guided by a magnetic tape, the vehicle autonomously navigates your facility, slips seamlessly under a stationary cart and engages it with a spring actuated tow pin into the cart's frame. Then the AGV will securely transport materials to a designated workstation or unload-points with precision and reliability. A single NSI AGV has the ability to mobilize multiple carts or a series of NSIs can manage an entire fleet providing a highly scalable solution as production demands increase.

The Creform model offers the most sophisticated control system available in NSI style AGVs, delivering routing flexibility, system responsiveness and operational control. Proudly manufactured in the USA, the NSI Slim series is built for durability, consistency and long-term performance in demanding industrial environments.

#### AGV Features:

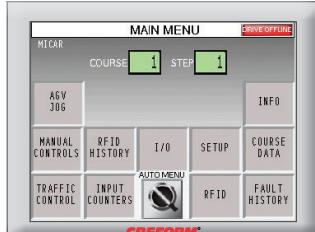
- PLC with HMI touchscreen with easy access control box.
- 50 course 128 command control, programming by PC or HMI.

- Onboard WiFi for traffic management. (Optional)
- Safety — audible warnings and flashing LED lights, obstacle sensors, non-contact laser bumpers and e-stop (emergency stops, temp stops, temp slows, 16 view sets), safety category 3, PLd rated.
- 24 Volt Power — full shift run under capacity load typical. Quick connector for charging. Auto charge optional.
- Manual drive wheel engage/disengage.
- Follows magnetic tape guidepath with Virtual Path capability.
- RFID reader for command initiation. RFID tags initiate AGV functions such as speed changes, turns and extend/retract tow pin.
- Standard 8 bit optical communication device. Often used for remote starting.
- Service & Support: Programming, plus cart/structure designs, kitting or assembly assistance along with route layout installation available from Creform.
- Optional remote control via smart device.
- Opportunity charge located in center of the path.
- Spring actuated tow pin.

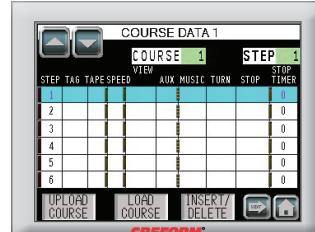
#### Sample HMI Screens



Auto Operation



Manual Operation



Course Program



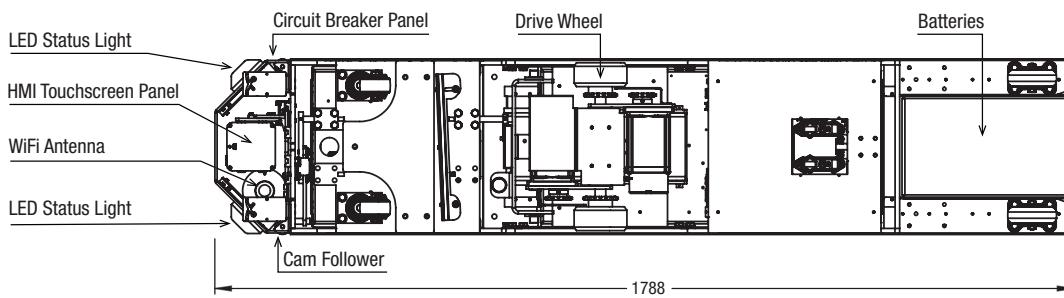
I/O Monitor

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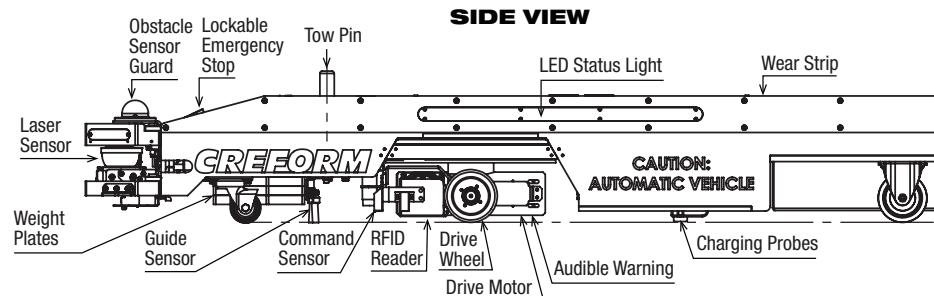
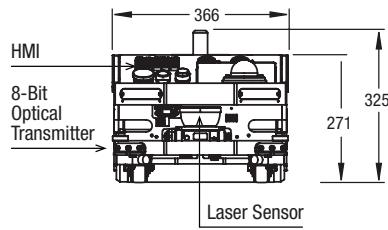
# SPECIFICATIONS

Part number	CA-Z50060-SG3	CA-Z33090-SG3	CA-Z25120-SG3
Speed range	4-50m/min 13-164ft/min	3-33m/min 10-108ft/min	2-25m/min 7-82ft/min
Load capacity	600kg/1320lb	900kg/1980lb	1200kg/2640lb
Draw bar	27kg/60lb	41kg/90lb	54kg/119lb
Direction	90° & 180° turn capability, forward only		
Battery type	24V DC, (2) 12V TPPL, AGM or Lithium Ion batteries 50AH for typical 8 hrs of run time, optional opportunity charging		
Safety devices	16 channel music box, LED lights, 16 view obstacle sensor, non-contact laser bumper, e-stop, safety PLC, CAT 3, PLd rated		
Braking system	Regenerative braking, electromechanical emergency & parking brake		
Minimum turn radius	900mm/35.4"		
Control method	Magnetic command tapes, RFID tags or Virtual Path capable 50 course PLC with HMI, WiFi capable, onboard RF for traffic management (optional)		
Guidepath	50mm wide Creform magnetic tape and/or 6mm wide embedded strip		
Floor condition	Height slope 1% or less, step 2mm or less; trough 10mm or less Surface roughness 10mm or less between min & max		
Usage conditions	Indoor only; 32-140°F, 0-40°C; 30-80% humidity - no dew formation		
Tow pin	30mm shaft OD / approximately 50mm stroke / spring loaded		
Protective circuits	Over current prevention on motor (protected by motor driver) Over current protection on power source (15A breaker)		
Unit weight	290kg/640lb with batteries		

## TOP VIEW



## FRONT VIEW



ISO 9001:  
2015 CERTIFICATION

**CREFORM**<sup>®</sup>

MATERIAL  
HANDLING  
SYSTEMS

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