

Assisted Docking System

Safe and efficient docking operation



The Assisted Docking System is an aircraft damage prevention system designed to enhance docking safety and efficiency. The system assists the driver in the safe aircraft approach and docking of the Rollertrack Conveyor onto the aircraft door sill. It is based on advanced LiDAR technology and complies with IATA AHM 913 standards.

Aircraft Protection

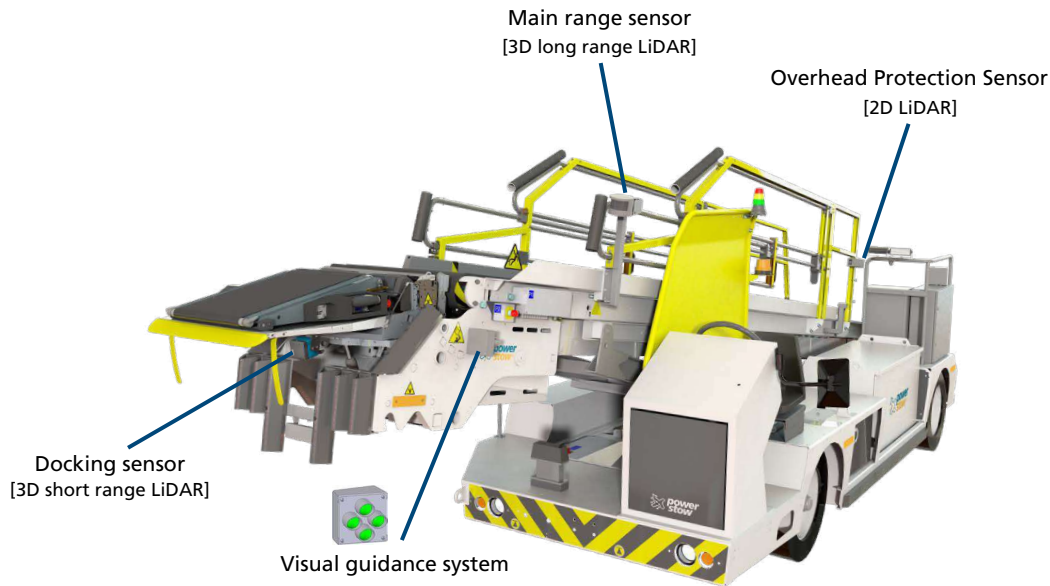
- Reduces risk of incidents of costly damage to the aircraft and GSE equipment
- Utilizes LiDAR technology to detect obstacles, minimizing the risk of damage to aircraft during docking and taxiing, and ensuring a precise docking procedure
- Automatically adapts the speed of the vehicle as it approaches the aircraft and activates braking upon complete docking

Operational Efficiency

- Improves operational efficiency by minimizing delays caused by docking incidents
- Ensures a faster and smoother docking operation by assisted guidance
- Helps enforce correct approach and aircraft docking procedures
- Simplifies the approach process and reduces training time required for drivers

Enhanced Safety for Personnel

- Provides guidance to the driver, easing the approach and docking process, and thereby reducing stress on personnel
- Creates a safer working environment by minimizing the risk of accidents involving ground personnel



Specifications

LiDAR sensors:	The system uses advanced laser technology to provide a detailed, three-dimensional view of the surroundings ahead and the aircraft fuselage. These sensors detect obstacles and provide a precise measurement of the environment to ensure enhanced protection during the docking procedure. The technology offers strong performance in a wide variety of lighting and weather conditions.
Control units:	The system uses several control units (computer, I/O module, PLC) to process data from the sensors and make real-time decisions to ensure safe and efficient driving.
Movement speed:	6m to 2m distance to obstacle = 6 km/h to 0.8 km/h 2m to 0.2m distance to obstacle = 0.8 km/h to 0.36 km/h < 0.2 m distance to obstacle = 0.36 km/h
Compatibility:	Compatible with the most common narrow-body aircraft types
Key features:	<ul style="list-style-type: none"> Autonomous Emergency Brake (AEB) Guidance System Overhead Obstacle Protection Turning Collision Prevention Automatic Brake Tests Collision Registration and Logging System Automated Sensor Calibration Automatic Speed Reduction

Contact

Power Stow A/S
 Erhvervsparken 7
 DK-4621 Gadstrup
 Denmark
 Phone: +45 4631 1032
 Fax: +45 4631 0152
 info@powerstow.com

Power Stow Americas Inc.
 6175 Northbelt Parkway,
 Suite C
 Norcross, GA 30071
 USA
 Phone: +1 404 242 1717
 info-us@powerstow.com

Power Stow Asia Pacific
 Room 719, 228 Meiyuan Road
 Enterprise Plaza,
 Jingan District
 Shanghai 200070
 China
 Phone: +86 139 1737 9084
 info-asia@powerstow.com



www.powerstow.com

Power Stow® Assisted Docking is protected by the following patent number:
 WO/2021/064573