



SDGS Advanced Visual Docking Guidance System

COMPLIANCE

ICAO	• Annex 14 Volume I • DOC 9157 ADM PART 4
EASA	• CS-ADR-DSN
IEC	• EN 50490
CAAC	• AC-137-CA-2022-02



FEATURES

- **Accurate Identification**

Millions of point cloud data per second to accurately distinguish between similar aircrafts in all weather conditions.

- **Accurate Docking**

Measurement accuracy < 10 cm. Predictive stop technology and dynamic speed control for more accurate docking.

- **Flexible Operation**

Fixed and mobile operator panels.

- **More Reliable**

High integration, modular design and ground maintenance.

- **Safer Docking**

Features such as emergency stops, apron barriers alerts, dirty lens detection and low visibility alerts provide safer docking.

- **Vehicle Interference Free**

Automatic identification of vehicles and humans to avoid distractions.

- **Thinner & Lighter**

Half the weight and thickness of similar products.

- **Farther & Faster**

Capture distance > 200m and ten times faster in response.

TECHNICAL DATA

- Laser Scanning Technology: Long-range 3D LiDAR
- Laser Classification: Eye safety Class I
- Field of View: Horizontal 90° x Vertical 30°
- Scanning Accuracy: 0.1°
- Capture Distance: Up to 200m
- Azimuth Guidance Accuracy: 10cm
- Input Power: AC 90~260V, 50/60Hz
- Power Consumption: Avg. 400W
- Display Type: High intensity LED full color display
- Visibility Angle: 160°
- Brightness: >6500 cd/m²
- LED Pixel Pitch: P5
- Operating Temperature: -25°C ~ +60°C
- Wind Load: >44 m/s
- Snow Load: >1000 N/m²
- IP Classification: IP 65

FUNCTIONS

Safe Guidance and Docking

- Automatic activation and guidance of aircraft docking based on information of AODB/A-CDM.
- Capture an aircraft and identify the aircraft type from long distance.
- Checks the compatibility of aircraft and PBB.
- Guides the aircraft to its correct stop position in all weather conditions.
- Monitoring and control of SDGS units

Turnaround and Apron Management

- Continuously scan the complete gate area by 3D LiDAR, obstacles detection and alert to ensure the safety docking.
- Synchronize and data sharing with AODB/A-CDM.
- Interfaces and status monitoring of GSE.
- Interface capability of PBB.
- Monitoring and control of aircraft stand manoeuvring guidance lights.

Ramp Information Display

- Aircraft type
- Flight information
- GSE (PBB, GPU, PCA, etc.) available or not
- A-CDM process, AIBT, AOBT, etc.
- Meteorological information
- Customized messages

