

Safedock A-VDGS Type 2

Advanced Visual Docking
Guidance System



Integrity is Key to Safety and Efficiency

The most efficient, safe and predictable ramp operation during all operating conditions.

An advanced visual docking guidance system (A-VDGS) must never fail to notify the pilot when it is not safe to proceed.

ADB SAFEGATE's Safedock Type 2 A-VDGS is designed with safety and availability in mind to provide intuitive azimuth guidance and accurate distance-to-go information to both pilots for safe, efficient and precise aircraft parking at a gate during all operating conditions and without marshallers.

Technology You Can Trust

Safedock interfaces with airport and airline systems, directly or via our SafeControl Apron Management software, to access flight information, such as the scheduled aircraft type and adjacent gate rules, allow automated docking, share real-time gate intelligence and provide management of the turn process.

Only ADB SAFEGATE's patented 3D laser scanning technology scans the gate area vertically and horizontally to capture and track aircraft. The unique horizontal scan allows the A-VDGS to measure parts of the aircraft on either side of the centerline to discriminate between aircraft types and subtypes. The system matches results against a predefined profile for the expected aircraft type and verifies with 100% accuracy that the approaching aircraft is compatible with gate and adjacent gate rules and it is safe to park. The 3D scan also ensures precise parking for a wide range of parking distances, curved approaches and multiple centerlines.

Safedock does not rely on ambient light and can detect and adjust for low visibility conditions so that availability and safety are never compromised during darkness or bad weather. Safedock has been put to the test on more than 7,000 gates at more than 200 airports worldwide and is proven and trusted in all visibility conditions including rain, fog, snow, extreme sunlight and darkness.

One Safedock Type 2 system has the flexibility to accommodate all aircraft types at a single gate and handle multiple centerlines within the laser scanning angle. The Type 2 high-intensity display is comprised of LED modules in yellow or red and is available in an 18 or 24 LED module configuration.

The Type 2-24 LED display has the added capability to perform as a Ramp Information Display System (RIDS) to communicate critical information to flight and ground crew during the turn process in support of an airport surface CDM program.

Safedock Type 2 A-VDGS Key Features

- Patented 3D laser scanning technique tracks the lateral and longitudinal position of an approaching aircraft.
- 3D scan verifies with 100% accuracy that the approaching aircraft is compatible with gate and adjacent gate rules.
- One system is capable of handling all aircraft types at a single gate.
- Technology allows gate docking in all weather conditions, all visibility/lighting conditions and during ramp closures.
- Intuitive active guidance is provided to both pilots based on the position of the aircraft.
- One system can handle multiple centerlines (T2 allows maximum separation between centerlines of 18°).
- Passenger boarding bridge interface enhances ramp safety.
- LED display provides RIDS capabilities to improve awareness.
- Integrated IP camera records every docking and can be used for ramp surveillance. (Option)
- Interface with airport and airline systems and ground support equipment for real-time gate intelligence.
- Advanced integration and data sharing (A-CDM) is easy via SafeControl Apron Management.
- Operator panel is used to manage the A-VDGS from the apron and includes an emergency stop function.
- Easy to maintain, high reliability and low cost of ownership.

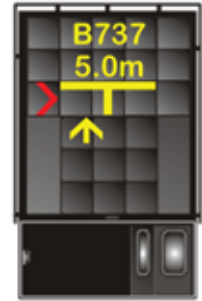
Safedock A-VDGS Type 2

Type 2 Technical Specifications:

Stop position accuracy:	10 cm / 3.9 in
Stop position distance:	8 - 50 m / 26 - 164 ft
Azimuth accuracy:	10 cm / 3.9 in
Horizontal scanning angle:	±13°
Maximum separation between centerlines:	18°
Display type:	High intensity LED
LED configurations:	T2-18 (18 LED modules) T2-24 (24 LED modules)
LED resolution:	16 × 16 diodes per module
LED color:	2 colors, yellow and red
Visibility angle:	48° (with sun shade)
Readability distance:	180 m / 540 ft
Number of RIDS characters, can alternate/scroll text:	T2-18: 18 static alpha/numeric T2-24: 30 static alpha/numeric
Data interface:	Ethernet
Power supply:	115/230 VAC, +10%, 50/60 Hz
Laser classification:	Class 1 eye safe
Operational temperature:	-25°C – +50°C / -13°F – +122°F
Wind load:	Up to 44 m/s
Snow load:	Up to 1000 N/m ²
IP classification:	IP54 (operator panel IP65)
Dimensions w/ sun shade (H × W × D):	1520 × 900 × 422 mm / 59.8 × 35.4 × 25.6 in.
Weight:	100-110 kg / 220-243 lbs



T2-18 pilot view



T2-24 pilot view



T2-18 LED configuration



T2-24 LED configuration



RIDS capability (T2-24 only)
6 rows, 4-6 characters per row



Operator panel