

Safedock

Type 3

Advanced Visual Docking
Guidance System (A-VDGS)



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

Integrity is key to safety and efficiency

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 3 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.

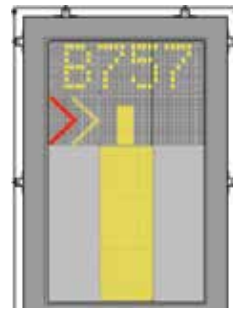
Only ADB SAFEGATE's patented 3D laser scanning technology scans the gate area vertically and horizontally to capture and track aircraft. The unique horizontal scan allows the A-VDGS to measure parts of the aircraft on either side of the centerline to discriminate between aircraft types and subtypes. 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 300 airports worldwide and is proven and trusted in all visibility conditions including rain, fog, snow, extreme sunlight and darkness.

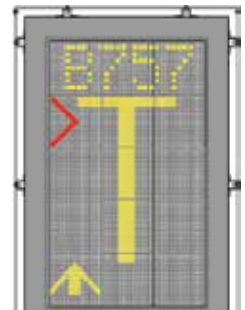
One Safedock Type 3 system has the flexibility to accommodate all aircraft types at a single gate and handle multiple centerlines within the laser scanning angle. The Type 3 LED display is comprised of LED modules in yellow or red and is available in a 9 or 15 LED module configuration.

Safedock Type 3 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 (T3 allows maximum separation between centerlines of 18°).
- Passenger boarding bridge interface enhances ramp safety.
- 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.



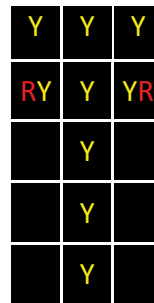
T3-9 pilot view



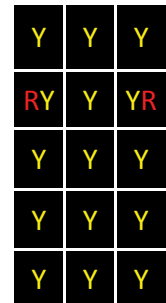
T3-15 pilot view

Type 3 technical specifications:

Sensor technology:	Infrared laser with patented 3D scan
Stop position accuracy:	10 cm (3.9 inches)
Stop position distance:	8 - 50 m (26 - 164 feet)
Azimuth accuracy:	10 cm (3.9 inches)
Horizontal scanning angle:	±13°
Maximum separation between centerlines:	18°
Display type:	High intensity LED
LED configurations:	T3-9 (9 LED modules) T3-15 (15 LED modules)
LED resolution:	8 x 8 diodes per module
LED color:	2 colors (yellow and red)
Visibility angle:	48° (with sun shade)
Readability distance:	80 m (262 feet)
Data interface:	Ethernet
Power supply:	115/230VAC, +10%, 50/60Hz
Laser classification:	Class 1 eye safe
Operational temperature:	-25°C – +50°C (-13°F – +122°F)
Wind load:	Up to 44 m
Snow load:	Up to 1000 N/m ²
IP classification:	IP54 (operator panel IP65)
Dimensions w/ sun shade:	1,396 h x 656 w x 650 d mm (55 h x 25.8 w x 25.6 d inches)
Weight:	90-100 kg (198-220 lbs)



T3-9 LED configuration



T3-15 LED configuration



Operator panel