

RLG Docking Systems, Inc

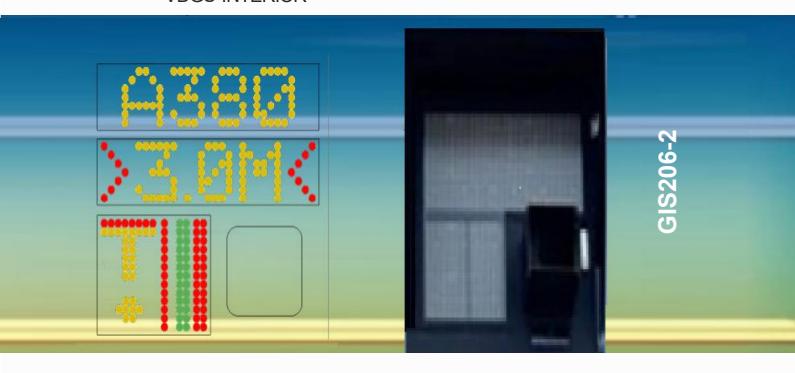


www.rlgvdgs.com THE FIRST VDGS MANUFACTURER OF THE WORLD



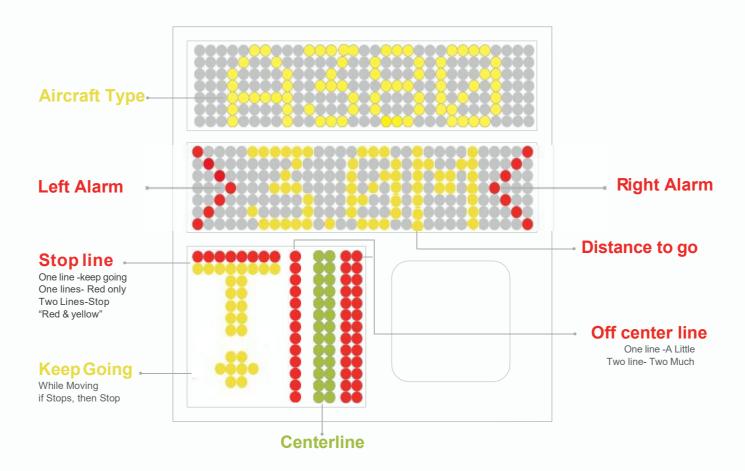
- Providing unambiguous guidance for both the pilot and the copilot
- Alert for the aircraft type ID identification and verification
- Full graphical user interface on operator panels
- Highly visible alphanumeric display and azimuth bar
- Stopping position accuracy around a 10-cm error range typically
- Automatically generated log files for troubleshooting
- FOD (Foreign Object Debris) function
- Real-time monitoring on the apron and the LED display by dual camera
- Al-based Soft-LiDAR strengthens the resistance to the extreme weather
- RIDS displays extra information during the idle time
- Compliance with ICAO Annex 14 version 9 sections 5.3.25 and 5.3.26

VDGS INTERIOR



SYSTEM OVERVIEW

The only existing AVDGS Systems brand fully complies ICAO Annex 14@ Follows Chapter 5.3.25.12



EQUIPMENT OPERATOR PANEL

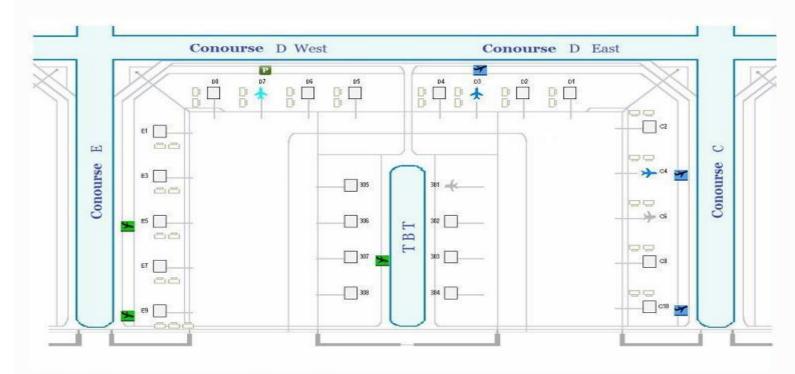
- Industrial-grade color touch screen
- One-click aircraft model selection
- Computers-connectable for data maintenance and program updates
- Equipped with emergency stop button





LIFE TIME STORAGE FOR DOCKING SYSTEM

- Beginner-friendly
- Windows operating system based
- Real-time log file recording
- Display the real-time information of the azimuth and the speed
- Updating new aircraft type supported



Gate Operating System (GOS) Features

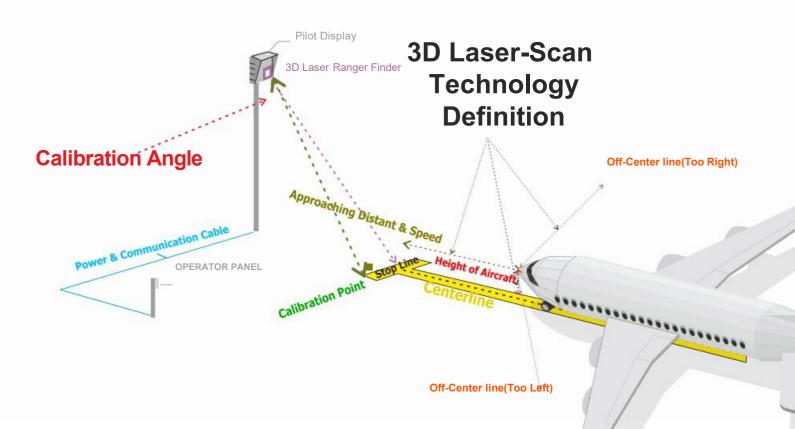
- Real-time gate status monitoring
- Intuitive and user-friendly graphical user interface
- Parking time recording for airline billing system
- Generated daily reports on each category
- Recording of the real-time monitoring video supported



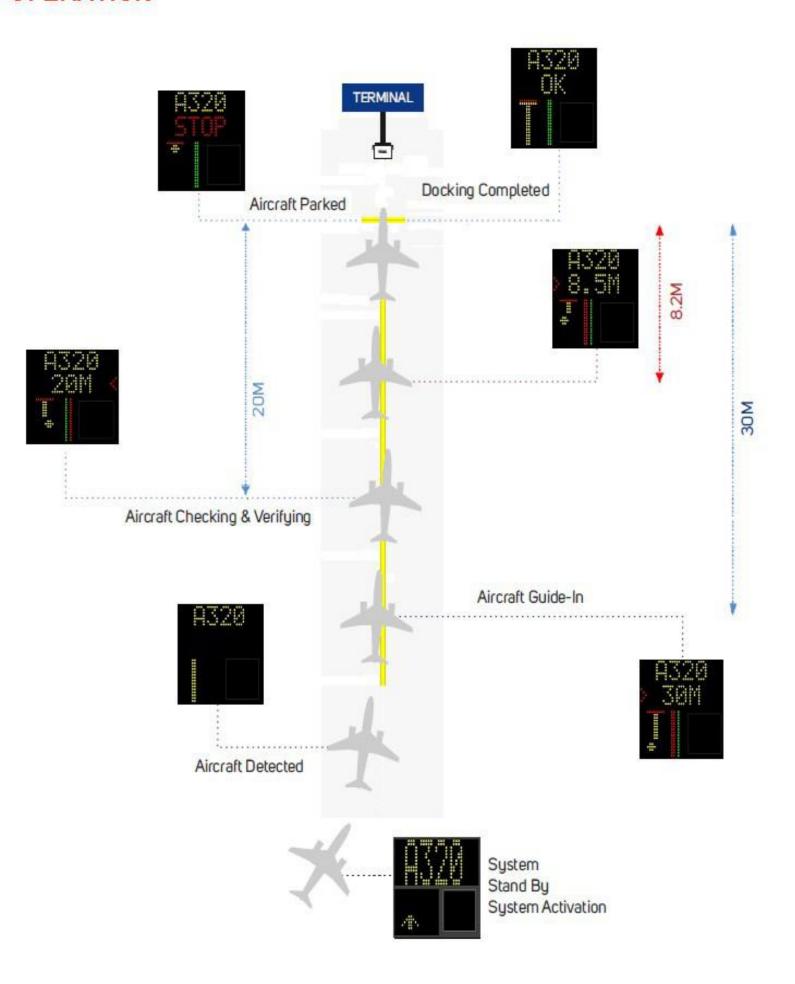
RLG Docking Systems Corporation is a pioneering manufacturer of Advanced Visual Docking Guidance Systems (A-VDGS) for airports worldwide. Our legacy dates back to 1969, when RLG Docking Systems invented the world's first automated aircraft guide-in system. Building upon this rich history and expertise, RLG Taiwan, established in 2013, has carried forward RLG's technology and experience, boasting over 10 years of dedicated experience in the A-VDGS business.

CONCEPT DESIGN OF AVDGS SYSTEM

- Advanced Visual Docking Guidance System (AVDGS) is a system instructing pilots to park the aircrafts at the apron
 accurately via visual methods usually. The systems allow them to keep the apron clear of obstructions and ensure
 the passenger boarding bridge (PBB) reaches the doors of the aircraft correctly.
- The RLG GIS 206-2 system safely guides the aircraft to the precise parking position at the apron. The use of a 2-axis scanning rangefinder laser can detect the current position of the aircraft, and the system can present the information on the LED display for both the pilot and the copilot.
- The RLG GIS 206-2 can identify and verify the model of the approaching aircraft. If the model is not consistent with the one selected at the beginning of the docking process, the alert will be issued. And the whole process will be taken over by the crews of the marshaller.
- The RLG GIS 206-2 LED display console is attached to the terminal building or other support fixtures that are precisely lined up with, and perpendicular to, the extension of the centerline on the apron.
- The arrangement aligns the laser portion of the RLG GIS 206-2 with the azimuth center of the aircraft. And the height above the ground to install the LED display console should be determined by ensuring the comfortable visibility of the alphanumeric display for the pilots regardless of the height of the aircraft.
- After the installation of the LED display console, the setup scanning procedure is required to be performed to ensure the best possible performance of the AVDGS.



OPERATION



A COMPLETE AND SUCCESSFUL DOCKING PROCEDURE CONSISTS OF 6 STAGES.

a) System Standby

Turn on the power from the operator panel. The system will boot up within one minute and stand by for the docking process.

b) System activation

After logging in to the system, the aircraft type can be selected and shown on the LED display console and the operator panel screen. The laser scanner is activated, and the system is ready for the docking process.

c) Aircraft detected

When the approaching aircraft is detected, usually more than 40 meters from the stopping position, the azimuth green bar will display on the LED display console to inform the pilot.

d) Aircraft Guide-in

Aircraft guide-in information such as continuous closing distance and azimuth guidance will display on the LED display console when the aircraft moves slowly toward the stopping position along the centerline on the apron.

e) Aircraft checking & verification

When the aircraft is slowly approaching the stopping position, it must be identified and verified at least 12 meters before the correct stopping position. If the type of the aircraft is not consistent, the system will display "ID FAIL" followed by "STOP" on the LED display console.

f) Aircraft parked

When the approaching aircraft reaches the stopping position correctly, the LED display console will show "STOP" followed by "OK." If the aircraft has moved beyond the stopping position and exceeded the acceptable distance, the LED display console will show "Too Far."





Operator Panel	
Operator Panel Display Type	Color LCD Touch Panel
Operator Panel Interface	Serial Communication RS 422/485
PC connectivity for maintenance	TCP/IP 10/100/1000 Base T
Operator Panel IP level	IP 65
Operator Panel Operation Temperature	-25 ° C~ +55 ° C
Processor	Intel® Atom™ Processor N2600 1.6GHz(or greater)
SO-DIMM up to 2GB USB	4x USB
HDD	8GB Cfast
Display Type	7" TFT-LCD
Power Input	12~24V DC
Construction	Aluminum Front Bezel & SGCC
IP Rating	IP65 front bezel
Net Weight	2.3kgs
Certification	CE/FCC Class/UL
Operating System Support	Windows
Operator Panel Dimensions	352mm(W) x 450mm(H) x 245mm(D)(Carton and fixed with ear)

AVDGS Display System GIS 206-2	
System Power	AC Input: 85~240V, 50Hz~60Hz, Auto Select<210 Watts
Laser Category	FDA CDRH Class 1, Eye Safe, 905nm
Horizontal Scan	+ /-15 degrees
Vertical Scan	-5 (up) / +25 (down) degrees
Range	150 meters
Azimuth Accuracy	0.2 degrees or 0.1 meter
Stop Position Accuracy	0.1 meters
Maximum Center line supported	3
Display Character Height	350mm / 202 mm
Display Visibility Distance	> 200 meters
Display Type	LED (3 colours)
Pilot Display Panel Material	Aluminum
Pilot Display Console Weight App	70kg (including Laser Unit)
IP level	IP54
System Operation Temperature	-25 ° C~ +55 ° C
System Operation Humidity	5% - 95% (non condensing)
RIDS Support	Yes(Optional)
Wireless Support	Yes, External USB Dongle, support 802.11n Wi-Fi
GOS Interface	XML interface with AODB or other system
FOD detection	General 100 cm x 100 cm x 100 cm
Soft-LiDAR	Al algorithm with 3D Scanning
Surveillance Camera Standard	Optional Dual Cameras Support Available

NOTE: WE RESERVE THE RIGHT TO CHANGE THE SPECIFICATION WITHOUT NOTICE.













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