SIGNS

RELIANCE

LED Signs for Airfield Guidance and Gate

Compliance with Standards

ICAO	Annex 14 Volume I (current edition)
EASA	CS-ADR-DSN (current edition)
Australia	MOS 139
NATO	STANAG 3316
STAC	SPE/STAC/SE/E/VIS/6008
AENA	DIN/DSEYN/PPT/022-02/12
ROS/MAK	
CE	
UKCA	

Uses

RELIANCE illuminated airfield guidance signs are used as information, mandatory instruction, position and direction indicators in accordance with ICAO Annex 14, Section 5.4 Signs. The signs are available with 322 km/h or 480 km/h wind load compliant options.

RELIANCE illuminated gate signs are used as aircraft stand identification sign in accordance with ICAO Annex 14, Section 5.4 Signs.

Information Sign
Informational Direction, Destination, and Boundary signs - black inscription on a yellow background. Designed to guide pilots to a particular point on the airfield by identifying runway exits, taxiway directions, taxiway intersections, taxiway ending, and inbound/outbound destinations, boundaries.

Mandatory Sign
Mandatory Instruction sign – white inscription on a red background. Designed to identify holding positions, runway intersections, and prohibit aircraft entry into designated areas.

Location Sign
Runway and Taxiway Location signs - yellow inscription on a black background and only where it is a stand-alone sign shall have a yellow border. Designed to identify taxiway and runway location on which the aircraft is located.

Aircraft Stand Identification Sign
Gate and Stand Identification signs - black inscription on a yellow background. Designed to identify to the pilots the particular gate/stand location.

Features and Benefits

LED Technology ensures a future proof airfield sign investment that removes the uncertainty of the proposed international phase out regulations for the traditional incandescent lamps.

- Long lasting light source
- Low power consumption
- Environmentally friendly
- Durable and vibration resistant
- Dramatically reduce maintenance costs and airport operation interruptions

Designed for Harsh Environments

Designed for harsh environments to dramatically extend component life and increase operational efficiency.

- Anodized aluminum housings
- Stainless-steel hardware and fixings
- Built-in surge and lightning protection
- Legend panel is made of UV-resistant polycarbonate to withstand jet blasts and other external forces
- LED strip and electronics box tested and certified for IP67 protection

Construction

- Sign housing/frame made from aluminum
- Mounting feet and poles made from aluminum
- Electronics box made from aluminum
- Legend panel front of UV-resistant polycarbonate

Operating Conditions

Operating Condition	Symbol	Specification
Operating temperature	T_A	-40 °C to +70 °C
Storage temperature	T_{STG}	-60 °C to +80 °C
Humidity	RH	Up to 100%

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Power Consumption

Power Factor (PF) typically >95%. Use the table to calculate CCR load and transformer sizing. For circuits or signs operating as low as 6.3A, the VA consumption may increase up to 5%.

Sign Size (mm) (Height x Length)	Electrical Supply	VA Load	Minimum Transformer Size (W)[1]
700 × 1150	6.6 A	20	45
700 × 1300	6.6 A	23	45
700 × 1600	6.6 A	27	45
700 × 1800	6.6 A	30	45
700 × 2100	6.6 A	35	45
700 × 2500	6.6 A	40	65
700 × 2650	6.6 A	42	65
700 × 3000	6.6 A	47	65
900 × 1150	6.6 A	29	45
900 × 1300	6.6 A	33	45
900 × 1600	6.6 A	40	65
900 × 1800	6.6 A	42	65
900 × 2100	6.6 A	48	65
900 × 2500	6.6 A	47	65
900 × 2650	6.6 A	50	65
900 × 3000	6.6 A	56	65
900 × 900 Gate	230 VAC	22	N/A
1200 × 1200 Gate	230 VAC	32	N/A
700 × 1300 Gate	230 VAC	TBD	N/A

Notes

[1] Maximum 40m of 2.5mm^2 (AWG14) secondary cable and no ILCMS.

Electrical Supply

RELIANCE™ Airfield Signs are available in parallel and series versions according to power requirements. RELIANCE™ Gate Signs are available in parallel only.

Power	Requirements
Constant Current Regulator (Series system)	2.8-6.6 A, 50/60 Hz 3-7 step CCR
Mains Power System (Parallel system)	120-240 VAC, 50/60 Hz

Dimensions and Weight

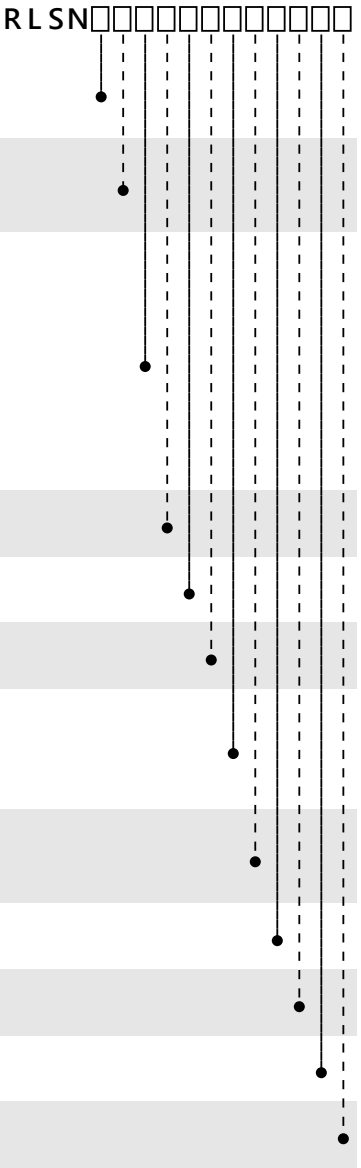
Dimensions are the overall outer dimensions of the sign frame. The visible face of the sign legend panel is 100 mm less than the height and width of the sign frame. When installed and mounted onto poles and Y-shaped feet, the total sign height increases by approximately 100 mm.

Sign Size (mm) (Height x Length)	Weight (kg) (322 km/h)	Weight (kg) (480 km/h)
700 x 1150	24.8	24.8
700 x 1300	26.5	26.5
700 x 1600	31.0	35.0
700 x 1800	33.7	37.7
700 x 2100	41.2	41.2
700 x 2500	46.0	50.0
700 x 2650	51.4	51.4
700 x 3000	60.0	60.0
900 x 1150	28.8	33.3
900 x 1300	31.0	35.5
900 x 1600	36.0	44.5
900 x 1800	39.7	48.2
900 x 2100	48.2	52.7
900 x 2500	53.9	62.4
900 x 2650	56.4	64.9
900 x 3000	61.9	66.4
900 x 900 Gate	21.0	N/A
1200 x 1200 Gate	32.5	N/A
700 x 1300 Gate	24.5	N/A

Note: 900 x 900 mm gate sign is used to display the gate/stand number only. 1200 x 1200 mm gate sign is used to display the gate/stand number and coordinates.

Guidance Sign

R L S N □□□□□□□□□□□□□



Application
2 = 322 km/h (mode 2)
3 = 483 km/h (mode 3)

Height
7 = 700 mm
9 = 900 mm

Length
1 = 1150 mm
2 = 1300 mm
3 = 1600 mm
4 = 1800 mm
5 = 2100 mm
6 = 2500 mm
7 = 2650 mm
8 = 3000 mm

Intensity
D = Dimmable

Options
0 = No option

Sides
1 = One-sided

Frame Color
G = Grey
Y = Yellow
B = Black

Power and Monitoring
S = 2.8 - 6.6 A, no monitoring
V = VAC

Standard
I = ICAO

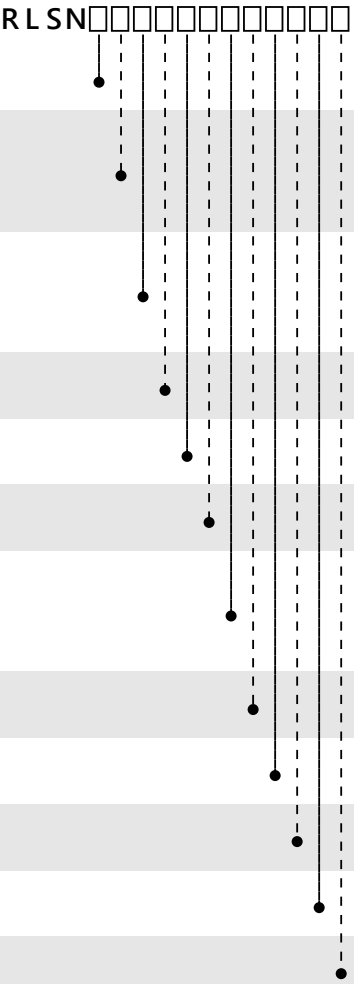
Connector type
0 = No options

Cable leads
0 = No options

Version
1 = First version

Gate Sign

R L S N □□□□□□□□□□□□□



Application
G = Gate Sign

Height
2 = 1200 mm[1]
7 = 700 mm[1]
9 = 900 mm[1]

Length
2 = 1200 mm[1]
3 = 1300 mm[1]
9 = 900 mm[1]

Intensity
D = Dimmable

Options
0 = No option

Sides
1 = One-sided

Frame Color
G = Grey
Y = Yellow
B = Black

Power and Monitoring
V = VAC

Standard
I = ICAO

Connector type
0 = No options

Cable leads
0 = No options

Version
1 = First version

Notes

1 Only available as 900 x 900, 1200 x 1200, and 700 x 1300 mm