

SafeLED Sign

Guidance Sign and Gate Sign



Compliance with Standards

ICAO: Annex 14 Volume I (Current edition)
ICAO: Aerodrome design manual part 4 and 6
IEC: 61827
STAC

Uses

- Information Sign
- Mandatory Instruction Sign
- Aircraft Stand Identification Sign

SafeLED 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 322km/h (Mode 2) or 480km/h (Mode 3) wind load requirements as an option.

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

The sign construction includes a housing made from aluminum and a display front of UV-resistant plastic.

SafeLED signs are available in two versions according to power requirements:

| Power | Light |
|---|---|
| Constant Current Regulator (Series Fed) | Current range 2.8 - 6.6 A 14-45 W LED modules |
| Mains Power System (Parallel system) | Voltage range 120-240 VAC, 50/60 Hz 14-45 W LED modules |

Features & Benefits

LED-based light source

LED technology offers a long lasting light source, low power consumption, a technology which is environmentally friendly and robust to vibration. By using SafeLED Signs the maintenance cost of signs and airport operation interruptions is dramatically reduced.

LED technology secures a future proof airfield sign investment and removes the uncertainty of the proposed international phase out regulations for the traditional incandescent lamps.

Designed for harsh environments

SafeLED Sign is designed for use in harsh environments. The electronic components are encapsulated in waterproof polyurethane and are well protected from wear and tear. Housings are anodized aluminum and fixings are stainless steel. Component life cycle is dramatically extended and operational lifespan is greatly increased. There is also built-in surge and lightning protection. The front plate is made of UV-resistant polycarbonate to withstand jet blasts and other external forces. To ensure a long life for the sign, the LED strip is tested and certified for IP67 protection.

Technical Data

Table 1: Series Circuit

| Characteristics | Symbol | Min | Max | Unit |
|---|---------------------|-----|-----|------------------|
| Supply current from series circuit (50 or 60Hz) with 3-7 intensity levels CCR | I _{SUPPLY} | 2.8 | 6.6 | A _{RMS} |

SafeLED Sign

Table 2: Total Power Consumption - Power Factor (PF) typically >0.95

| Characteristics | Symbol | Min | Max | Unit |
|--------------------------------------|------------------|-----|-----|------|
| 700 x 1150 mm @ 6.6 A _{RMS} | P _{tot} | - | 23 | W |
| 700 x 1300 mm @ 6.6 A _{RMS} | P _{tot} | - | 25 | W |
| 700 x 1600 mm @ 6.6 A _{RMS} | P _{tot} | - | 29 | W |
| 700 x 1800 mm @ 6.6 A _{RMS} | P _{tot} | - | 30 | W |
| 700 x 2100 mm @ 6.6 A _{RMS} | P _{tot} | - | 35 | W |
| 700 x 2500 mm @ 6.6 A _{RMS} | P _{tot} | - | 40 | W |
| 700 x 2650 mm @ 6.6 A _{RMS} | P _{tot} | - | 42 | W |
| 700 x 3000 mm @ 6.6 A _{RMS} | P _{tot} | - | 46 | W |
| 900 x 1150 mm @ 6.6 A _{RMS} | P _{tot} | - | 27 | W |
| 900 x 1300 mm @ 6.6 A _{RMS} | P _{tot} | - | 29 | W |
| 900 x 1600 mm @ 6.6 A _{RMS} | P _{tot} | - | 34 | W |
| 900 x 1800 mm @ 6.6 A _{RMS} | P _{tot} | - | 37 | W |
| 900 x 2100 mm @ 6.6 A _{RMS} | P _{tot} | - | 41 | W |
| 900 x 2500 mm @ 6.6 A _{RMS} | P _{tot} | - | 47 | W |
| 900 x 2650 mm @ 6.6 A _{RMS} | P _{tot} | - | 50 | W |
| 900 x 3000 mm @ 6.6 A _{RMS} | P _{tot} | - | 55 | W |
| 900 x 900 mm Gate sign @ 230VAC | P _{tot} | - | 22 | W |
| 1200 x 1200 mm Gate sign @ 230VAC | P _{tot} | - | 32 | W |

Table 3: Environment

| Characteristics | Symbol | Min | Max | Unit |
|-----------------------------|------------------|-----|-----|------|
| Operating humidity range | RH | 0 | 100 | % |
| Operating temperature range | T _A | -40 | +70 | °C |
| Storage temperature range | T _{STG} | -60 | +80 | °C |

Table 4: General description

| Name | Description |
|--------------|--|
| Power Supply | An integrated, encapsulated electronic converter for series circuits (2.8-6.6A) or mains power (120/230Vac). Power Factor (PF) typically >0.95 |
| Optics | Transilluminating LEDs, no reflectors are used. UV-resistant polycarbonate front panel is printed on the back side with UV-resistant color. Note: Lifetime of LEDs depends on operation. |
| Photometry | Distribution and homogeneity comply with ICAO Annex 14. |
| Color | Complying with ICAO Annex 14. |
| Finish | External parts are made of aluminum alloy and polycarbonate. All fixings and fastening are stainless steel. |

Note: For more information about the product, including manuals and certifications, please see the Product Center on our website, www.adbsafegate.com.

Standard Outer Dimensions

| Guidance signs | Measurement (mm) |
|----------------|---|
| Height | 700, 900 |
| Width | 1150, 1300, 1600, 1800, 2100, 2500, 2650 and 3000 |

| Gate signs | Measurement (mm) |
|----------------|---------------------------|
| Height × width | 900 × 900 and 1200 × 1200 |

Note: 900 × 900 mm sign fits stand number.

1200 × 1200 mm fits stand number and coordinates.

When installed, the total sign heights mounted on poles increases by 100 mm. The height and width of the sign including frame is 100 mm more than the visible front area.

Ordering Code Guidance Sign

Product

SN = Sign

Application

2 = Mode 2, 322 km/h
3 = Mode 3, 483 km/h

Height

7 = 700 mm
9 = 900 mm

Length

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

Intensity

D = Dimmable

Sides

1 = One sided

Frame Color

G = Grey
Y = Yellow
B = Black

Power & Monitoring

S = 2.8 - 6.6A, No monitoring
V = VAC

Standard

I = ICAO

Version

1 = First edition

SL SN X X X D 0 1 X X I 0 0 1

Ordering Code Gate Sign

Product

SN = Sign

Application

G = Gate Sign

Height¹

9 = 900 mm
2 = 1200 mm

Length¹

9 = 900 mm
2 = 1200 mm

Intensity

D = Dimmable

Sides

1 = One sided

Frame Color

G = Grey
Y = Yellow
B = Black

Power & Monitoring

V = VAC

Standard

I = ICAO

Version

1 = First edition

SL SN X X X D 0 1 X V I 0 0 1

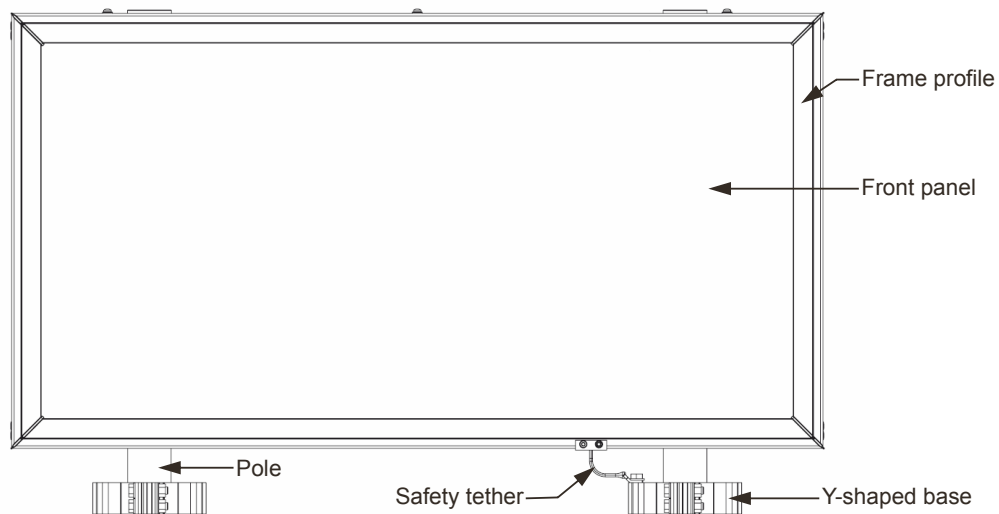
Note

¹ Only available as 900 x 900 or 1200 x 1200

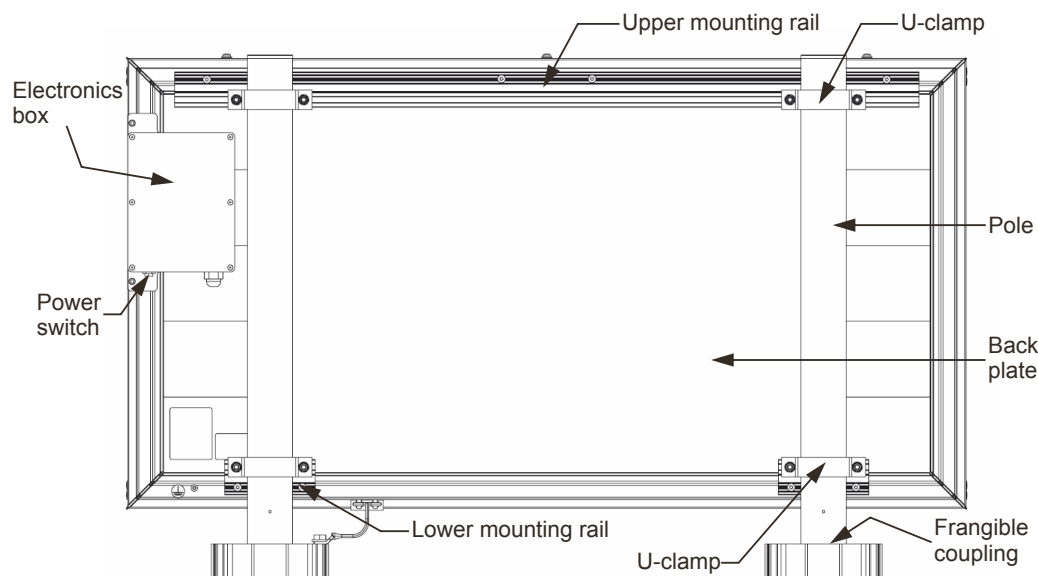
SafeLED Sign

Construction

SafeLED Sign components



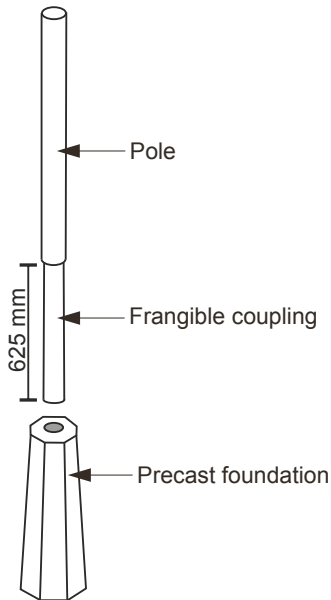
Sign front



Sign back

Precast foundation (Optional)

Precast foundations are optional. Collar shims are **not** included as part of the sign assemblies. The frangible couplings are only designed to be with foundations that accept 60 mm diameter pipe and have an insertion depth for the pipe of 625 mm.



Note: All descriptions and photometric characteristics in this publication present only general particulars and shall not form part of any contract. The right is reserved to change them without prior notification.