# Solar Airfield Guidance Signs

Flash Technology solar LED airfield guidance signs are a simple solution for airfields that experience difficulties with grid access or for those that require a quick, minimally-disruptive addition to an existing airfield.

- ↗ Includes a solar-powered sign and a solar engine power supply (SEPS)
- ↗ SEPS incorporates the latest technology in solar technology, hardware and software to provide a reliable and sustainable power source.
- ↗ High-quality LED light source virtually eliminates runway shutdowns, reduces re-lamping expenses and on-going maintenance costs.
- ↗ Battery life of 5+ years
- ↗ Easy installation and relocation—no specialized work crews required
- ↗ Limited air traffic disruption and functions immediately upon installation
- ↗ Optional Handheld Controller allows for remote, wireless operation for enhanced visibility in poor weather conditions.
- ↗ 7+ days of autonomy (operation without solar charging)—scalable to meet requirements up to 40 days

## Construction

Corrosion-resistant sign construction requires minimal maintenance:

- ↗ Aluminum housing
- ↗ Acrylic sign legend panels
- ↗ Stainless steel hardware, retroreflective sheeting

## Installation

- ↗ Each sign ships with frangile couplings and floor flanges-ready for installation on a concrete pad (recommended installation method).
- ↗ The SEPS should be installed on a level concrete pad within 20 feet of the solar sign.
- ↗ For a temporary application, the wiring between the SEPS and the sign can be above ground. Both the sign and SEPS contain side conduits for cabling access.

## MODELS

| Type | Purpose | Legend Color | Background |
|------|---------|--------------|------------|
| L-858Y | Direction, Destination & Boundary | 58.6" (149 cm) | Yellow |
| L-858R | Mandatory Sign | 71.6" (182 cm) | Red |
| L-858L | Runway/Taxiway Location | Yellow | Black |
| L-858B | Runway Distance Remaining | White | Black |

## SPECIFICATIONS

| | |
|---|---|
| Compliance | FAA: Meets L-858Y, L-858R, L-858L and L-858B per AC 150/5345-44 and Engineering Brief 67 |
| | CE: Complies with EMC Directive 2004/108/EC |
| | ICAO: Please inquire about ICAO compliant options |
| Temperature | -40 °F to +131 °F (-40 °C to +55 °C) |
| Humidity | 1-100% |
| Wind | Mode 2 signs withstand wind velocities up to 225 mph |

# Airfield Guidance Signs

## SIGN HEIGHTS

| Type | Size Number | Face Height | Legend Height | Mounting Height |
|------|-------------|-------------|---------------|-----------------|
| L-858Y/R/L | 1 | 18" (45.7 cm) | 12" (30.5 cm) | 29.7" (75.5 cm) |
| L-858Y/R/L | 2 | 24" (61 cm) | 15" (38.1 cm) | 35.7" (90.8 cm) |
| L-858Y/R/L | 3 | 30" (76.2 cm) | 18" (45.7 cm) | 41.7" (106 cm) |
| L-858B | 4 | 48" (122 cm) | 40" (101.6 cm) | 58.2" (147.8 cm) |
| L-858B | 5 | 30" (76.2 cm) | 25" (63.5 cm) | 41.7" (106 cm) |

## SIGN LENGTHS

| Number | 1 Module | 2 Module | 3 Module | 4 Module |
|--------|----------|----------|----------|----------|
| 1 | 29.4" (75 cm) | 58.6" (149 cm) | 87.9" (223 cm) | 117.2" (298 cm) |
| 2 | 35.9" (91 cm) | 71.6" (182 cm) | 107.4" (273 cm) | 143.2" (364 cm) |
| 3 | 42.4" (108 cm) | 84.6" (215 cm) | 126.9" (323 cm) | 169.2" (430 cm) |
| 4 | 47.9" (122 cm) | n/a | n/a | n/a |
| 5 | 42.4" (108 cm) | n/a | n/a | n/a |

*Note: Sign depth is 9.4" (23.9 cm)*

## CONFIGURATION

| Type | Size | Module | RF Control | Face |
|------|------|--------|------------|------|
| L-858Y<br>L-858R<br>L-858L<br>L-858B | 1<br>2<br>3<br>4<br>5 | 1<br>2<br>3<br>4 | RF<br>NA | Single<br>Double |

## LED DRIVER

| | |
|--|--|
| Channel A | 18-38 VDC from 0.3-1.4 A<br>5-100% duty cycle, constant current |
| Channel B | 18-38 VDC from 0.3-1.4 A<br>5-100% duty cycle, constant current |
| Automatic Light Control (ALC) | When enabled, automatically adjusts to low levels of sunlight to ensure continued autonomous operation |
| | Available on channels A and B |
| Control, Autonomous Mode | Dusk-to-dawn, steady-on |
| Load Cabling | 22' (6.7 m) cable can exit onto the surface or down into a ground pot |

## PV PANEL

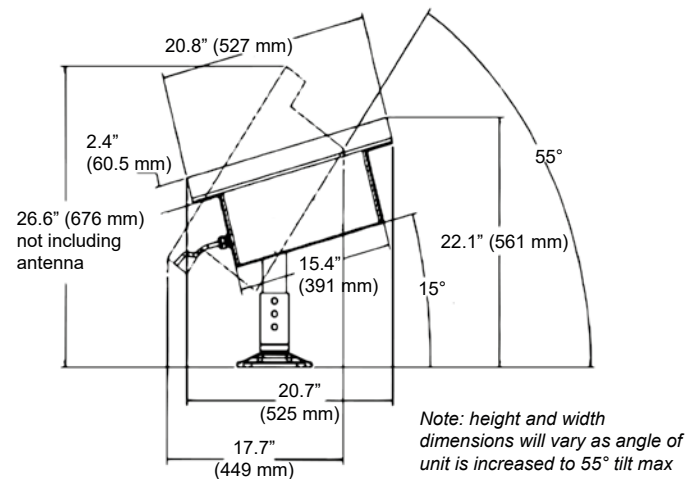| | |
|--|--|
| Power | 95 W |
| Type | High-efficiency monocrystalline, IEC 61215 |
| Lifetime | 10 years at 90% output |

## WIRELESS

| | |
|--|--|
| Range | 2.5 miles (4 km) |
| Frequency | 900 MHz ISM Band, FHSS |
| Encryption | 256-bit AES |
| Control, Ondemand Mode | Seamless integration with existing Flash Technology wireless solar products |
| | Up to 8 independent groups |
| | Flash, emergency, autonomous, ondemand temporary, configuration and ARCAL modes |

## SEPS SPECIFICATIONS

| | |
|--|--|
| Installed Weight | 132 lbs (59.8 kg) |
| Shipping Weight | Box 1 (SEPS): 76 lbs (34.4 kg) |
| | Box 2 (battery): 68 lbs (30.8 kg) |
| Installed Dimensions | 42.9 x 29.9 x 17.4" (108.9 x 75.9 x 44.1 cm)<br>With wireless antenna at 55° tilt |
| Shipping Dimensions | Box 1 (SEPS):  46.9 x 25.5 x 14"<br>(119.1 x 64.7 x 35.6 cm) |
| | Box 2 (battery): 13.1 x 8.3 x 7.4"<br>(33.2 x 21 x 18.8"cm) |
| Temperature | Operating: -22 to +122 °F (-30 to +50 °C) |
| | Storage: -40 to +176 °F (-40 to +80 °C) |
| Type | Replaceable and recyclable |
| | Absorbent glass mat (AGM) SLA |
| | Standard with 1 battery |
| Lifetime | 4,000 cycles to 20% depth of discharge at +68 °F (+20°C) |
| Charger | Temperature-compensated, maximum power point tracking (TC-MPPT) |

## SEPS DIMENSIONS



20.8" (527 mm)

2.4" (60.5 mm)

26.6" (676 mm) not including antenna

55°

22.1" (561 mm)

15.4" (391 mm)

15°

20.7" (525 mm)

17.7" (449 mm)

*Note: height and width dimensions will vary as angle of unit is increased to 55° tilt max*

## PACKAGING DATA
*Signs are shipped with frangible couplings and floor flange-ready for installation.*

| Description | | Gross Weight | Dimensions |
|-------------|--|--------------|------------|
| Size 1 | Module 1 | 46 lbs (21 kg) | 34 x 34 x 13" (87 x 86.4 x 33 cm) |
| | Module 2 | 78 lbs (35 kg) | 34 x 63 x 13" (87 x 160 x 33 cm) |
| | Module 3 | 115 lbs (52 kg) | 34 x 92 x 13" (87 x 234 x 33 cm) |
| | Module 4 | 169 lbs (77 kg) | 34 x 121 x 13" (87 x 307 x 33 cm) |
| Size 2 | Module 1 | 71 lbs (32 kg) | 40 x 40 x 13" (102 x 102 x 33 cm) |
| | Module 2 | 104 lbs (47 kg) | 40 x 76 x 13" (102 x 193 x 33 cm) |
| | Module 3 | 153 lbs (70 kg) | 40 x 112 x 13" (102 x 285 x 33 cm) |
| | Module 4 | 220 lbs (100 kg) | 40 x 147 x 13" (102 x 374 x 33 cm) |
| Size 3 | Module 1 | 81 lbs (37 kg) | 46 x 46 x 13" (117 x 117 x 33 cm) |
| | Module 2 | 131 lbs (60 kg) | 46 x 89 x 13" (117 x 226 x 33 cm) |
| | Module 3 | 199 lbs (90 kg) | 46 x 131 x 13" (117 x 333 x 33 cm) |
| | Module 4 | 252 lbs (114 ) | 46 x 173 x 13" (117 x 440 x 33 cm) |
| Size 4 | Module 1 | 120 lbs (54 kg) | 62 x 52 x 13" (158 x 132 x 33 cm) |
| Size 5 | Module 1 | 85 lbs (39 kg) | 46 x 46 x 13" (117 x 117 x 33 cm) |

CE  RoHS  Pb

# FLASH TECHNOLOGY