# DALI HF LS LI

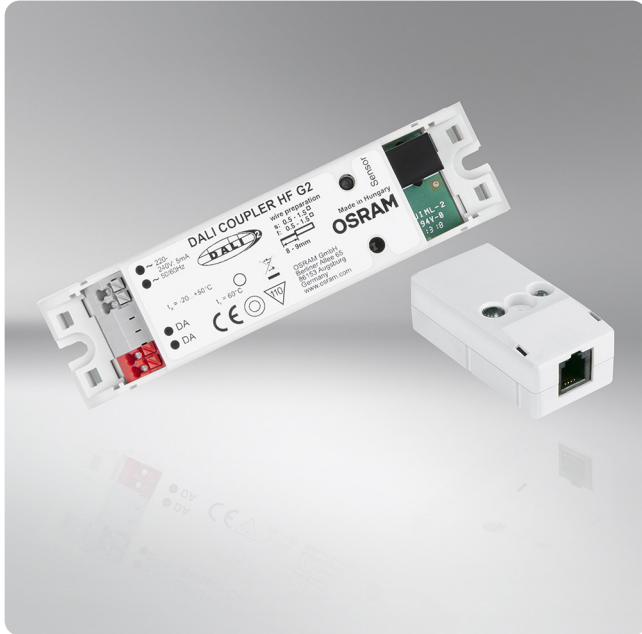## Luminaire Integrated Light and Presence Sensor and DALI Coupler

Date: _____

Quantity: _____

Company: _____

Project: _____



### Works with

- Encelium X
  - ▸ DALI Wired

CE

### Key Features & Benefits

- Designed for luminaire integration
- Works with the Encelium DALI Manager to connect the light and presence sensor to a DALI system
- Wide range of mounting heights from 2 to 13 m (6.6 to 43 ft)

The **DALI HF LS LI** is a High-Frequency Light Sensing Luminaire Integrated Sensor and Coupler designed to incorporate light and presence sensing control of your DALI luminaire into the Encelium X Lighting Control System.

The **HF LS LI Sensor** includes both a light and a presence sensor which utilize an active radar element, allowing a wide range of mounting heights, from 2 to 13 m (6.6 to 43 ft).

The HF LS LI Sensor is used with a **DALI HF LS LI Coupler**, which connects the sensor to your DALI network. Both pieces come equipped to integrate into your luminaire. If independent mounting is preferred, there is a separate ceiling integration kit (ECO CI Kit) available for purchase.

ENCELIUM

# DALI HF LS LI Coupler Specifications

## SENSING AND CONTROL
**Sensing**
- Works with HF LS LI Light and Presence Sensor

**Control**
- DALI Communication

## ELECTRICAL
**Power Consumption**
- 2 mA — DALI
- 0.35 W at 230V, 50/60 Hz

## ENVIRONMENTAL
**Operating Temperature**
- -20° to 50°C (-4° to 122°F)

## PHYSICAL
**Dimensions (H x W x D)**
- 21 x 118 x 30 mm (0.83 x 4.6 x 1.18 inches)

**Weight**
- 50 g (1.8 oz)

**Housing Color**
- White

**Housing Material**
- Plastic

**Mounting Options**
- Luminaire Integration
- Independent Ceiling Integration is optional and requires the purchase of ECO CI KIT

## WARRANTY
- For warranty details, refer to the full warranty documentation at encelium.com

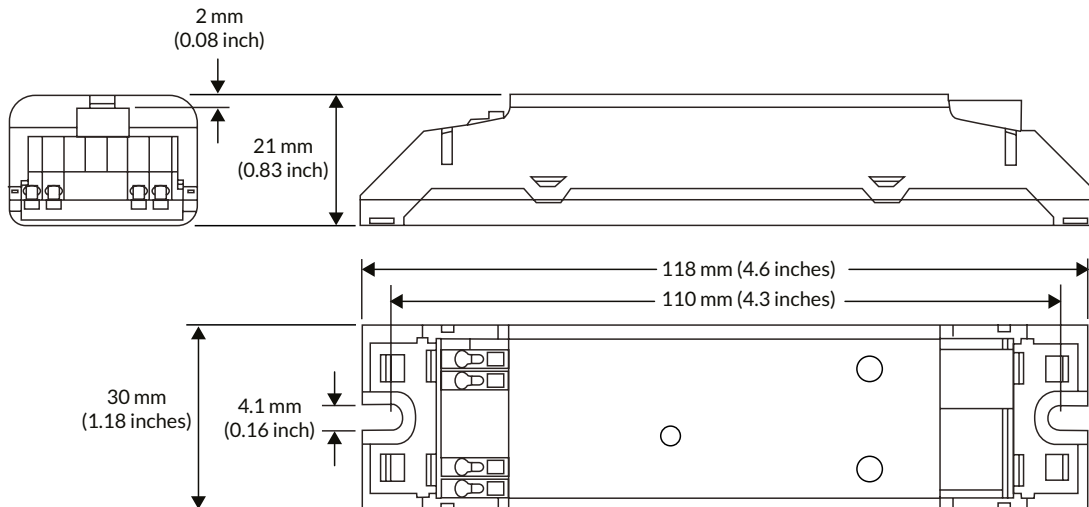## CERTIFICATIONS & SAFETY
**Approbations**
- CE

**Environmental Suitability**
- IP20

CE

# Dimensions



2 mm (0.08 inch)

21 mm (0.83 inch)

118 mm (4.6 inches)

110 mm (4.3 inches)

30 mm (1.18 inches)

4.1 mm (0.16 inch)

# DALI HF LS LI Sensor Specifications

## SENSING AND CONTROL
**Sensing**
- Third-party presence sensing via dry contact
- Third-party light sensing via 0-10V

**Light Sensor Operating Range**
- 20 to 800 lux (approximately)

## ELECTRICAL
**Power Consumption**
- 0.45 W at 230V, 50/60 Hz

## ENVIRONMENTAL
**Ambient Temperature Range**
- -20° to 50°C (-4° to 122°F)

## PHYSICAL
**Dimensions (H x W x D)**
- 21 x 56 x 28 mm (0.83x 2.2 x 1.1 inches)

**Weight**
- 22 g (0.78 oz)

**Housing Color**
- White

**Housing Material**
- Plastic

## Mounting Options
- Luminaire Integration

**Mounting Height**
- 2 to 13 m (6.6 to 43 ft)

**Detection Area**
- Ø6 m (0.25 inch) maximum

**Detection Angle**
- 35° to 80°

## WARRANTY
- For warranty details, refer to the full warranty documentation at encelium.com
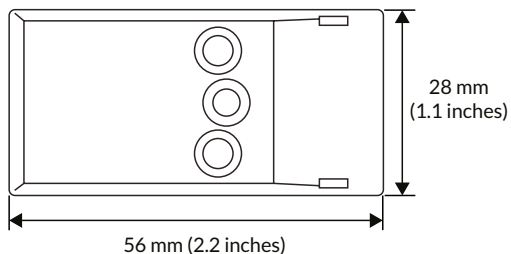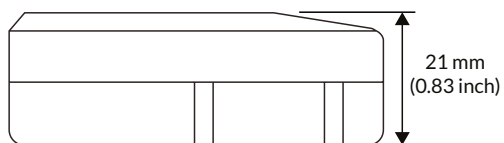
## CERTIFICATIONS & SAFETY
**Approbations**
- CE

**Environmental Suitability**
- IP20

## Dimensions



21 mm
(0.83 inch)

28 mm
(1.1 inches)

56 mm (2.2 inches)

# ECO CI KIT Specifications

## PHYSICAL
### Dimensions (H x W x D)
- ECO CI KIT installed on DALI HF LS LI Coupler 23 x 33 x 146 mm (0.9 x 1.3 x 5.7 inches)

### Weight
- 20 g (0.7 oz)

### Housing Color
- Green

### Housing Material
- Plastic

### Mounting Options
- Independent Ceiling Integration strain relief housing kit for WLC, DALI HF LS LI Coupler, and DALI Sensor Coupler E

## WARRANTY
- For warranty details, refer to the full warranty documentation at encelium.com
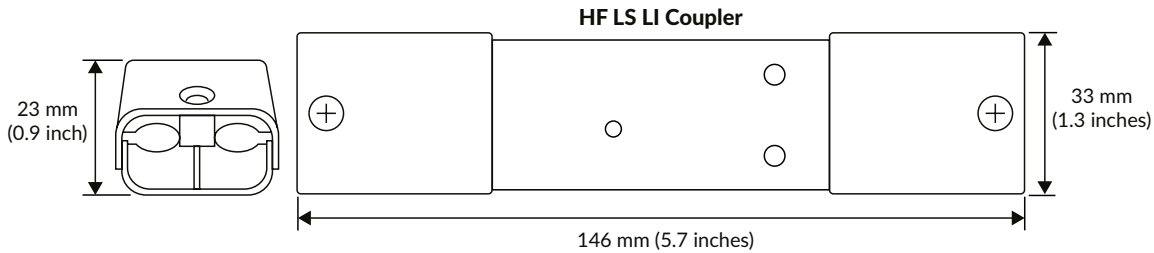
## CERTIFICATIONS & SAFETY
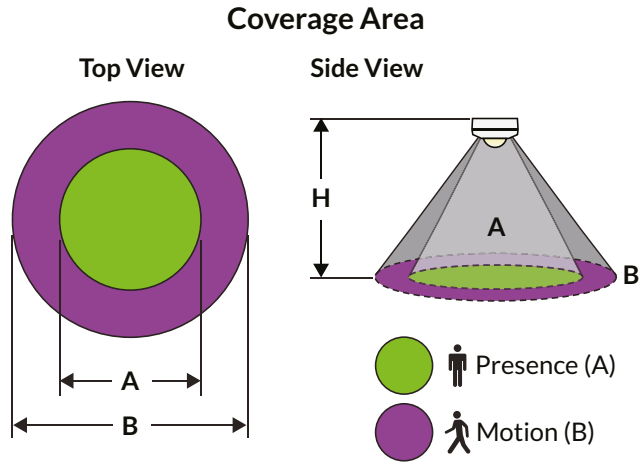### Approbations
- CE

$C\!\epsilon$

# Dimensions



**HF LS LI Coupler**

23 mm (0.9 inch)

33 mm (1.3 inches)

146 mm (5.7 inches)

# Ordering Information

| Catalog Number | Description | Approbation | Communication Network |
|---|---|---|---|
| DALI COUPLER HF G2 | DALI HF LS LI Coupler | CE | DALI |
| HF-LS-LI | HF LS LI Sensor | CE | — |
| HF 4P4C 25 | 4p4c Connector Cable (25cm) | CE | — |
| ECO-CI-KIT | ECO CI KIT | CE | — |

Notes:

- The DALI HF LS LI Coupler requires one sensor per coupler (e.g. HF LS LI Sensor) for luminiaire mount installations.
- 4p4c Connector cable is required to connect the HF-LS-LI sensor to the Coupler.
- The HF LS LI and ECO CI KIT are sold separately. The ECO CI KIT is required for independent ceiling mount installations only.
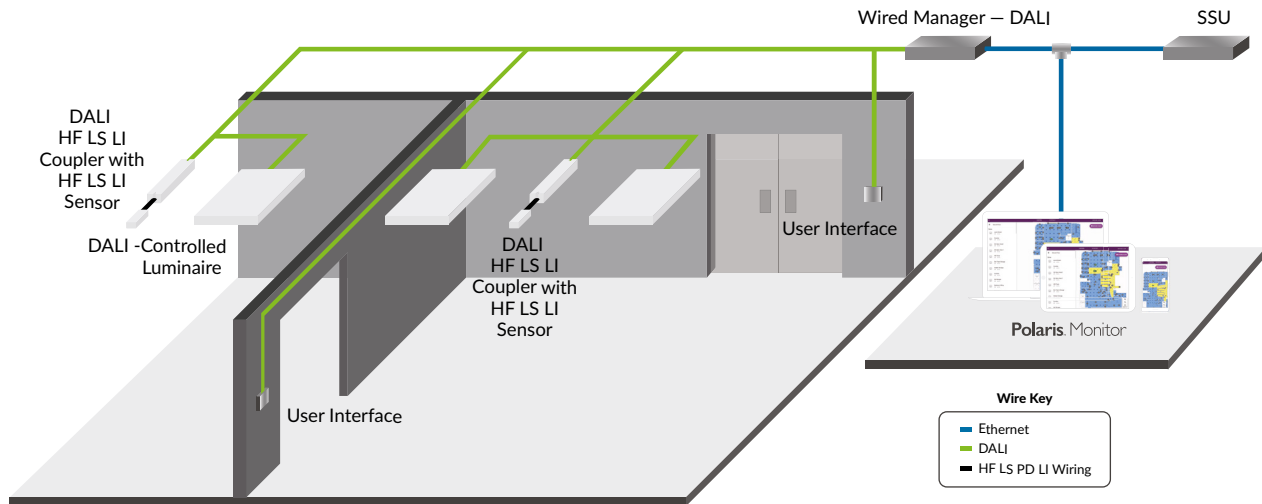
## Sensor Coverage

### Coverage Area

**Top View**    **Side View**



Presence (A)

Motion (B)

### Sensor Detection Range

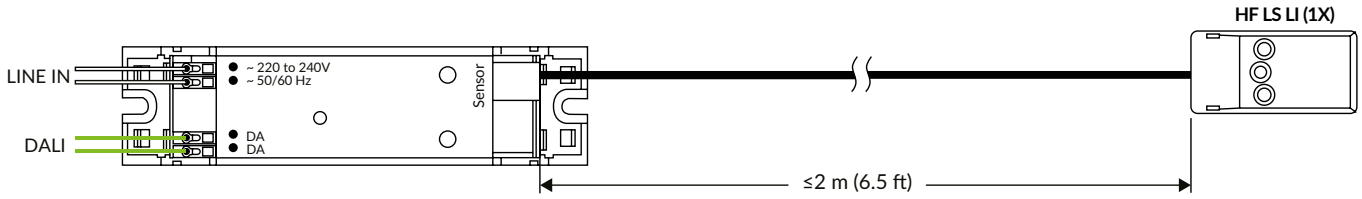|  | Presence | Motion |
|---|---|---|
| **Mounting Height (H)** | 8 m (26.2 ft) | 13 m (43 ft) |
| **Detection Range** | 15 m (49.2 ft) | 25 m (82 ft) |
| **Coverage Area** | 35˚ x 80˚ | 35˚ x 80˚ |

## Wired System Overview

Encelium Extend enables you to control DALI devices. With any Encelium wired design, you get a reliable, lighting control system that can be installed quickly and easily.



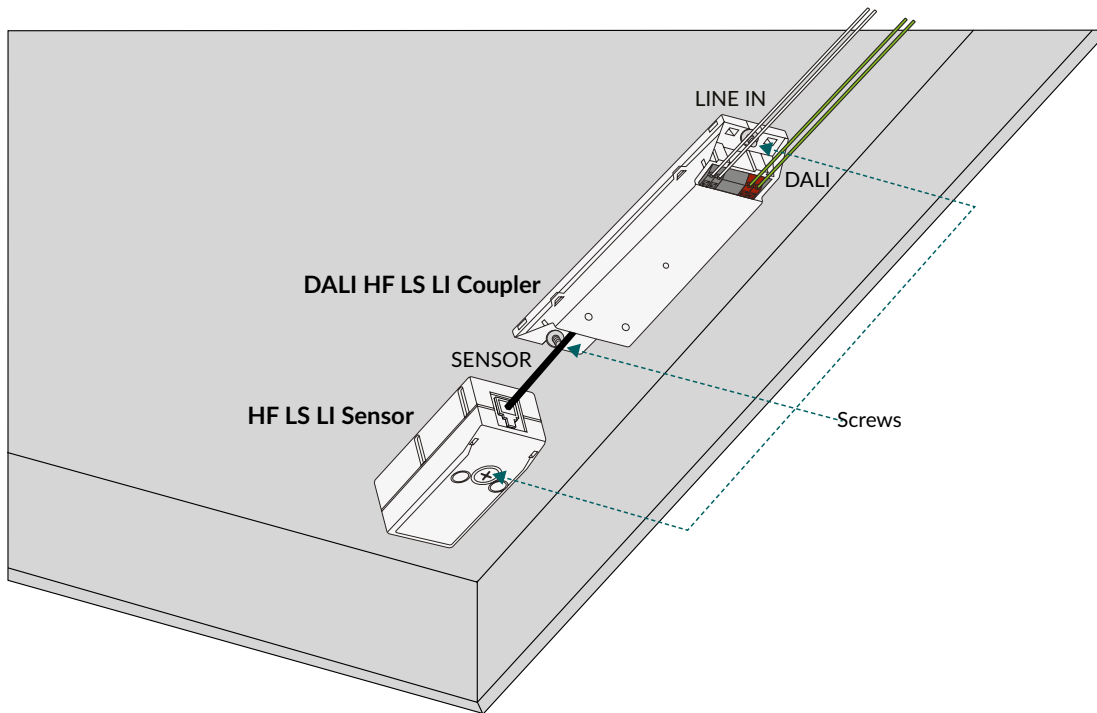Wired Manager — DALI          SSU

DALI
HF LS LI
Coupler with
HF LS LI
Sensor

DALI -Controlled
Luminaire

DALI
HF LS LI
Coupler with
HF LS LI
Sensor

User Interface

User Interface

Polaris. Monitor

**Wire Key**
- Ethernet
- DALI
- HF LS PD LI Wiring

## Wiring Diagram

### DALI HF LS LI Wiring

HF LS LI (1X)

LINE IN

~ 220 to 240V
~ 50/60 Hz

Sensor

DA
DA

DALI

≤2 m (6.5 ft)

## Mounting Options

### Luminaire Integration

LINE IN

DALI

**DALI HF LS LI Coupler**

SENSOR

**HF LS LI Sensor**

Screws

### Independent Ceiling Integration

ECO CI KIT

ENCELIUM