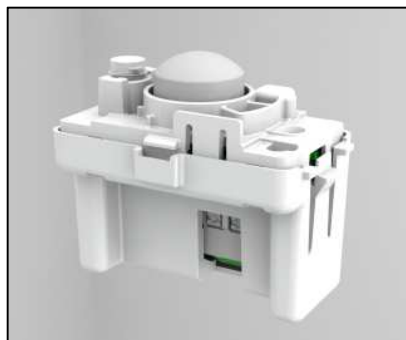




SmartCast® Wireless Integration Module



Available Part Numbers

Part Number	Description
WIM-CMA-OEM	SmartCast Wireless Integration Module
WIM-CMB-OEM	SmartCast Wireless Integration Module with Bluetooth

Purpose of Document

This document is intended to provide fixture manufacturers with the information needed to properly integrate the SmartCast® Wireless Integration Module controls with their fixtures.

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Product Overview

The SmartCast® Wireless Integration Module (WIM) is a modular system intended to be mounted into an existing light fixture or be mounted directly into the ceiling and leverage Cree's SmartCast™ technology to automate setup, drive data acquisition, enable remote control, and provide energy savings for the user.

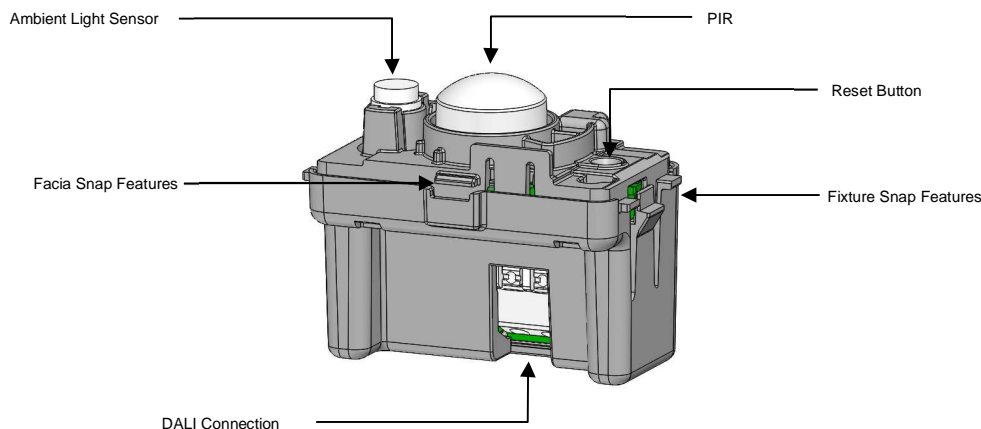


Figure 1. Product Overview

Compatible Drivers

The SmartCast® Wireless Integration Module is designed to be used with drivers with an integrated self-powered DALI connection to power the controls module and provide digital communications to the driver.

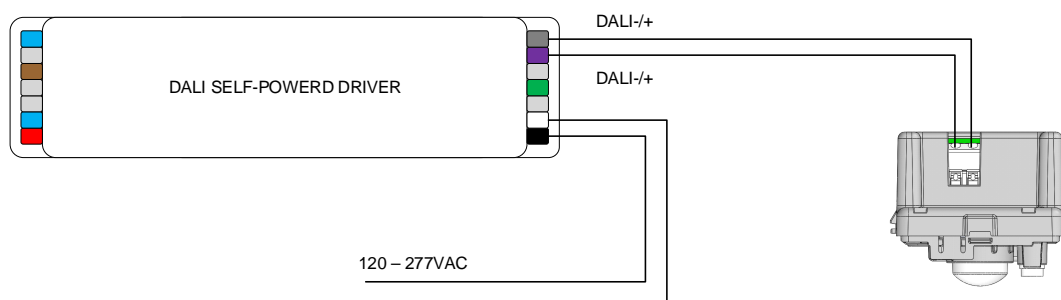


Figure 2. Wiring Diagram

Compatible Drivers

Manufacturer	Product Series	Model Number	Product Information
OSRAM	OPTOTRONIC Intelligent DEXAL Drivers	OTi30/120-277/1A0 DX L	https://www.osram.us/
		OTi50/120-277/1A4 DX L	
		OTi85/120-277/2A3 DX L	

Table 1. Compatible Drivers

Physical Mounting Considerations

3D Step models for the SmartCast Wireless Integration Module are available upon request. It is recommended that the models are used to ensure seamless integration.

Dimensions

Dimensions in mm

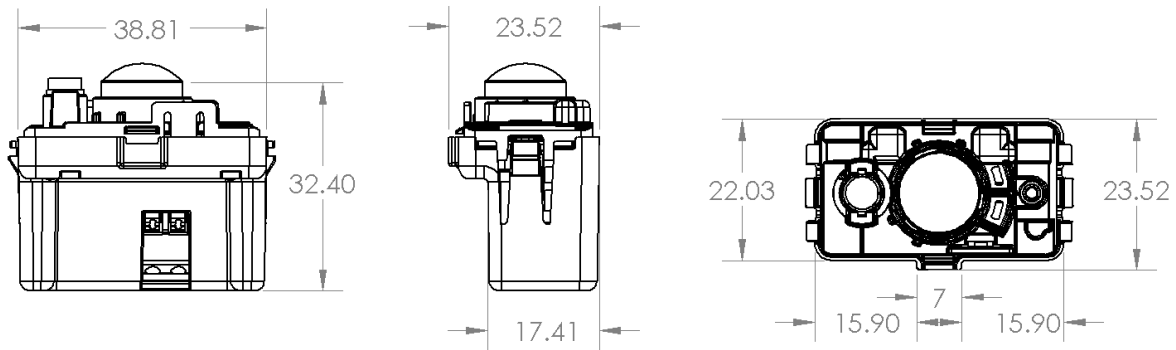


Figure 3. Module Dimensions

Fascia Plate

The SmartCast Wireless Integration Module is equipped with snaps on the sides of the module to allow the designer/integrator to design a custom fascia plate that creates a seamless, aesthetic look for any application.

Design Considerations:

- It is important that the sensor and button holes are maintained in order to ensure full functionality.
- Use the example fascia models for appropriate sizing and alignment.
- The fascia design should not contain any metallic material.

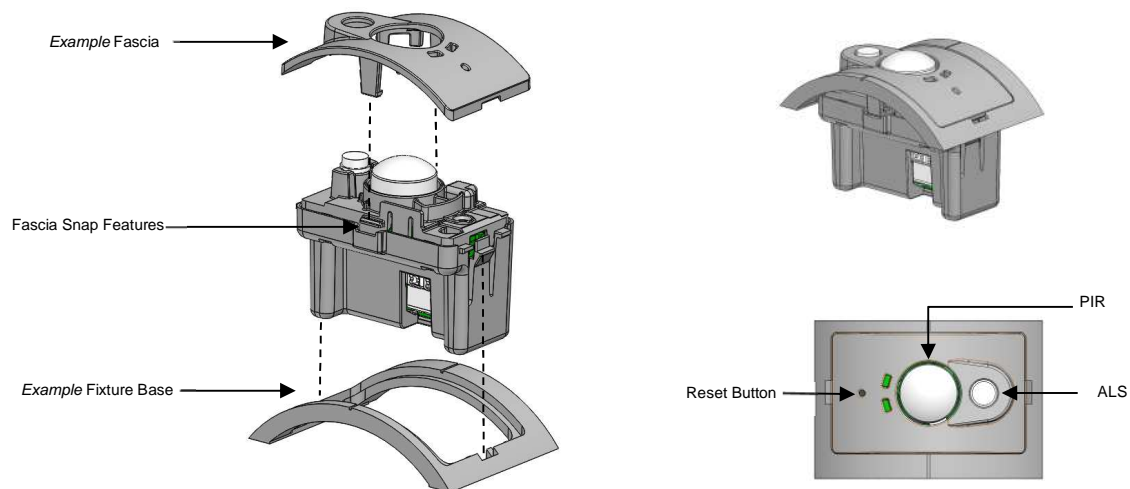


Figure 4. Fascia Example

Mounting Features

The SmartCast Wireless Integration Module is designed to be installed into the fixture from room side and the module includes release features within the snaps so that the module can be removed and replaced if needed.

Base Dimensions:

*Example Base Mount. **Dimensions are in mm. Refer to 3D models for exact dimensions and snap interfaces.*

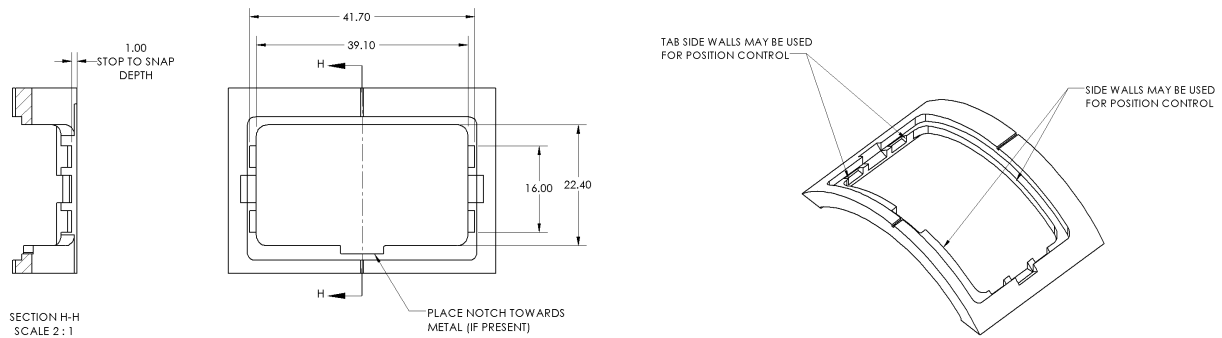


Figure 5. Base Mount

Recommended Cutout:

The WIM is designed to be recessed from the main surface to allow for a fascia plate to be installed.

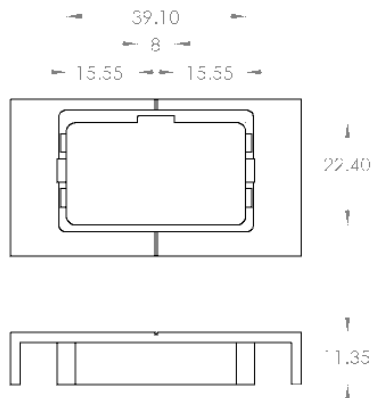


Figure 6. Cutout Recommendation

Orientation

Orient the module such that the keying feature is located toward the largest proximity of metallic materials.

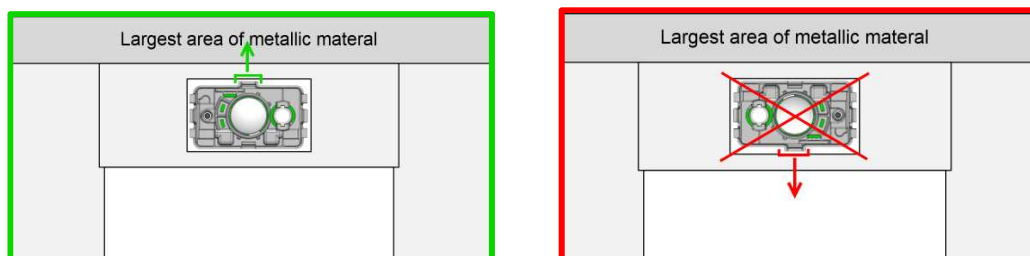


Figure 7. Orientation

Keep Out

Mounting Thickness:

- Suitable for use in mounting thicknesses up to 1mm.

Separation from Metal:

- Maintain 0.25 inches (12.7mm) from metallic walls.
 - *Note: For all fixture integrations, it is recommended that the antenna is tested to ensure successful communications over the desired range.*

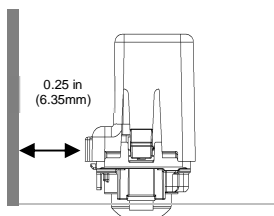


Figure 8. Separation from Metal

Wiring Considerations

Acceptable Wire Gauge:

Parameter	Min	Max	Unit
SOLID	24	18	AWG
STRANDED	22	20	AWG

Table 2. Acceptable Wire Gauge

Wire Strip Length:

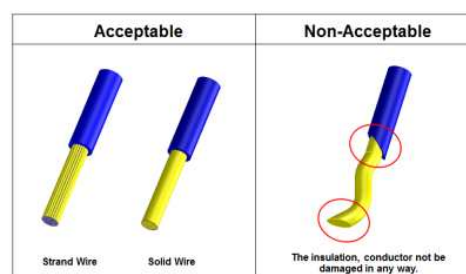


Figure 9. Wire Strip Length

Minimum Depth Required:

****Measured from maximum fascia height.**

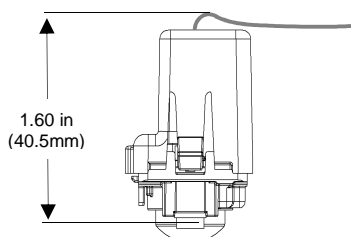


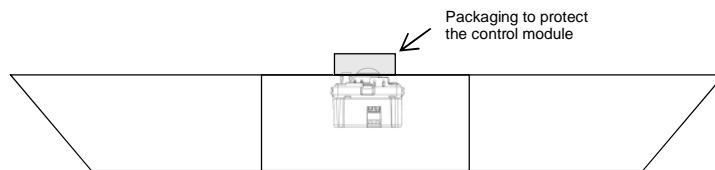
Figure 10. Minimum Depth Required

EMC Considerations:

The SmartCast Wireless Integration module can support up to 25ft cable lengths, however, long cable lengths can cause unintentional EMC compliance failures. It is recommended that the cable length between the module and the driver be kept to a minimum. A ferrite may be used on the DALI control lines to suppress noise for unintentional EMC filtering.

Packaging

Fixture packaging must protect the module so that it does not get damaged in shipping.



FCC COMPLIANCE STATEMENT

CAUTION: Changes or modifications not expressly approved could void your authority to use this equipment.

This device complies with Part 15 of the FCC Rules. Operation to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

This device has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the device is operated in a commercial environment. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this device in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The LED in the front of this device operates within Risk Group 1 levels per IEC 62471.

INDUSTRY CANADA STATEMENT

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. In addition, this device complies with ICES-001 of the Industry Canada (IC) Regulations.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF EXPOSURE NOTICE

To comply with the FCC/IC RF exposure compliance requirements, this device and its antenna must not be co-located or operating to conjunction with any other antenna or transmitter.

This equipment shall be installed and operated with minimum distance 5cm between the radiator & your body. No other antenna is authorized for use with this product.

Pour correspondre aux requis d'exposition au FCC/IC RF, cet appareil et son antenne ne doivent être localisés tout prêt ou opérer en conjunction avec d'autres antennes ou transmetteurs. Cet équipement doit être installé et opéré avec une distance minimum de 5cm entre l'émetteur et votre corps. Aucune autre antenne externe n'est autorisée à être utilisé avec ce produit.

OEM LABELING REQUIREMENTS

There must be a label on the outside of the final product displaying the following for **WIM-CMA-OEM**:

Contains FCC ID: 2ACQ6-WIM

Contains IC: 11481A-WIM

There must be a label on the outside of the final product displaying the following for **WIM-CMB-OEM**:

Contains FCC ID: 2ACQ6-WMB

Contains IC: 11481A-WMB

The OEM must make sure that FCC and IC labeling requirements are met.

All FCC and IC statements on this page must be included in the OEM product manual.

Authorized for FCC 47 CFR Part 15 Subpart C as displayed on FCC Grant.

When installed in a host, see additional guidance in KDB Publication 996369 D04 Module Integration Guide and confirm that the final host product still complies with FCC 47 CFR Part 15 Subpart B.