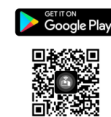


Wireless Lighting Control Solutions



Keilton®



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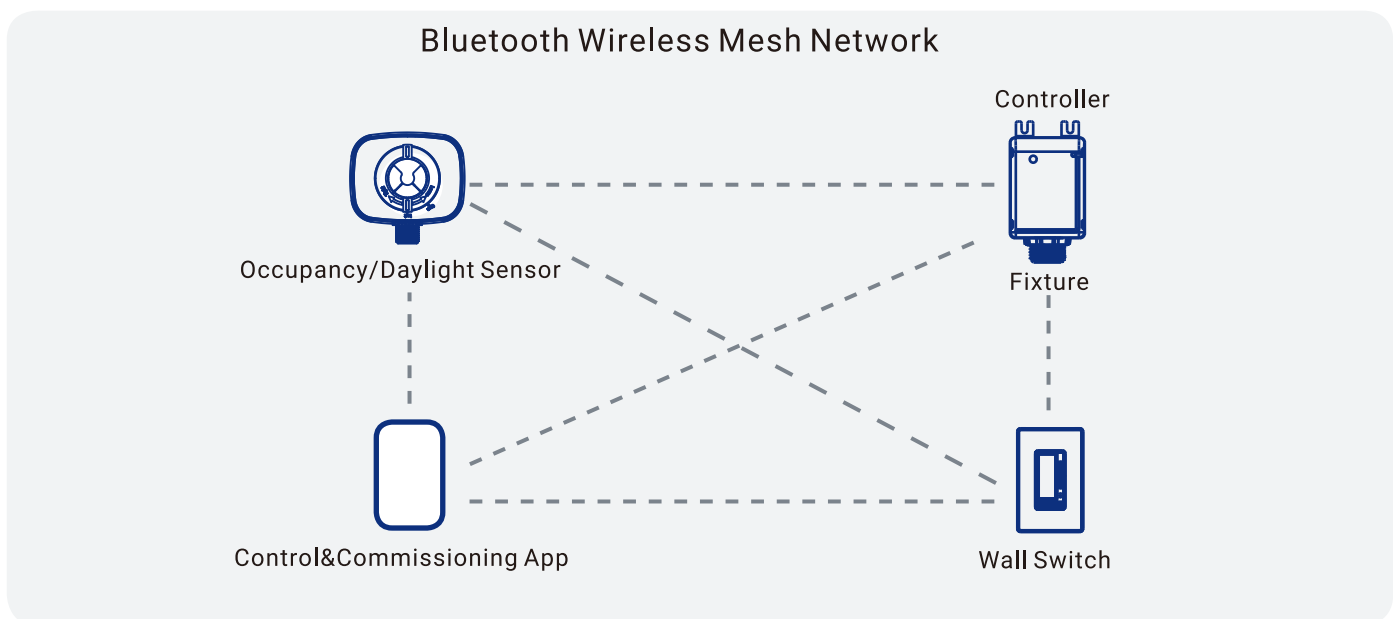
Wireless Control Solutions

Bluetooth Mesh Commercial Grade Lighting Control Systems

Keilton Lighting Controls offers a complete stand-alone wireless system to control lights in a wide variety of applications. The system includes wireless fixture controllers, switches, and occupancy/daylight harvesting sensors all using Bluetooth® wireless technology. In addition to the system devices we also offer a fixture mounted controller and sensor with Bluetooth technology providing wireless communication and occupancy/daylight harvesting control in one device.

Each Bluetooth enabled device is its own wireless node for sending, receiving and sharing control commands through a wireless mesh network. Expandability is easy with each device passing information to the next thus expanding the reach and control throughout the network.

Architecture-Bluetooth Wireless Network



Simplicity

- Bluetooth wireless technology provides reliability, redundancy, and easy expandability
- Devices communicate over a secure Bluetooth wireless network
- Smartphones with Bluetooth antenna can configure and control lights with the complimentary Keilton Lighting Controls App
- Network bridges and onsite internet are not required
- Bluetooth Controller and Sensors are line powered for long term reliability and performance.

System Functionality

- Networking of luminaires
- Individual Addressability
- Occupancy sensing
- Daylight Harvesting/Photocell Control
- High-end Trimming
- Flexible Zoning
- Continuous Dimming

Devices



Keilton Lighting Controls Bluetooth Controller

- Converts fixtures into wirelessly controlled luminaires
- Provides individual or multi-fixture control
- ON/OFF (relay) and 0-10v dimming control of the fixture(s) through a Keilton Lighting Controls Bluetooth Switch or App
- 120/277VAC 3A Load Control



Keilton Lighting Controls Commissioning & Control App

- For Bluetooth enabled iOS or Android Smartphone
- Commissioning: Light levels, zones, pre-sets, schedule, high end trimming
- Control: Dimming, ON/OFF, pre-sets



Keilton Lighting Controls Bluetooth Switches

- Fingertip control over lights in defined spaces
- One/Multiple zone dimmer, 5-button
- Scene control
- Wireless, AAA battery powered
- Faceplates included



Keilton Lighting Controls Bluetooth Low Bay Sensor

- PIR occupancy sensor
- 1" lens, low bay lens (20 ft.)
- Easily installed into soft ceiling tiles
- Power provided by Bluetooth Controller PPA102S
- Each IFS105 sensor is able to control all Bluetooth Controllers in same zone

Devices



Keilton Lighting Controls Bluetooth Fixture Controller & High Bay Sensor

- Provides automated individual and group control of light fixtures
- Occupancy (PIR) and daylight harvesting sensor
- ON/OFF/0-10V dimming
- 40' coverage radius on 40' ceiling
- EFS104 120/277VAC line powered, 5A Load Control, fixture external mounted
- EFS107 12-24VDC powered by fixture or PPA103S power pack, ceiling mounted



Keilton Lighting Controls Fixture Integrated Bluetooth Controller & Sensor

- OEM preferred
- Achieve all functionalities as EFS104/EFS107
- 12VDC powered by standard 0-10v commercial lighting fixture with DC output
- EFS106 3.5mm audio plug in mounted
- IFS108 extremely thin with quick connector to install
- IFS105S/SE small size fits into any luminaire, with low/high bay lens option



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**INTEGRATED IOT SENSOR &
FIXTURE CONTROLLER**

Applications

- Office
- Retail
- Industrial
- Healthcare
- Education



Fixture integrated IoT sensor and controller OEM Guide

Luminaire level lighting controls

Add functionality and IoT readiness to your luminaires with an easy to install system

Keilton[®]

Maximize lighting performance, increase occupant satisfaction

Keilton luminaire level sensor and controller are designed to be integrated directly into luminaires. These Luminaire Level Lighting Controls can be deployed as independent occupancy and daylight fixture sensors, or easily networked with controllers using the Keilton App for room, area, or floor lighting controls. The devices are part of Keilton BLE family of networked lighting controls solutions. This allows them to communicate with other wireless switches, sensors, and load controllers and our wired Dialog system for building-wide advanced lighting controls strategies.



ASHRAE 90.1 Compliant



By incorporating the same technology in both small and large systems, Keilton products specially designed to support small individual offices or to easily scale up to large commercial spaces, delivering compatibility, reliability, and commonality to the entire facility.

Features

- Sensor and sensor-less models for cost effective scalability
- Two 0-10V channels to support standard and tunable white LED drivers
- DIM-to-OFF for effective dimming and energy efficient functionality
- UL2043 capabilities without any additional wiring
- Small form factor to fit into standard ½ inch electrical knockouts
- Bluetooth wireless technology for security and reliability
- Bluetooth beacons for IoT and location services strategies

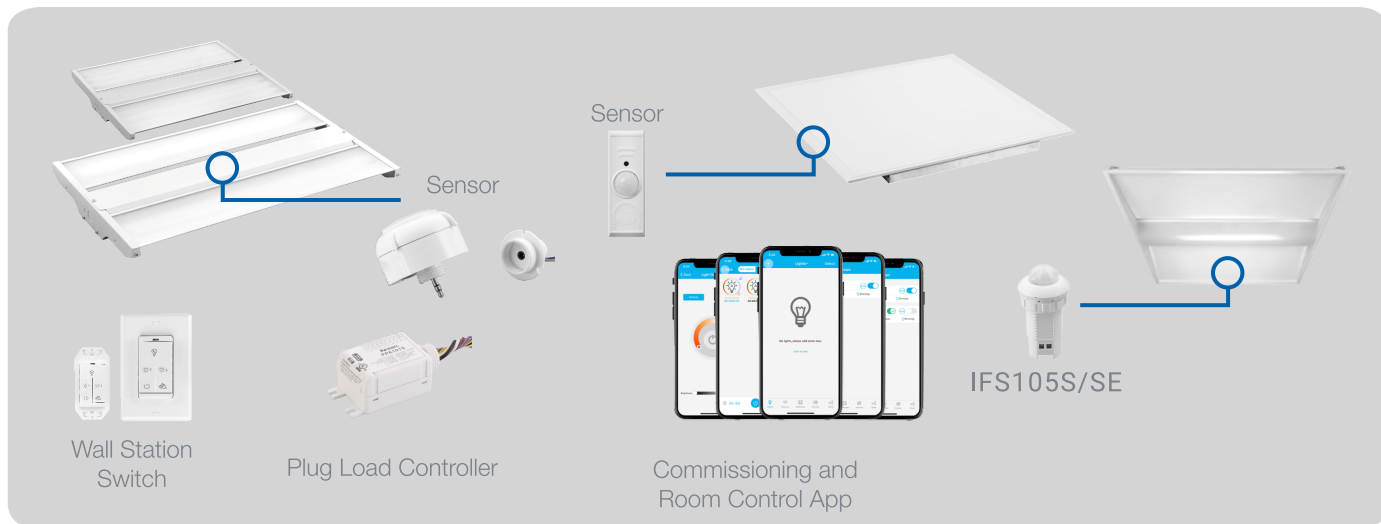


IFS108 installed in the standard troffer

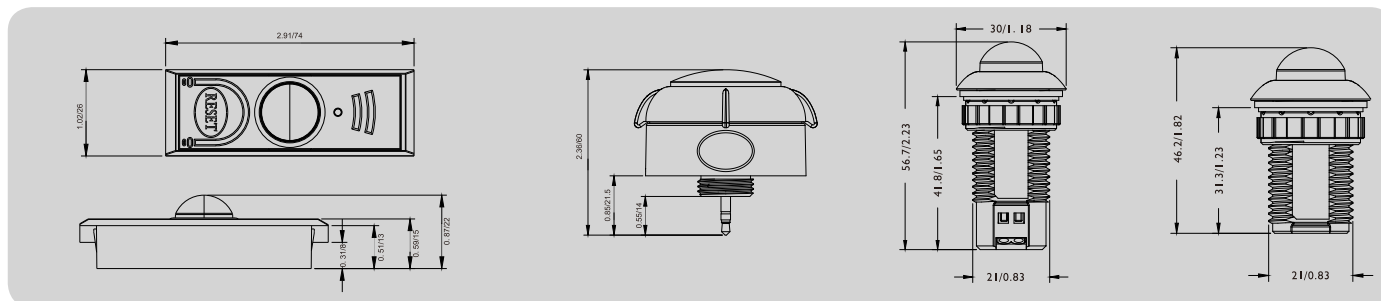
Overview

The Keilton fixture sensor and controller support single and dual channel 0-10V dimming LED drivers and are powered by the driver's 12VDC auxiliary power output. They are designed to fit directly into standard ½" electrical knockouts and are networked using Bluetooth Wireless Technology. The system is commissioned and configured via a free app on the iTunes App Store and Google Play Store (Keilton). This app uses the on-board Bluetooth Technology on the iOS product to configure and commission the devices and system. IFS108 and EFS106 are also part of our wireless lighting control ecosystem which includes load controllers, occupancy/daylight sensors, and wall switches, each using Bluetooth communication technology. The Keilton Bluetooth system is Title 24 compliant. It can provide all the necessary control schemes for Occupancy (Occupancy, Vacancy, Partial ON, Partial OFF), Primary & Secondary Daylight Harvesting, and Demand Response.

Bluetooth Lighting Control Ecosystem



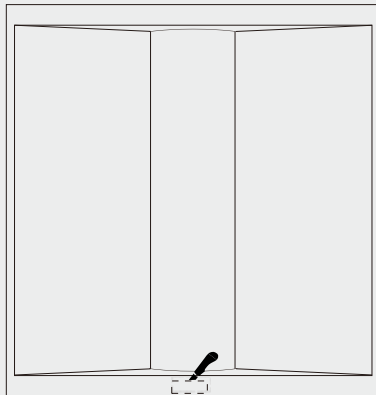
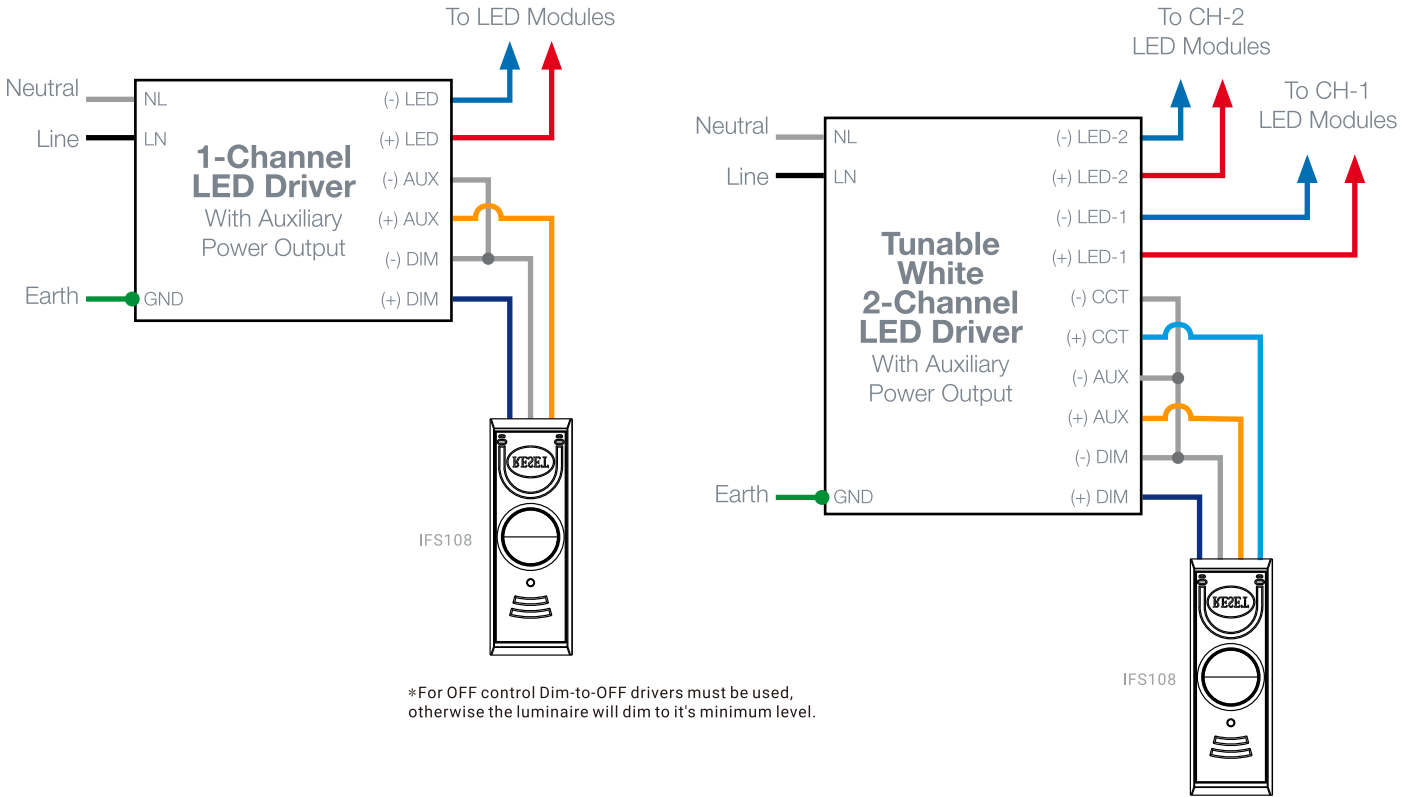
Design, Dimensions, Specifications



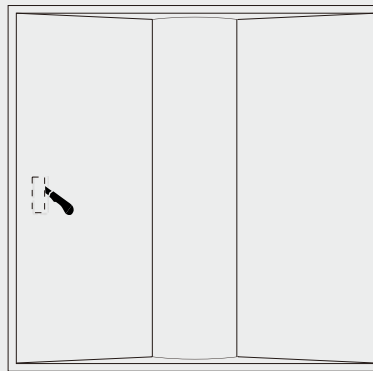
PART NUMBER	• IFS108	• EFS106	• IFS105S/IFS105SE
OCC. SENSOR MOUNTING HEIGHT	• Up to 20ft(8m)	• Up to 40ft(12m)	• Up to 40ft(12m) High / Low bay lens optional
FUNCTIONALITY	<ul style="list-style-type: none"> • Integrated Fixture PIR sensor • 0-10V dimming with dim-to-off driver • Occupancy, Vacancy, Partial ON and Partial OFF • Adjustable Occupancy Time out • Primary & Secondary Daylight Harvesting • Bluetooth Beacon for digital ceiling, IoT, and location service strategies • Commissioning via App 		
WIRING	• Use #20 to #26 AWG solid copper conductors stripped to 4mm		
INPUT VOLTAGE	• 12V		
WIRELESS RANGE	<ul style="list-style-type: none"> • 100ft clear line of sight • Distances may vary based on location and environment • Additional devices may be required at time of commissioning to ensure Bluetooth network integrity 		
ENVIRONMENT	<ul style="list-style-type: none"> • Indoor stationary, non-vibrating, non-corrosive atmosphere, and non-condensing humidity • Operation temperature 32° F to 131° F (0° C to 55° C) • Storage temperature -40° F to 140° F (-40° C to 60° C) 		
DIMMING	<ul style="list-style-type: none"> • Two 0-10 Dimming channels, each capable of sinking up to 30mA • Typical use is with single channel 0-10V LED driver providing aux output power and dim-to-off capability • May also be used with dual-channel, tunable white LED drivers providing aux output power and dim-to-off capability 		
CERTIFICATIONS	<ul style="list-style-type: none"> • UL2043 (Plenum), UL FLTJ rated • May be installed through a knockout in the luminaire wiring enclosure or installed external to the enclosure and power with Class 2 circuit using Class 2 wiring method 		
WARRANTY	• Standard 5-year warranty		

Wiring

Devices are positioned in luminaires and wired directly to LED drivers for power and control commands (see our Design-in Guide for installation information).



IFS108 die cut in the Luminaire is 20.8*64.8mm



IFS105S/SE die cut 1/2" size hole