

PROJECT:	
CATALOG #	
TYPE:	DATE:

## LED SMART VOLUMETRIC RETROFIT

### with Integrated Programmable Controls

#### DESCRIPTION

The LED Volumetric Retrofit brings a new level of control and convenience to interior grid ceiling applications. Equipped with an on-board sensor that supports both occupancy sensing and daylight harvesting, this retrofit kit is the ultimate energy reduction tool. And while this functionality comes standard out of the box, it can be fully customized with just a few taps to your mobile device. Our new mobile app, LiteSmart, enables fixtures in a space to be grouped together and function as one; they can be turned on/off, dimmed, or programmed based on your schedule. Settings can be adjusted and pushed live in seconds. Custom scene configurations can also be created to meet the various needs of the space.

This LED retrofit can accommodate all standard sizes of fluorescent troffers, including 2' x 4', 2' x 2' or 1' x 4', and it's patented design makes installation simple and quick. The kit can be installed by one person in less than two minutes, without breaking into the ceiling plenum. Once installation is complete, all functionality can be set up via LiteSmart, then controlled through the app or our wireless remote switch.

The LED Smart Volumetric Retrofit delivers up to 125 lumens per watt (LPW) over the course of its 100,000-hour rated life. It ensures long-term energy savings over traditional fluorescent bulbs and ballasts, as well as eliminates routine maintenance, making it perfect for updating existing troffers. Furthermore, it's backed by an industry-leading 10-year warranty, guaranteeing peace of mind for the life of your fixture.

#### FEATURES

- Wireless control via mobile app or bluetooth wall switch (optional)
- Daylight harvesting
- Occupancy sensing
- 100,000-hour rated life
- 10-year warranty
- DLC Premium (up to 125 LPW)
- Suitable for damp locations
- Continuous dimming
- Compatible with Emergency Battery Backup

#### APPLICATIONS

- Drop/grid ceilings
- Fluorescent troffer replacements



#### MARKETS

- Schools and universities
- Offices and municipal buildings
- Healthcare facilities and hospitals

#### CERTIFICATIONS



## SPECIFICATIONS

**Life (@L70):** 100,000 hours (@L70)

**Warranty:** 10 years

### PERFORMANCE

**Operating temp:** -4°F to 113°F (-20°C to 45°C)

**Efficacy (LPW):** 125 LPW

**CRI:** 80

### ELECTRICAL

**Input voltage:** 120-277V

**Input frequency:** 50/60Hz

**PF:** ≥.95

**THD:** N/A

**Surge protection:** N/A

**Dimming:** Continuous dimming (0-100%)

**Minimum dimming:** N/A

**Aux. Voltage:** No

**Driver CL:** N/A

**Whip/Cord:** No

**Sensor:** Bluetooth for Daylight & Motion Sensing

### OPTICAL

**Beam:** N/A

**Lens:** Polycarbonate Frosted

**UGR:** N/A

### PHYSICAL

**Finish:** Smooth

**Color:** White

**Housing:** Painted Steel

### INDUSTRY STANDARDS/RATINGS

**IP:** N/A

**IK:** N/A

**Location:** Damp

**IC:** Yes

**UL/ETL:** ETL

**FCC:** Yes

**RoHS:** Yes

**DLC:** 5.1 Premium

## MOUNTING

**Standard:** T-bar grid (drop ceilings) mounted fluorescent troffers

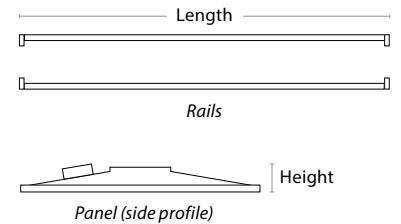
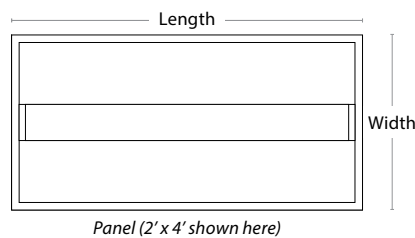
**Wiring access:** 1/2" trade size knockouts

## ACCESSORIES

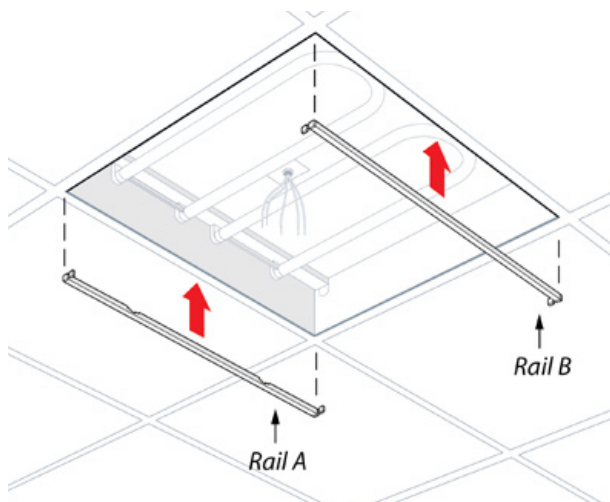
**Bluetooth Control Switch:** Used to control lighting functions such as on/off, dimming, daylight harvesting and scene selection

## DIMENSIONS / WEIGHT

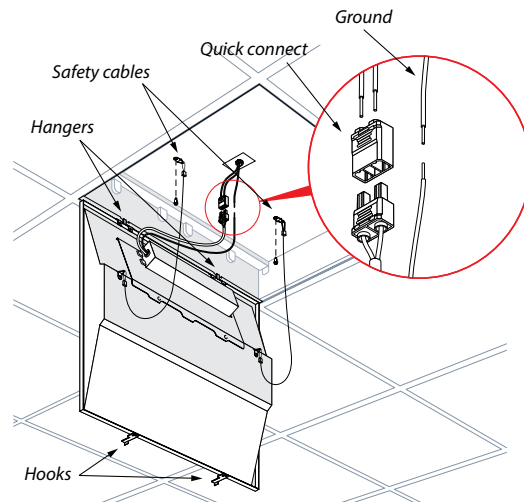
ORDER#	SIZE	LENGTH	WIDTH	HEIGHT	RAIL LENGTH
VRT435N	2' x 4'	45"	21"	2.875"	47"
VRT440N	2' x 4'	45"	21"	2.875"	47"
VRT450N	2' x 4'	45"	21"	2.875"	47"
VRT235N	2' x 2'	21"	21"	2.875"	23"
VRT240N	2' x 2'	21"	21"	2.875"	23"
VRT250N	2' x 2'	21"	21"	2.875"	23"
VRT135N	1' x 4'	45"	10.5"	2.875"	47"
VRT140N	1' x 4'	45"	10.5"	2.875"	47"
VRT150N	1' x 4'	45"	10.5"	2.875"	47"



## PRODUCT OVERVIEW AND INSTALLATION



The mounting rails are inserted between the troffer and grid rail on opposite sides with the anti-rotational tabs pointed inward and notches facing up.



The panel hangers are inserted into the notches on the mounting rail, enabling the panel to hang freely while electrical connections are completed.

# ORDERING INFORMATION

## 2' X 2'

MODEL #	DESCRIPTION	WATTAGE	CCT	LUMENS
VRT235N	2X2 LED Smart Volumetric Retrofit   36W   3500K	36	3500	2,250   2,500   3,125   3,750   4,500
VRT240N	2X2 LED Smart Volumetric Retrofit   36W   4000K	36	4000	2,250   2,500   3,125   3,750   4,500
VRT250N	2X2 LED Smart Volumetric Retrofit   36W   5000K	36	5000	2,250   2,500   3,125   3,750   4,500

## 2' X 4'

MODEL #	DESCRIPTION	WATTAGE	CCT	LUMENS
VRT435N	2X4 LED Smart Volumetric Retrofit   50W   3500K	50	3500	3,125   3,750   5,000   5,625   6,250
VRT440N	2X4 LED Smart Volumetric Retrofit   50W   4000K	50	4000	3,125   3,750   5,000   5,625   6,250
VRT450N	2X4 LED Smart Volumetric Retrofit   50W   5000K	50	5000	3,125   3,750   5,000   5,625   6,250

## 1' X 4'

MODEL #	DESCRIPTION	WATTAGE	CCT	LUMENS
VRT135N	1X4 LED Smart Volumetric Retrofit   36W   3500K	36	3500	2,250   2,500   3,125   3,750   4,500
VRT140N	1X4 LED Smart Volumetric Retrofit   36W   4000K	36	4000	2,250   2,500   3,125   3,750   4,500
VRT150N	1X4 LED Smart Volumetric Retrofit   36W   5000K	36	5000	2,250   2,500   3,125   3,750   4,500

## BLUETOOTH CONTROL SWITCHES

MODEL #	DESCRIPTION	USAGE
BCS01	Bluetooth control switch (batteries needed)	Used to control functionality of the fixture; on/off, dimming, daylight harvesting and scene selection.
BCS02	Solar bluetooth control switch	Used to control functionality of the fixture; on/off, dimming, daylight harvesting and scene selection.



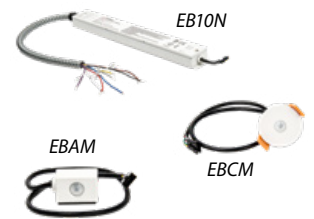
BCS01



BCS02

## EMERGENCY BATTERY BACKUP

MODEL #	DESCRIPTION	USAGE
EB10N	10W Emergency Battery Backup	Supplies battery backup to an individual fixture for up to 90 minutes. <u>Must be ordered with EBCM or EBAM indicator module.</u>
EBCM	Ceiling-mounted Indicator Module	In grid ceiling applications, this unit connects to the EB10 and is recess mounted in an adjacent panel where it displays the unit's current status of operation.
EBAM	Adhesive-mounted Indicator Module	In drywall/open ceiling applications, this unit connects to the EB10 and is mounted via adhesive, where it displays the unit's current status of operation.



## WIRELESS CONTROL

The LED Smart Volumetric Retrofit uses bluetooth technology for a completely wireless connection to your smart phone or remote wall switch.



*Set up and manage your space with LiteSmart.*

*Use the remote switch for everyday control.*



**LITESMART**  
by Litetronics

LiteSmart is a mobile app that enables total management of lighting systems at the touch of your fingers. Within the app, all LED Smart Volumetric Retrofit functionality can be set up and controlled; on/off, dimming, grouping, scene creation and time scheduling. Adjustments can also be made to the occupancy sensor and daylight harvesting settings, then implemented across an entire group in seconds.

### BENEFITS

- Total control over your lighting system
- Quick and easy changes that can be implemented in seconds across a group of fixtures
- Further energy reduction via occupancy sensing, daylight harvesting and max wattage control
- Ability to create custom scenes based on specific needs, such as presentations
- Time scheduling that sets hours of operation per day

### NETWORK CAPABILITIES

- Unlimited admins and guests can be added to each network
- Each network supports up to 100 fixtures
- Individual fixtures can belong to up to 32 groups
- Up to 127 scenes can be created from one network
- Up to 10 switches can be created from one network
- BLE 485 module for communication with BMS with open source 4 RS ports



**WIRELESS SWITCH**  
Part # BCS01 or BCS02

The bluetooth control switch comes in handy for the daily occupants of a space. This switch, which can be wall mounted, enables quick adjustments to be made to a specific group of fixtures. Features include on/off, dimming, daylight harvesting and scene selection. The switch must be set up through the LiteSmart mobile app, but can then function on it's own within any space.

### BENEFITS

- Control over key functions for a specific group of lights
- Adjustments are quick and easy, and create an optimized space for a variety of needs
- Further reduce energy via daylight harvesting function, or disable daylight harvesting for full brightness
- Ability to choose between custom scenes based on specific needs within the space

### SWITCH CAPABILITIES

- Enable/disable auto daylight harvesting
- Brighten/dim a group or turn on/off the entire group of fixtures
- Program up to 3 scenes per switch