



SENSOR SWITCH® 'HALEON CLASS' SENSORS NPI LAUNCH

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PRODUCT OVERVIEW

"Haleon Class" sensors



VERTEX

Fixture embedded
Occ/Photocell
LEDcode 2

Lens Option:

8F = 8' height / 16'
radius Small Motion
Optimized

15F = 15' height / 30'
radius

Large Motion Detection



HALEON

Fixture embedded
Occ/Photocell
LEDcode 2

Lens Option

45 = 10'-40' @ 40' height /
40' radius
Up to 30' Large Motion
Up to 40' Extra Large
Motion

45A = Aisleway equivalent
of above motion

IP66 version Coming Soon !



SBG BTP

Fixture embedded
Occ/Photocell
LEDcode 2
IP66 Rated

Lens Option

6 = 15'-45' @ 45' height /
20' radius
Up to 35' Large Motion
Up to 45' Extra Large
Motion

10 = 7'-15' height provides
Radial 16'-36'



LSX BTP

Fixture End Mount
Occ/Photocell
LEDcode 2

Lens Option

45 = 10'-40' @ 40' height /
40' radius
Up to 30' Large Motion
Up to 40' Extra Large
Motion

45A = Aisleway equivalent
of above motion



SBO BTP

Outdoor Pole Mount
Occ/Photocell
LEDcode 2
IP66 Rated

Lens Option

6 = 15'-45' @ 45' height /
20' radius
Up to 35' Large Motion
Up to 45' Extra Large
Motion

10 = 7'-15' height provides
Radial 16'-36'

ALL 'HALEON CLASS' SENSORS

Overall Features and Benefits that make them "Haleon Class"

Functionality

- PIR Occupancy Detection
- Photocontrol Daylight Harvesting
- No PIR field calibration or sensitivity adjustments required
- LED indicator for occupancy detection and programming feedback
- Non-volatile settings memory
- AES128 Security
- Corrosion Guard with Extended LT Option
- Aids in CA Title 24 Compliance
- Tested to NEMA 7-2011
- Sensors are UL Listed
- SMHB is UL Recognized

Sensor and Control

- VLP and BTP Programming Capability
- Lens Options – Small and Large Motion
- Switching/Dimming Photocell Programs
 - OCC = On/Off Occupancy
 - HL = High/Low/(Off) Occupancy Dimming
 - ADC = On/Off Occupancy with Auto Dimming Photocell
 - ANL = High/Low/(Off) Occupancy Dimming with Auto Dimming Photocell
- LT = Low Temp / High Humidity options
- Native LEDcode 2 communication
- 0-10V Control Compatible when used with a Smart Hub (SMHB)
- Dimming Levels are Driver Dependent

Driver Compatibility

- Any eldoLED Driver with LEDcode 2
 - Non-SMHB option
 - Cannot use BTP programming
 - No TWH LightShape available
- Any 0-10V Drivers
 - Must use SMHB option
 - Can be used with multiple 0-10V drivers
 - Within the Same Fixture
 - Within Linked Fixtures
 - Within a Room Level grid of Fixtures
- SMHB Power Requirements:
 - Standby Auxiliary Power Supply
 - 12-24VDC
 - Requires >35mA Output Current

Can be supplied by a 0-10V Driver with AUX

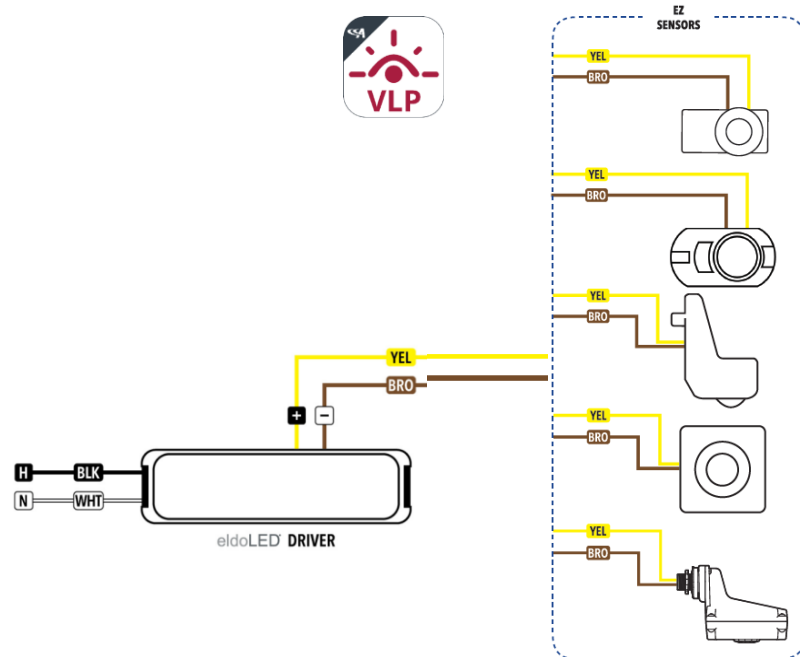
Can be supplied by an additional auxiliary Power Supply



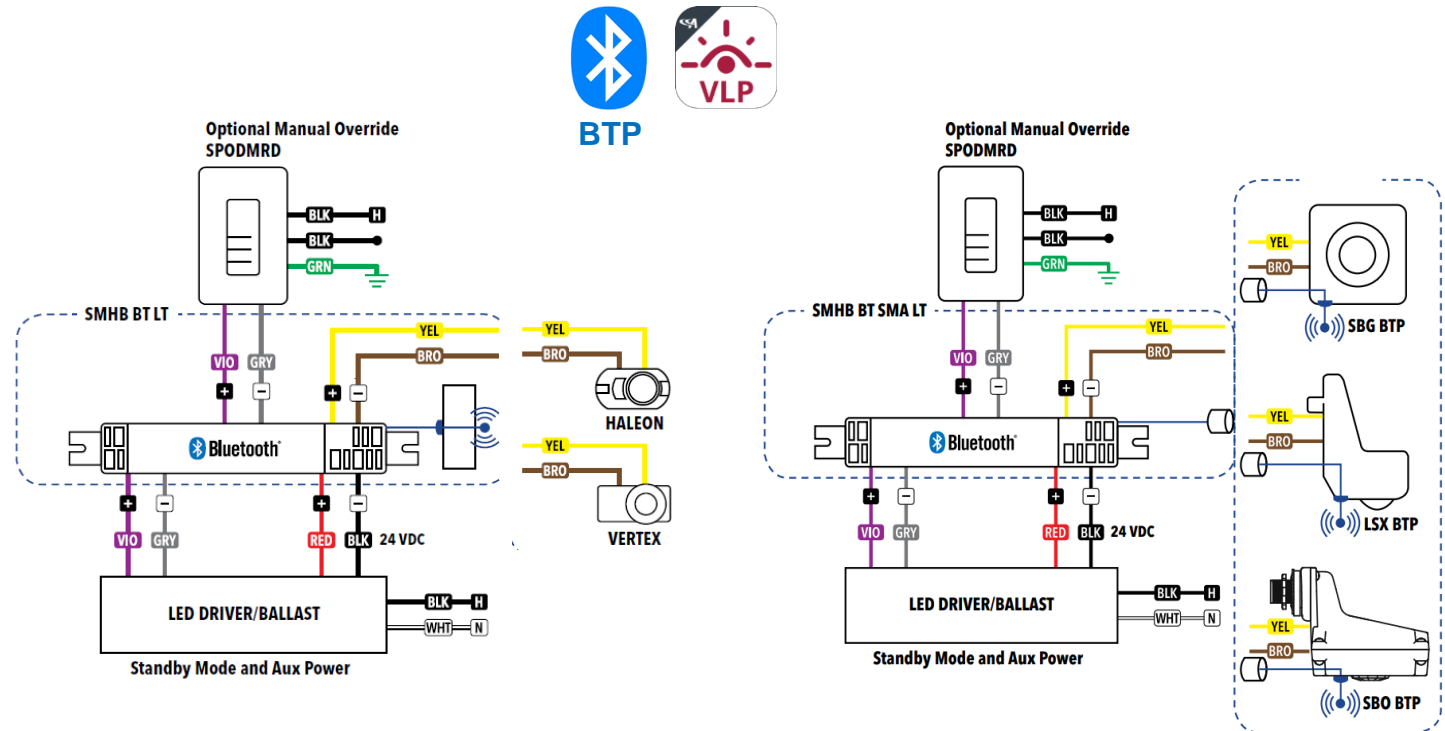
ALL 'HALEON CLASS' SENSORS

Overall Features and Benefits that make them "Haleon Class"

All can be wired by LEDcode 2 directly to an eldoLED Driver in a Stand-Alone circuit



All can be wired by with a SMHB on a 0-10V circuit to multiple drivers with an option for a Dimming Wall Controller



VERTEX

Embedded Sensor with Bluetooth Programming

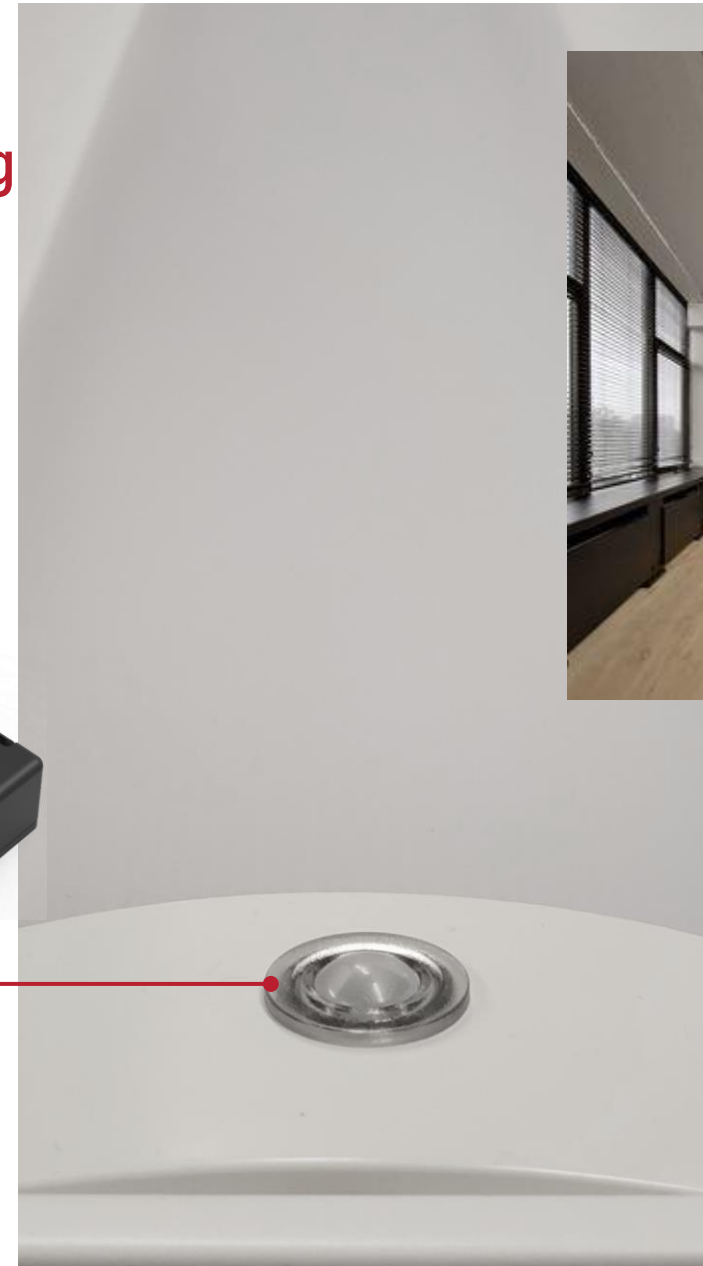
- Why Should Customers Buy?
 - Small form factor embedded sensor
 - Two lens configurations perform at 8-15 ft. mounting height:
 - Small motion 360°
 - Standard motion 360°
 - Standalone sensor with occupancy sensing, dimming, photocontrol
 - Indicator light for California Title 24 Compliance
 - Low temperature / high humidity
- Where to Use?

Embed into Commercial linear and recessed fixtures for:

 - Meeting Rooms
 - Private Office
 - Closet
 - Copy Room



VERTEX



HALEON

Embedded Sensor with Bluetooth Programming

- Why Should Customers Buy?
 - Small Sized, fixture embedded sensor.
 - Two lens configurations perform at 10-40 ft. mounting height:
 - High Mount 360°
 - High Mount Aisleway
 - Standalone sensor with occupancy sensing, dimming, photocontrol
 - Integrated retractable lens mask rotates 360° to prevent unwanted detection
 - Indicator light for California Title 24 compliance
 - Low temperature / high humidity
 - Colors: white and natural aluminum
- Where to Use?

Embed into Indoor (damp) rated Commercial and Industrial fixtures in:

 - Warehousing
 - Manufacturing
 - General industrial



HALEON



SBG BTP

Embedded Sensor with Bluetooth Programming

- Why Should Customers Buy?
 - Large detection range, fixture embedded sensor.
 - Two lens configurations perform at 9-45 ft. mounting height:
 - High and Low Mount 360°
 - Standalone sensor with occupancy sensing, dimming, photocontrol
 - Indicator light for California Title 24 compliance
 - IP66 wet location rated for indoor or outdoor applications
 - Adjustable time delays
- Where to Use?

Embedded in Indoor or Outdoor WET rated Commercial and Industrial fixtures in:

 - Warehousing – standard and COLD STORAGE
 - Manufacturing and Food Preparation
 - General industrial – Indoor and Outdoor Area



SBG BTP



LSX BTP

Bolt-On Sensor with Bluetooth Programming

- Why Should Customers Buy?
 - Easy to factory install, knockout mounting
 - Bolt-On allows for configurable inventory
 - Two lens configurations perform at 10-40 ft. mounting height:
 - High Mount 360°
 - High Mount Aisleway
 - Integrated mounting bracket
- Where to Use?

Bolt-On to Indoor (damp) rated Commercial and Industrial fixtures in:

 - Warehousing
 - Manufacturing
 - General industrial



LSX BTP



BTP



sensorswitch

SBO BTP

Bolt-On Wet Rated Sensor with Bluetooth Programming

- Why Should Customers Buy?
 - Large detection range, fixture embedded sensor.
 - Two lens configurations perform at 9-45 ft. mounting height:
 - High and Low Mount 360°
 - Standalone sensor with occupancy sensing, dimming, photocontrol
 - Indicator light for California Title 24 compliance
 - IP66 wet location rated for indoor or outdoor applications
 - 6 different Mounting Bracket/Extension Options
- Where to Use?

Embedded in Indoor or Outdoor WET rated Commercial and Industrial fixtures in:

 - Warehousing – standard and COLD STORAGE
 - Commercial and Industrial Outdoor Area Lighting



SBO BTP



Smart Hub - SMHB

LEDcode to 0-10V translator and BT Radio

FEATURES:

- Enables BTP programming of sensors
- Enables use of 0-10V dimming driver and controls
- LEDcode 2.0 communication translation to 0-10V peripheral devices
- Provides power to connected LEDcode peripheral devices
- Requires input power: 12-24VDC, 35mA min from Driver Aux or Aux Power Supply
 - Driver must be Standby Ready
- Ports Identifiable by Color Coded Connectors
 - LEDcode communication ports – all the same circuit
 - 0-10V output sink
 - 0-10V input source
- UL Recognized device
- 0-10V is isolated (meets UL 8750 Supplement SF)
- SMHB BT SMA version does not have an antenna and has a coax connector for use with SBO BTP, SBG BTP and LSX BTP with internal antenna.





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SOLUTIONS SUPPORTED

"HALEON CLASS" SOLUTIONS

Fixture Embedded Sensor in "Stand Alone" Configuration

Driver Compatibility

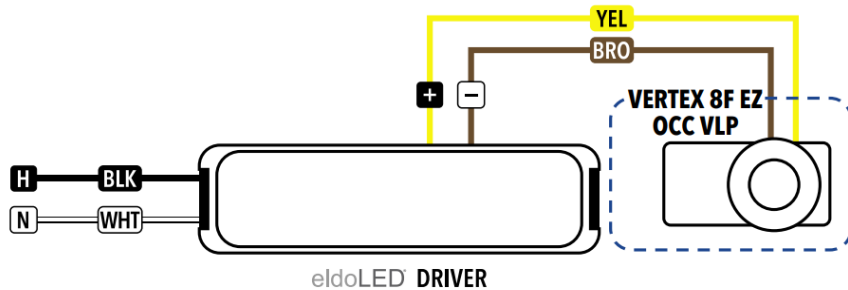
- eldoLED driver with LEDcode 2.0
- Driver must be Standby Ready

Controls Compatibility

- No Controls – "Stand Alone" only

Sensor Features

- Configurable using the Sensor Switch VLP Mobile App Camera flash programming
- Direct digital communication with eldoLED ensures reliable dimming and control
- Lens options to perform at various heights
- Auto-dimming via photocell control
- PIR Motion Sensing with High/Low/Off occupancy controlled dimming capability
- No PIR field calibration or sensitivity adjustments required
- White LED indicator for occupancy detection and programming feedback
- Ability to aid in Title 24 compliance
- cULus Listed compliance



Vertex or other
Haleon Class
Sensor



LEDcode
2.0



Stand Alone
ONLY

"HALEON CLASS" SOLUTIONS

Fixture Embedded Sensor in "Stand Alone" Configuration with LEDcode Cross

Driver Compatibility

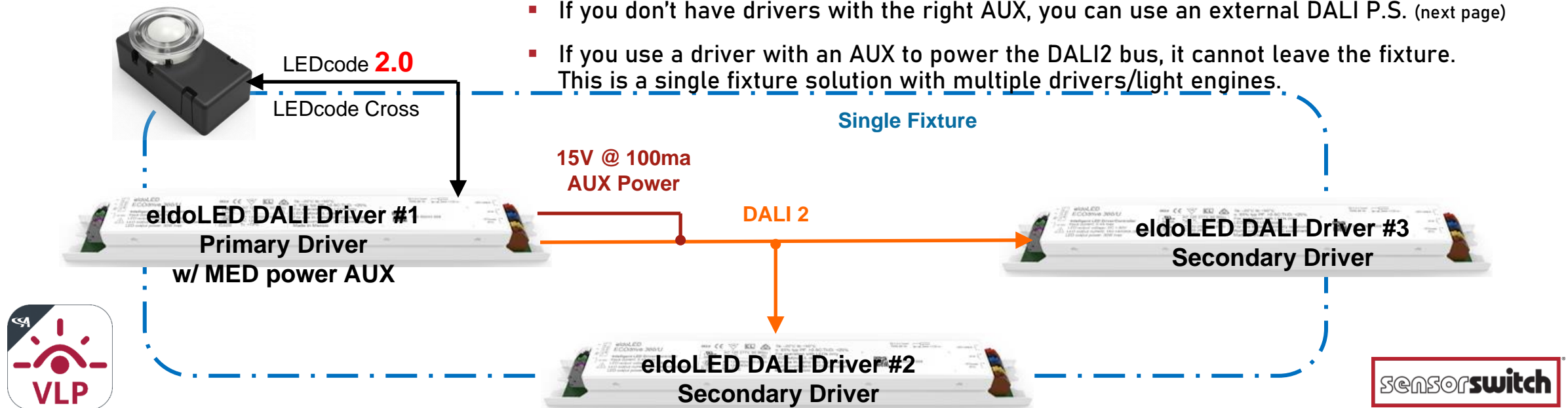
- eldoLED DALI drivers with LEDcode 2.0
- ECO or SOLOdrive – Intensity Dim and Dim To Warm LightShape
- Drivers must be Standby Ready

Controls Compatibility

- No Controls – "Stand Alone" only

Configuration Features – Single Fixture Solution

- Each driver controls a LED light engine. Drivers or fixtures don't have to match wattages but must be same output type (1 or 2 channel) and DIM type (Intensity, Dim To Warm)
- DALI bus cannot connect to any other controls system, it is only for LEDcode Cross
- Up to 16 drivers total can be connected
- Any driver on the DALI bus can supply the AUX power for the bus
- If you don't have drivers with the right AUX, you can use an external DALI P.S. (next page)
- If you use a driver with an AUX to power the DALI2 bus, it cannot leave the fixture. This is a single fixture solution with multiple drivers/light engines.



"HALEON CLASS" SOLUTIONS

Fixture Embedded Sensor in "Stand Alone" Configuration with LEDcode Cross

Driver Compatibility

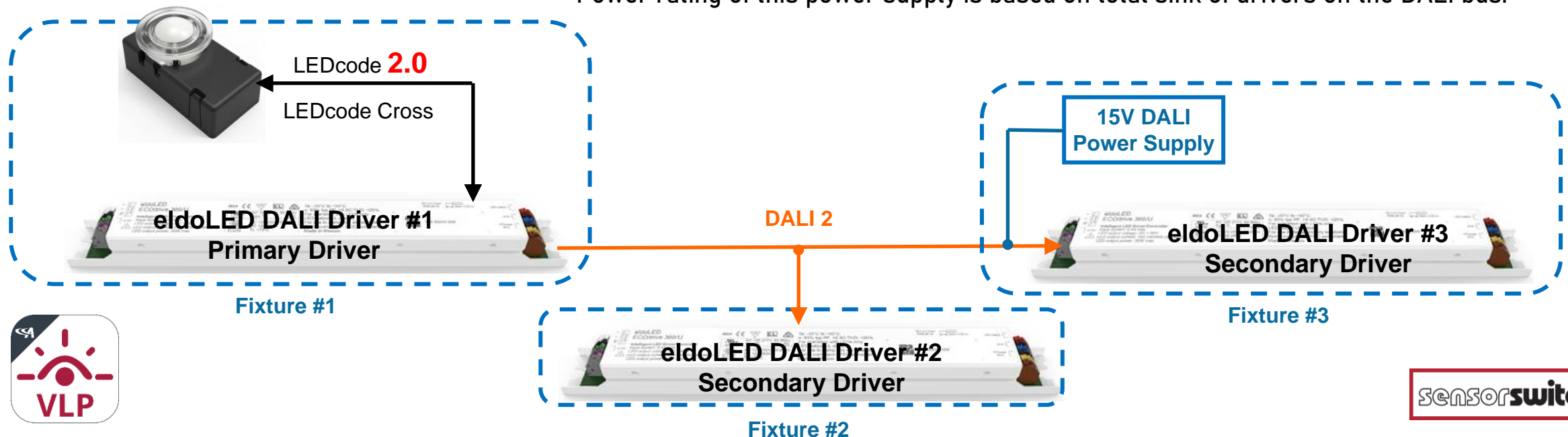
- eldoLED DALI drivers with LEDcode 2.0
- ECO or SOLOdrive – Intensity Dim and Dim To Warm LightShape
- Driver must be Standby Ready

Controls Compatibility

- No Controls – "Stand Alone" only

Configuration Features – Multi-Fixture Solution

- Each driver controls a LED light engine. Drivers or fixtures don't have to match wattages but must be same output type (1 or 2 channel) and DIM type (Intensity, Dim To Warm)
- DALI bus cannot connect to any other controls system, it is only for LEDcode Cross
- Up to 16 drivers total can be connected
- An external DALI Power Supply can be wired into any fixture that is on the DALI bus. Power rating of this power supply is based on total sink of drivers on the DALI bus.

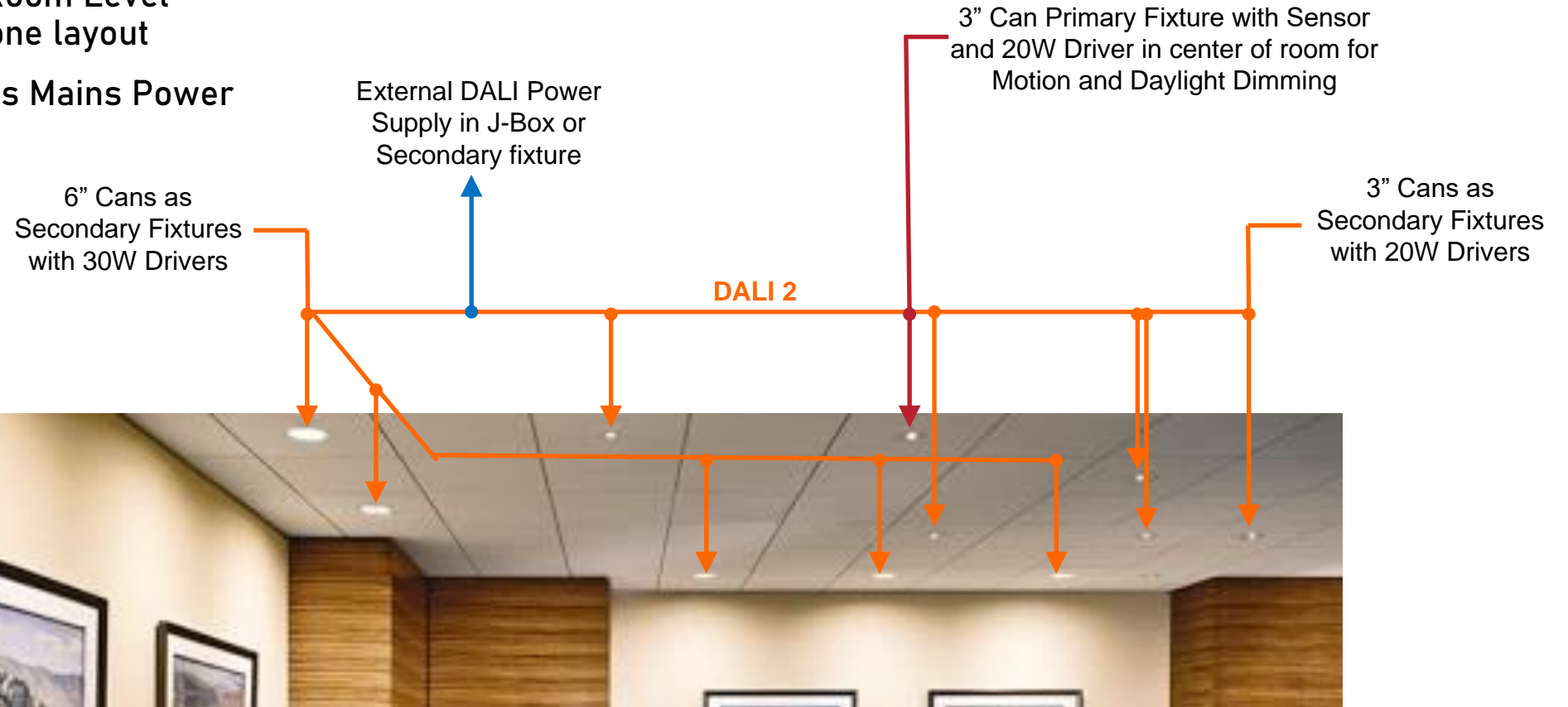


"HALEON CLASS" SOLUTIONS

Fixture Embedded Sensor in "Stand Alone" Configuration with LEDcode Cross

Example Graphic for Room Level
Control with Stand Alone layout

Wall Switch - switches Mains Power



"HALEON CLASS" SOLUTIONS

Fixture Embedded Sensor + SMHB + 0-10V MED AUX Driver + Wall Control

Driver Compatibility

- 0-10V ECO/SOLO Driver with MED AUX:
 - 12V-24VDC, >35mA output
- 1 and 2 channel outputs for Intensity DIM
- Driver must be Standby Ready
- No 0-10V w/MED AUX with TWH available

Controls Compatibility

- SPODMRD, 0-10V wall control
- * If using the sensor in Photocell Dimming modes (ADC/ANL), a dimming equipped wall switch will only dim down below the foot-candle Set Point level of the photocell. Dimming up is not an option due to California Title 24 compliance.

Sensor Features

- VLP Mobile App Camera flash programming or BTP Bluetooth Programming
 - VLP for up to 8' sensor range
 - BTP for up to 100' sensor range
- Sensors are cULus Listed, SMHB is cULus Recognized

Vertex or other Haleon
Class Sensor



LEDcode 2.0

Smart Hub



12-24V AUX
Power

0-10V

0-10V to Control

eldoLED OR



X Brand Driver



"HALEON CLASS" SOLUTIONS

Fixture Embedded Sensor + SMHB + 0-10V Driver + Wall Control + MP20 Power Pack

Driver Compatibility

- 0-10V ECO/SOLO Driver - non-AUX
- MP20 Power Pack
- 1 and 2 channel outputs for Intensity DIM or Dim to Warm LightShape

Controls Compatibility

- SPODMRD, 0-10V wall control
- * If using the sensor in Photocell Dimming modes (ADC/ANL), a dimming equipped wall switch will only dim down below the foot-candle Set Point level of the photocell. Dimming up is not an option due to California Title 24 compliance.

Sensor Features

- VLP Mobile App Camera flash programming or BTP Bluetooth Programming
 - VLP for up to 8' sensor range
 - BTP for up to 100' sensor range
- Sensors are cULus Listed, SMHB is cULus Recognized

Vertex or other
Haleon Class Sensor



LEDcode **2.0**

Smart Hub



15V Power

0-10V

0-10V to Control

PS 150 Power Pack



eldoLED NO AUX



X Brand Driver



"HALEON CLASS" SOLUTIONS

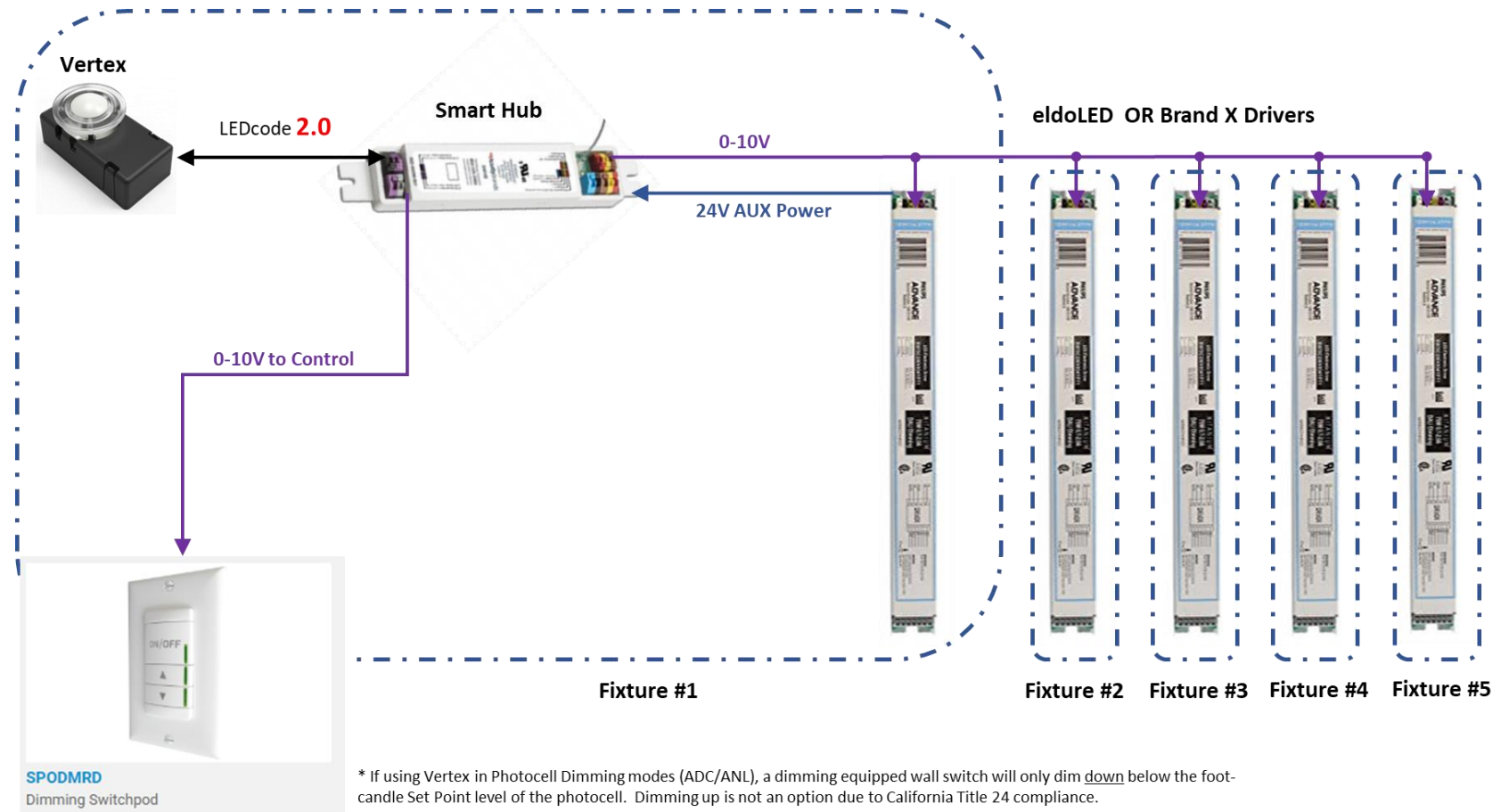
Fixture Embedded Sensor + SMHB + Multiple 0-10V Driver + Wall Control

Driver Compatibility

- Fixture #1
 - 0-10V Driver with AUX:
 - 12V-24VDC, >35mA output
- Driver must be Standby Ready
- Fixture #2 - #5 = 0-10V dimming
- 0-10V is ISOLATED on the SMHB for UL8750 Compliance

Controls Compatibility

- SPODMRD, 0-10V wall control
- * If using the sensor in Photocell Dimming modes (ADC/ANL), a dimming equipped wall switch will only dim down below the foot-candle Set Point level of the photocell. Dimming up is not an option due to California Title 24 compliance.



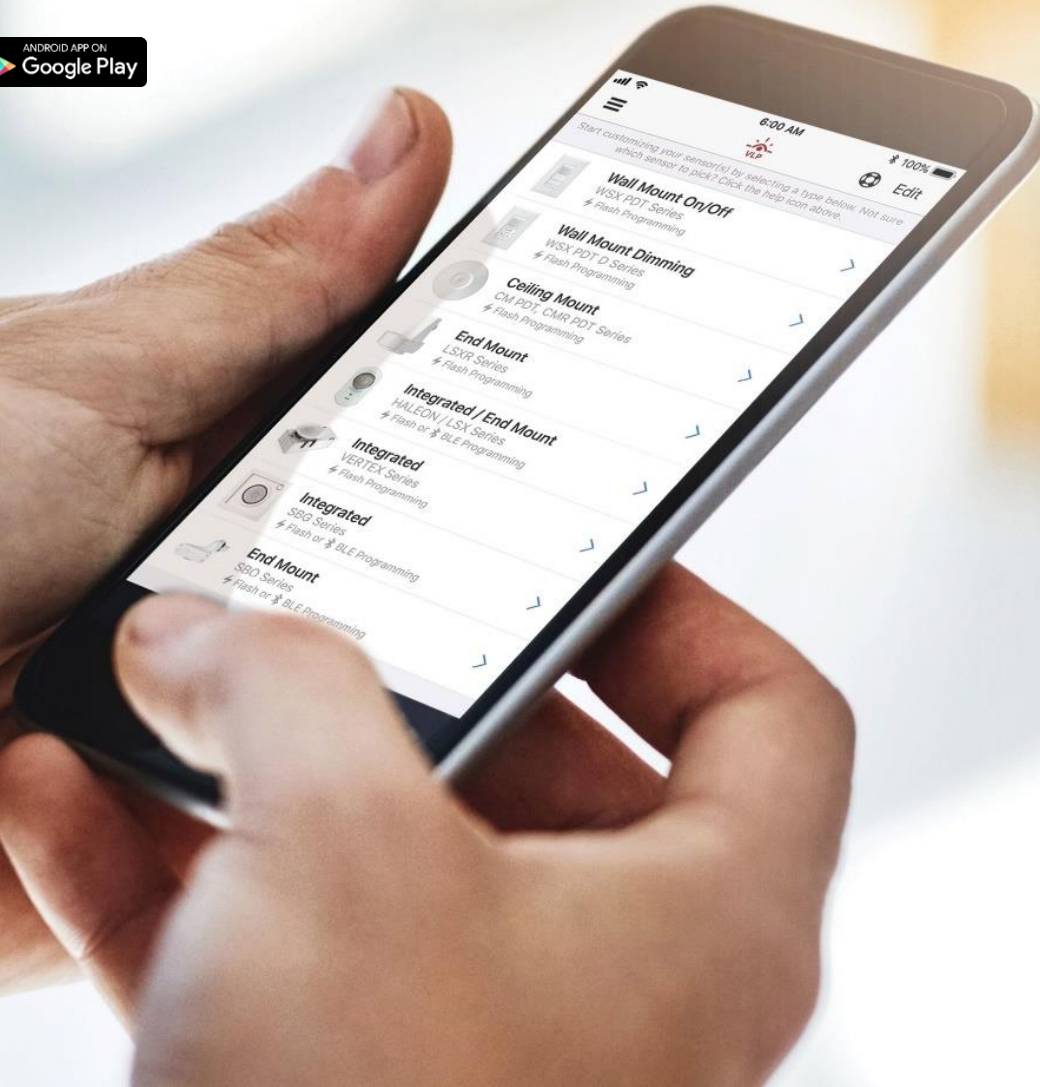
* If using Vertex in Photocell Dimming modes (ADC/ANL), a dimming equipped wall switch will only dim down below the foot-candle Set Point level of the photocell. Dimming up is not an option due to California Title 24 compliance.



3

SENSOR SWITCH MOBILE APP

SENSOR SWITCH MOBILE APP



Visible Light Programming (VLP)

A sequence of flashes from your smartphone efficiently programs settings on VLP-enabled products.

Recommended for 6-8 ft. range



Bluetooth® Wireless Programming (BTP)

Program multiple BTP-enabled sensors at the same time from the ground.

Recommended for 100 ft. range

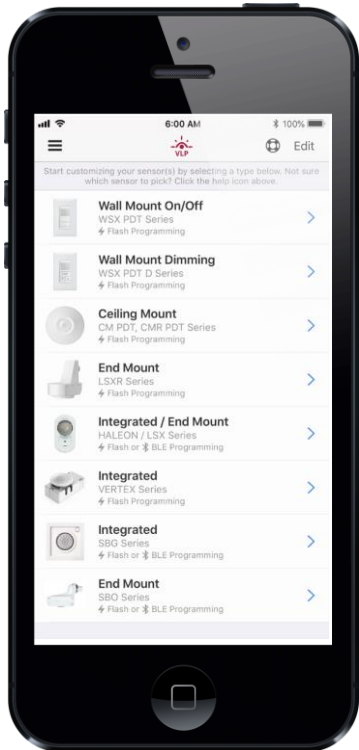


SENSOR SWITCH MOBILE APP

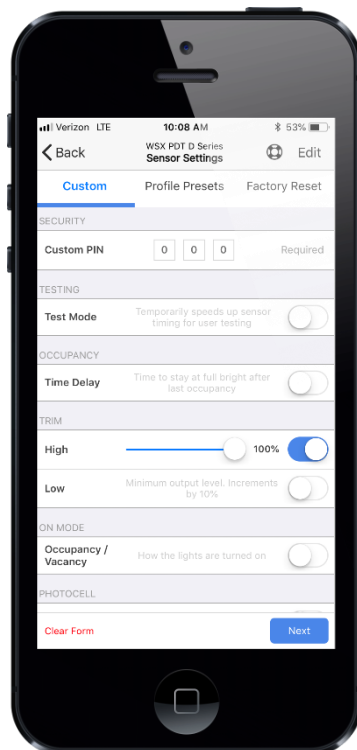
Visible Light Programming

1

Select the appropriate sensor.

**2**

Set the 3-digit pin and adjust to the desired setting.

**3**

Aim the camera's flash towards the sensor and press the Send button.

**4**

The light bar will toggle on and off to confirm successful transmission.

Room Lights:



LED:



Blink-Blink

Meaning:

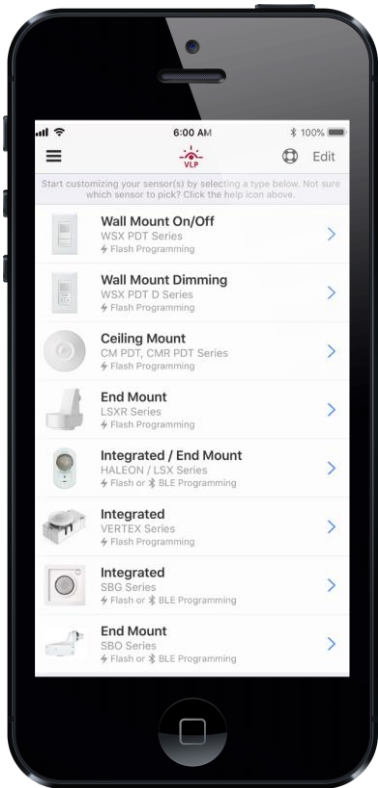
Successfully set PIN and/or configuration option.

SENSOR SWITCH MOBILE APP

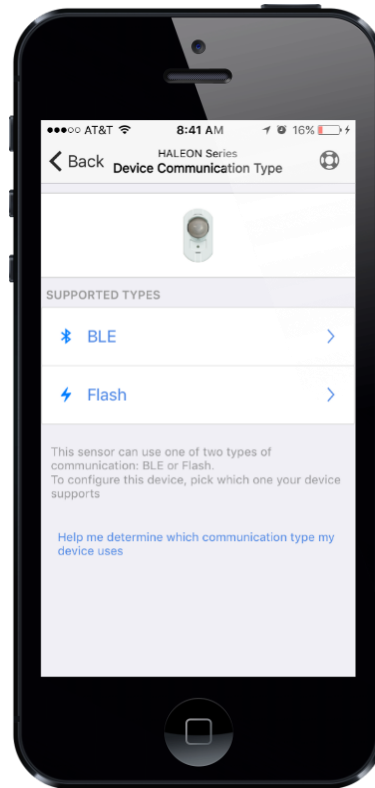
Bluetooth® Wireless Programming

**1**

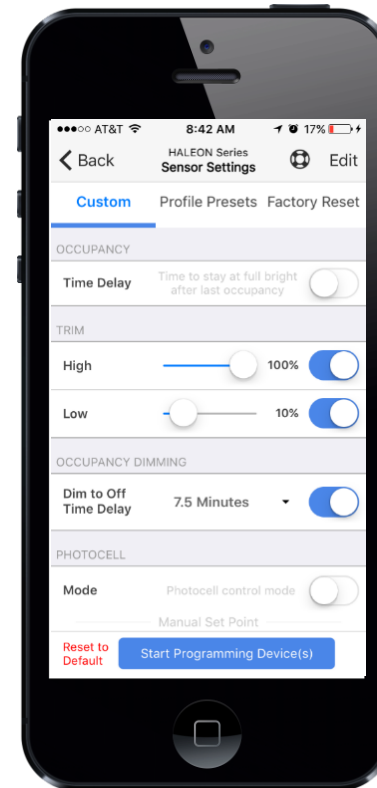
Select the appropriate sensor.

**2**

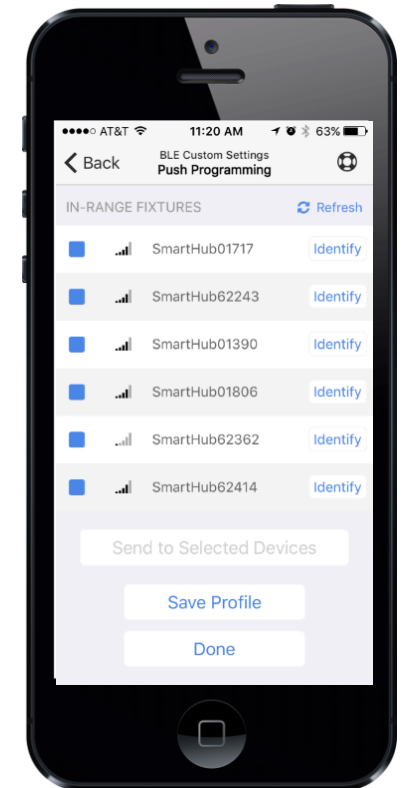
Select BLE communication type.

**3**

Set configuration options.

**4**

Select BLE-enabled fixtures to batch process configuration changes.





4

PROGRAMMING & HARDWARE OPTIONS

VLP PRODUCT PORTFOLIO – “Haleon Class” sensors



VERTEX

Fixture embedded
Occ/Photocell
LEDcode 2

VERTEX 8F EZ OCC VLP
VERTEX 8F EZ HL VLP
VERTEX 8F EZADC VLP
VERTEX 8F EZ ANL VLP

VERTEX 15F EZ OCC VLP
VERTEX 15F EZ HL VLP
VERTEX 15F EZ ADC VLP
VERTEX 15F EZ ANL VLP



HALEON

Fixture embedded
Occ/Photocell
LEDcode 2

HALEON 45 EZ OCC VLP
HALEON 45 EZ HL VLP
HALEON 45 EZ ADC VLP
HALEON 45 EZ ANL VLP

HALEON 45A EZ OCC VLP
HALEON 45A EZHL VLP
HALEON 45A EZADC VLP
HALEON 45A EZ ANL VLP



SBG BTP

Fixture embedded
Occ/Photocell
LEDcode 2

SBG 6 EZ OCC VLP
SBG 6 EZ HL VLP
SBG 6 EZ ADC VLP
SBG 6 EZ ANL VLP

SBG 10 EZ OCC VLP
SBG 10 EZ HL VLP
SBG 10 EZ ADC VLP
SBG 10 EZ ANL VLP



LSX BTP

Fixture End Mount
Occ/Photocell
LEDcode 2

LSX 45 EZ OCC VLP
LSX 45 EZ HL VLP
LSX 45 EZ ADC VLP
LSX 45 EZ ANL VLP

LSX 45A EZ OCC VLP
LSX 45A EZ HL VLP
LSX 45A EZ ADC VLP
LSX 45A EZ ANL VLP



SBO BTP

Outdoor Pole
Fixture Mount
LEDcode 2

SBO 6 EZ OCC VLP
SBO 6 EZ HL VLP
SBO 6 EZ ADC VLP
SBO 6 EZ ANL VLP

SBO 10 EZ OCC VLP
SBO 10 EZ HL VLP
SBO 10 EZ ADC VLP
SBO 10 EZ ANL VLP

EZ version is LEDcode only – If you order VLP product, the only driver you can use is eldoLED

EZ-VPL versions of the SBG, LSX and SBO do not have an antenna inside

BTP PRODUCT PORTFOLIO – “Haleon Class” sensors with SMHB BT

NPT
Bluetooth® Programming



VERTEX

Fixture embedded
Occ/Photocell
LEDcode 2

VERTEX 8F SMHB OCC BTP
VERTEX 8F SMHB HL BTP
VERTEX 8F SMHB ADC BTP
VERTEX 8F SMHB ANL BTP

VERTEX 15F SMHB OCC BTP
VERTEX 15F SMHB HL BTP
VERTEX 15F SMHB ADC BTP
VERTEX 15F SMHB ANL BTP



HALEON

Fixture embedded
Occ/Photocell
LEDcode 2

HALEON 45 SMHB OCC BTP
HALEON 45 SMHB HL BTP
HALEON 45 SMHB ADC BTP
HALEON 45 SMHB ANL BTP

HALEON 45A SMHB OCC BTP
HALEON 45A SMHB HL BTP
HALEON 45A SMHB ADC BTP
HALEON 45A SMHB ANL BTP

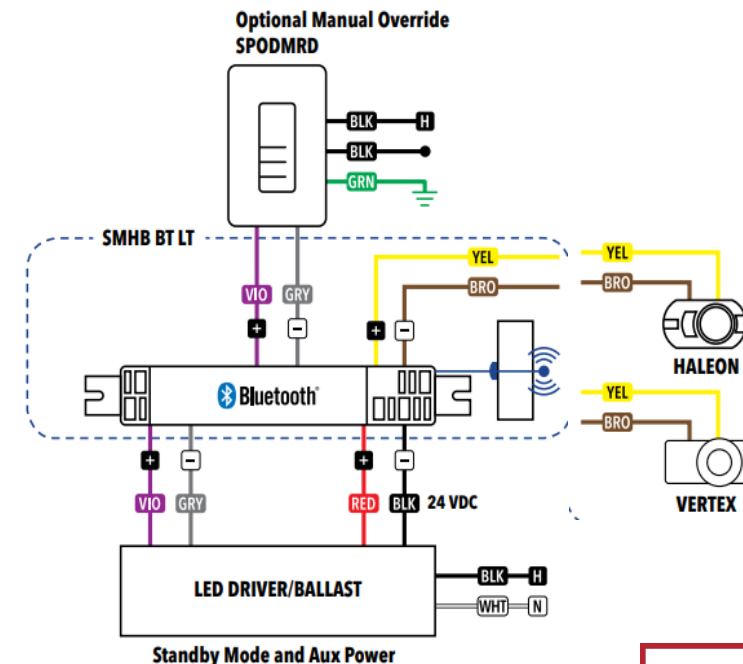


SMHB BT NPT

SmartHub Included – If you order the Vertex or Haleon with the SMHB option, the SMHB BT NPT is included with the sensor.

The remote antennae has NO ADHESIVE is on the antenna.

If customers need an option with adhesive on the antenna, they should order the sensor and SMHB separately – see the next slide



THIS IS NOT A RECOMMENDED SOLUTION FOR MOST OEM CUSTOMERS

BTP PRODUCT PORTFOLIO – “Haleon Class” sensors with SMHB BT

Bluetooth® Programming



VERTEX

Fixture embedded
Occ/Photocell
LEDcode 2

VERTEX 8F EZ OCC VLP
VERTEX 8F EZ HL VLP
VERTEX 8F EZADC VLP
VERTEX 8F EZ ANL VLP

VERTEX 15F EZ OCC VLP
VERTEX 15F EZ HL VLP
VERTEX 15F EZ ADC VLP
VERTEX 15F EZ ANL VLP



HALEON

Fixture embedded
Occ/Photocell
LEDcode 2

HALEON 45 EZ OCC VLP
HALEON 45 EZ HL VLP
HALEON 45 EZ ADC VLP
HALEON 45 EZ ANL VLP

HALEON 45A EZ OCC VLP
HALEON 45A EZHL VLP
HALEON 45A EZADC VLP
HALEON 45A EZ ANL VLP

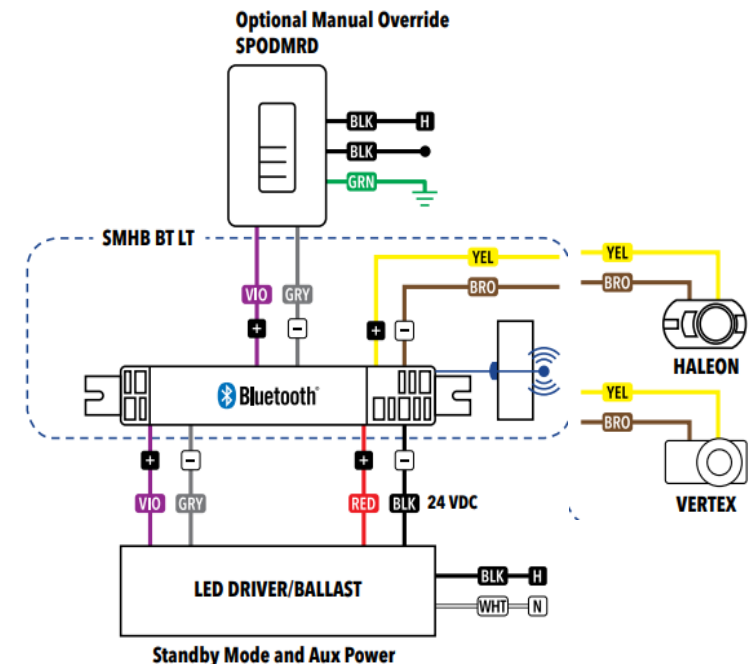


SMHB BT

If you order the Vertex or Haleon with the EZ option, the SMHB is NOT included with the sensor.

The SMHB BT ordered separately HAS THE ADHESIVE on the antenna.

If customers need an option with adhesive on the antenna, they should order the Sensor and SMHB separately.

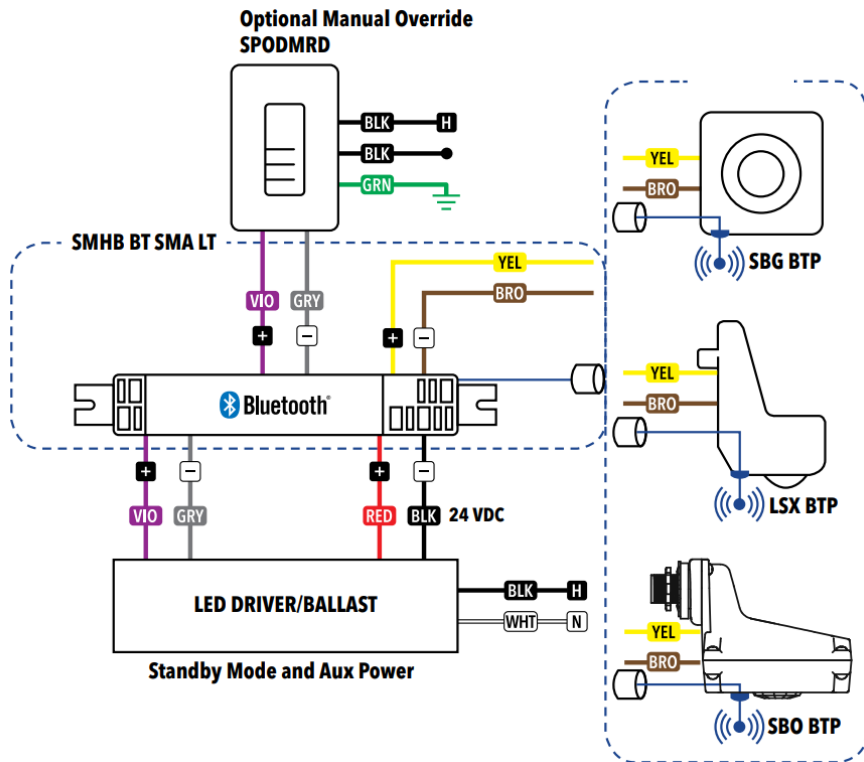


IF you want the SmartHub SMHB BT with the adhesive on the antenna – You can order the EZ VLP version of the sensor and the SMHB BTP separately.

The EZ sensor with the SMHB BT, will BTP program.

BTP PRODUCT PORTFOLIO – “Haleon Class” sensors with SMHB BT

Bluetooth® Programming



SBG BTP

Fixture embedded
Occ/Photocell
LEDcode 2

SBG 6 SMHB OCC BTP
SBG 6 SMHB HL BTP
SBG 6 SMHB ADC BTP
SBG 6 SMHB ANL BTP

SBG 10 SMHB OCC BTP
SBG 10 SMHB HL BTP
SBG 10 SMHB ADC BTP
SBG 10 SMHB ANL BTP



LSX BTP

Fixture End Mount
Occ/Photocell
LEDcode 2

LSX 45 SMHB OCC BTP
LSX 45 SMHB HL BTP
LSX 45 SMHB ADC BTP
LSX 45 SMHB ANL BTP

LSX 45A SMHB OCC BTP
LSX 45A SMHB HL BTP
LSX 45A SMHB ADC BTP
LSX 45A SMHB ANL BTP



SBO BTP

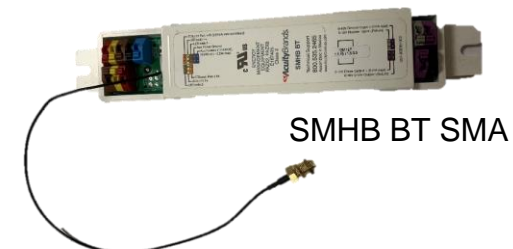
Outdoor Pole
Fixture Mount
LEDcode 2

SBO 6 SMHB OCC BTP
SBO 6 SMHB HL BTP
SBO 6 SMHB ADC BTP
SBO 6 SMHB ANL BTP

SBO 10 SMHB OCC BTP
SBO 10 SMHB HL BTP
SBO 10 SMHB ADC BTP
SBO 10 SMHB ANL BTP

SmartHub is Included – If you order any of the product SKU's with SMHB, it will come complete with the SMHB BT SMA.

The BT antennae is built into the SENSOR. Coax cable connects them



SMHB BT SMA

sensorswitch



5

SALES TOOLS

SENSOR SWITCH OEM PRODUCT PLAYBOOK



Sensor Switch® OEM Products

Wall Switch Sensor WSX

The WSX family of wall switch occupancy sensors provides simple and cost-effective solutions for commercial and residential lighting control applications.

- Private Office
- Conference Room
- Restroom
- Restroom with Stalls
- Closet
- Cargo Room
- Small Enclosed Spaces

Ceiling Mount Sensor CMX-300

The CMX family of ceiling mount occupancy sensors provides a range of sensor solutions for applications with finished ceilings, providing flexibility for multiple mounting heights and coverage patterns.

- Private or Open Office
- Conference Room
- Restroom with Stalls
- Storage Area with Shelving
- Classroom
- Hallways

Universal 360° Single-Pole Sensor SFR 7 & 30

The SFR 7 and 30 sensor is a compact line voltage single pole occupancy sensor that utilizes passive infrared (PIR) technology to detect motion within a 360° coverage pattern for high bay or low bay applications.

- High Bay
- Low Bay
- Warehouse
- Distribution Center
- Industrial Spaces

Fixture Mount Sensor LXXB

The LXXB family of fixture mount occupancy sensors provides reliable, versatile solutions for commercial and industrial lighting control applications.

- High Bay
- Bi-Directional Highway
- Warehouse
- Distribution Center
- Gymnasium
- Industrial Spaces

Outdoor Fixture Mount Sensor LXXCB

Designed to mount directly through a 1/2-inch knockout in a luminaires or pole, the LXXCB sensor is used for walling size motion while preventing rain trapping from the environment.

- Pedestrian Walkway
- Parking Lot and Deck
- Outdoor Spaces

Commercial Luminaires-Embedded Occupancy and Daylight Sensor VERTX

The VERTX features a patent-pending, multi-purpose snap-in lens that serves as an ambient light pipe and indicator light output. This lens is a 1/8-inch hole, its compact footprint enables seamless, inconspicuous integration into the luminaire without compromising aesthetics.

- Gymnasium
- Auditorium
- Lobby
- Corridor
- Commercial Spaces

Luminaire Integrated Ingressed Occupancy Sensor with Dimming LXX-RTT

The LXX-RTT sensor is ideal for indoor, standard luminaire lighting control applications. With its versatile nature, it is employed to perform a variety of mounting heights typical of industrial applications.

- Warehouse
- High Bay
- Gymnasium
- Bi-Directional Highway
- Industrial Spaces

Wet Location Luminaire Ingressed Occupancy Sensor with Dimming LXX-RTT

The LXX-RTT sensor is perfect for standard luminaire lighting control applications requiring an IP65 rating for wet locations and offers 100% digital PIR detection that is tested for walking size motion.

- Parking Lot and Deck
- Gymnasium
- Industrial Spaces
- Outdoor Spaces
- Wet Locations

Industrial Luminaire-Embedded Occupancy and Daylight Sensor HALCON

Optimized to perform at a variety of mounting heights, the HALCON's small footprint and color options enable seamless integration into a luminaire without disrupting aesthetics or requiring additional mounting space.

- High Bay
- Warehouse
- Distribution Center
- Industrial Spaces

Sensor Switch OEM Product Review

Sensor Switch® Sales Guide

Target End Customers

Construction	Facility Managers	Design-Build Engineers	Electrical Engineers
Values areas of installation	Focused on energy code compliance	Looking for a total energy savings solution	Values breadth of product options or configuration settings

Customer Benefits

- Sensor Switch provides innovative sensor technologies for applications requiring compliance with energy codes such as IECC, ASHRAE and CA Title 24
- Our occupancy and daylight sensors are designed to optimize energy savings and enable sustainability

Things to Keep in Mind

- Sensor Switch sensors can save effectively and in bringing facilities up to energy code compliance
- Controls can increase energy savings by up to 30% through energy saving strategies such as dimming, occupancy detection and daylight harvesting
- Sensor Switch control solutions are designed to operate in various OEM Applications

Potential Opportunities

- LED lighting conversions
- Opportunities where establishing compliance with energy codes is required
- Spaces where lights can automatically turn off or dim when unoccupied, such as restrooms and closets
- Outdoor applications where lights can be dimmed during off-hours, such as parking lots and garages
- Applications with high bay luminaires requiring occupancy detection and/or photocontrol

Common Pain Points

Problem	Selling Message	Customer Objections
Complying with energy codes	Sensor Switch offers cost-effective solutions that aid in energy compliance. Our products address these energy code requirements for dimming, occupancy sensing and daylight harvesting	Doesn't think we need controls I don't understand which product to select Unsure if detection was specified
Perception that controls are complicated	Sensor Switch devices are customer installation friendly and require no programming. Our products are easily retrofitted in traditional wired applications and new construction projects	Passive Dual Technology (PDT) from Sensor Switch offers passive infrared detection and Microphonic™ technology, a more reliable non-vision detection method than ultrasonic technology
Increasing energy costs	Controls can reduce energy costs by 30%. Strategic implementation of lighting and controls ensure the lowest upfront and lowest total cost of ownership	I am not sure what controls will be compatible with specified lighting Implementing a Sensor Switch solution with Acuity OEM solution will ensure interoperability between lighting and controls

* Dimmable required to enable Bluetooth® Wireless Programming. See DIMM spec sheet.

Sensor Switch Sales Guide

Sensor Switch® Mobile App

Programming in a flash!

The Sensor Switch mobile app offers a quick and easy way to configure settings on VLP-enabled Sensor Switch occupancy sensors, photocontrols and luminaire-embedded sensors using your mobile device.

Visible Light Programming (VLP)

The Sensor Switch mobile app presents a sequence of flashes from your mobile device to efficiently change settings on VLP-enabled products. Programming occupancy sensors and photocontrols has never been easier!

Bluetooth® Wireless Programming

Users can program multiple VLP-enabled products at the same time using Bluetooth® wireless technology, eliminating the need to use a VLP or flasher. Sensor programming can be done from the facility floor using the Sensor Switch mobile app.

Target Customers

CEM Manufacturing	CEM Post-Install	End Users
Pain Point Disrupted with the amount of time required to program sensors using push-button programming during manufacturing	Pain Point Disrupted with the time it takes for contractors to complete sensor configuration and push-button programming	Pain Point Disrupted with the time it takes for contractors to complete sensor configuration and push-button programming
Customer Benefit Significant reduction in the time to program sensors and photocontrols with back programming, resulting in increased productivity	Customer Benefit Easily reports to customer needs and in-line configuration settings to optimize energy savings without having to call back the contractor	Customer Benefit Reduces overall project cost and downtime as a result of significant time reduction for contractors to program sensors

Programming Options

1. Visible Light Programming (VLP)
2. Bluetooth® Wireless Programming
3. End of Line Programming

Innovative Sensor Technology

- **Passive Infrared (PIR) Detection** - Primary detection method used to determine presence in most occupancy sensors; line of sight is required
- **Microphonic™** - Utilizes a microphone to listen for sounds to determine occupancy. Always used in addition to PIR, never alone, for increased performance reliability
- **Passive Dual Technology (PDT) Detection** - Detection method using PIR and Microphonic™ to determine presence. Especially effective when line of sight is obstructed
- **Matrix Protection** - Trained sensors to learn and load connections that make products impossible to wire backwards, eliminating potential jobsite delays due to miswiring
- **Convertible Neutral™** - A patent-pending technology enabling our occupancy sensors to convert from a neutral to a neutral and ground connection
- **Self Calibration** - All photocontrols have an automatic self-point calibration mode regardless of time of day or daylight conditions
- **Daylight Harvesting** - Using ambient light in a space to aid in determining and saving energy. Sensors with photocontrols can detect ambient light and turn off lights when not needed

* The Sensor Switch mobile app is available as a free download from Google Play and Apple App Store. For more information and resources on the Sensor Switch mobile app and VLP-enabled products, please visit www.sensor-switch.com

Sensor Switch Mobile App VLP & Bluetooth® User Guide

SENSOR SWITCH OEM PRODUCT PLAYBOOK

sensor switch

Sales Guide

Target End Customers

Contractors	Facility Managers	Design-Build Engineers	Electrical Engineers
Values ease of installation	Focused on energy code compliance	Looking for a total energy savings solution	Values breadth of product options or configuration settings

Customer Benefits

- Sensor Switch provides innovative sensor technologies for applications requiring compliance with energy codes such as IECC, ASHRAE and CA Title 24.
- Our occupancy and daylight sensors are designed to optimize energy savings and enable sustainability.

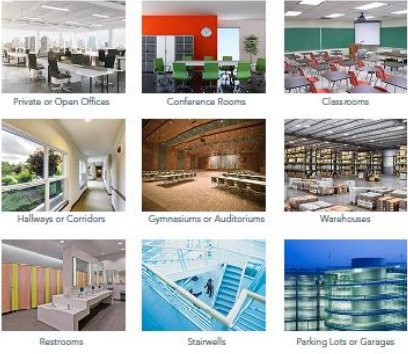
Things to Keep in Mind

- Sensor Switch sensors can cost-effectively aid in bringing facilities up to energy code compliance.
- Controls can increase energy savings by up to 30%* through energy saving strategies such as dimming, occupancy detection and daylight harvesting.
- Sensor Switch control solutions are designed to operate in various OEM Applications.

Potential Opportunities

- LED lighting conversions
- Opportunities where establishing compliance with energy codes is required
- Spaces where lights can automatically turn off or dim when unoccupied, such as copy rooms and closets
- Outdoor applications where lights can be dimmed during off-hours, such as parking lots and garages
- Applications with high bay luminaires requiring occupancy detection and/or photocontrol

Applications



Common Pain Points

Problem	Selling Message
Complying with energy codes	Sensor Switch offers cost-effective solutions that aid in energy compliance. Our products address these energy code requirements for dimming, occupancy sensing and daylight harvesting.
Perception that controls are complicated	Sensor Switch devices are contractor installation friendly and require no commissioning. Our products are easily retrofitted in traditional wired applications and new construction projects.
Increasing energy costs	Controls can reduce energy costs by 30%*. Strategic implementation of lighting and controls ensures the fastest payback and lowest total cost of ownership.

Customer Objections

Objection	Response
I don't think we need controls.	Controls can increase savings by 30%* and many applications are needed to comply with energy codes.
I don't understand which product to order.	Reference the Sensor Switch Quick Recommendation Guide.
Ultrasonic detection was specified.	Passive Dual Technology (PDT) from Sensor Switch utilizes passive infrared detection and Microphonics™ technology, a more reliable secondary detection method than ultrasonic technology.
I am not sure what controls will be compatible with specified lighting.	Implementing a Sensor Switch solution with Acuity OEM validation will ensure interoperability between lighting and controls.

*Results typical; actual savings may differ.

sensor switch

Sensor Switch® OEM Products



5-Year Limited Warranty
5-year limited product warranty on all Sensor Switch occupancy sensors and photocells.

Wall Switch Sensor WSX

The WSX family of wall switch occupancy sensors provide simple and cost-effective solutions for commercial and residential lighting control applications.

- Private Office
- Conference Room
- Restroom
- Restroom with Stalls
- Closet
- Copy Room
- Small Enclosed Spaces



Fixture Mount Sensor LSXR

The LSXR family of fixture mount occupancy sensors provide reliable, versatile solutions for commercial and industrial lighting control applications.

- High Bay
- Bi-Directional Aisleway
- Warehouses
- Distribution Center
- Gymnasium
- Industrial Spaces



Luminaire Integrated Occupancy Sensor with Dimming LSX BTP

The LSX BTP sensor is ideal for indoor standalone industrial lighting control applications. With its versatile nature, it is amplified to perform a variety of mounting heights typical of industrial applications.

- Warehouse
- High Bay
- Gymnasium
- Bi-Directional Aisleway
- Industrial Spaces



Ceiling Mount Sensor CM/CMR

The CM family of ceiling mount occupancy sensors provide a range of sensor solutions for applications with finished ceilings, providing flexibility for multiple mounting heights and coverage patterns.

- Private or Open Office
- Conference Room
- Restroom
- Restroom with Stalls
- Storage Area with Shelving
- Classroom
- Hallways



Outdoor Fixture Mount Sensor SBOR

Designed to mount directly through a 1/2-inch knockout in a luminaire or pole, the SBOR sensor is tuned for walking size motion while preventing false tripping from the environment.

- Pedestrian Walkway
- Parking Lot and Deck
- Outdoor Spaces



Wet Location Luminaire Integrated Occupancy Sensor with Dimming SBO BTP

The SBO BTP sensor is perfect for standalone industrial lighting control applications requiring an IP66 rating for wet locations and offers 100% digital PIR detection that is tuned for walking size motion.

- Parking Lot and Deck
- Gymnasium
- Industrial Spaces
- Outdoor Spaces
- Wet Locations



Universal 360° Snap-Fit Sensor SFR 7 & 30

The SFR 7 and 30 sensor is a compact line voltage snap-fit occupancy sensor that utilizes passive infrared (PIR) technology to detect motion within a 360° coverage pattern for high bay or low bay applications.

- High Bay
- Low Bay
- Warehouse
- Distribution Center
- Industrial Spaces



Commercial Luminaire- Embedded Occupancy and Daylight Sensor VERTEX

The VERTEX features a patent-pending, multipurpose snap-fit lens that serves as an ambient light pipe and indicator light output. Fitting into a 5/8-inch hole, its compact footprint enables seamless, inconspicuous integration into the luminaire without compromising aesthetics.

- Gymnasium
- Auditorium
- Lobby
- Corridor
- Commercial Spaces



Industrial Luminaire- Embedded Occupancy and Daylight Sensor HALEON

Optimized to perform at a variety of mounting heights, the HALEON's small footprint and color options enable seamless integration into a luminaire without disrupting aesthetics or requiring additional mounting space.

- High Bay
- Warehouse
- Distribution Center
- Industrial Spaces



sensor switch

Sensor Switch® Mobile App

Programming in a flash!

The Sensor Switch mobile app offers a quick and easy way to configure settings on VLP-enabled Sensor Switch occupancy sensors, photocontrols and luminaire-embedded sensors using your mobile device.



Visible Light Programming (VLP)

The Sensor Switch mobile app transmits a sequence of flashes from your mobile device to efficiently change settings on VLP-enabled products. Programming occupancy sensors and photocontrols has never been easier!



Bluetooth® Wireless Programming

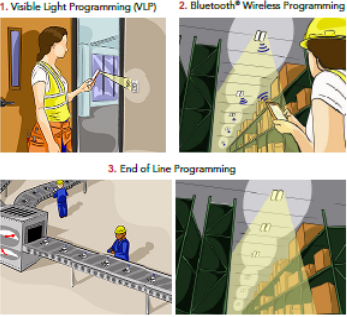
Users can program multiple VLP-enabled products at the same time using Bluetooth® wireless technology, eliminating the need to use a lift or ladder. Sensor programming can be done from the facility floor using the Sensor Switch mobile app.



Target Customers

	OEM Manufacturing	OEM Post Sale	End Users
Pain Point	Dissatisfied with the amount of time required to program sensors using push-button programming during manufacturing	Dissatisfied with the limitations around simple program changes to lighting networks and sensors	Dissatisfied with the time it takes for contractors to complete sensor configuration using push-button programming
Customer Benefit	Significant reduction in the time to program sensors and photocontrols with batch programming, resulting in increased productivity	Easily respond to occupants' needs and fine-tune configuration settings to optimize energy savings without having to call back the contractor	Reduced overall project cost and downtime as a result of significant time reduction for contractors to program sensors

Programming Options



Innovative Sensor Technology

- **Passive Infrared (PIR) Detection** – Primary detection method used to determine presence in most occupancy sensors; line of sight is required.
- **Microphonics™** – Utilizes a microphone to listen for sounds to indicate occupancy. Always used in addition to PIR, never alone, for increased performance reliability.
- **Passive Dual Technology (PDT) Detection** – Detection method using PIR and Microphonics to determine presence. Especially effective when line of sight is obstructed.
- **Miswire Protection** – Patented reversible line and load connections that make products impossible to wire backwards, eliminating potential jobsite delays due to miswiring.
- **Convertible Neutral** – A patent-pending technology enabling our occupancy sensors to convert from a no-neutral to a neutral-and-ground connection.
- **Self-Calibration** – All photocontrols have an automatic set-point calibration mode regardless of time of day or daylight conditions
- **Daylight Harvesting** – Using ambient light in a space to aid in illumination and save energy. Sensors with photocells can detect ambient light and turn off lights when not needed.

The Sensor Switch mobile app is available as a free download from Google Play and Apple App Store. For more information and resources on the Sensor Switch mobile app and VLP-enabled products, please visit www.acuitybrands.com/vlp.

¹ SMHB is required to enable Bluetooth® Wireless Programming. See SMHB spec sheet.

"HALEON CLASS" SALES DEMO KIT

Bill of Materials for building your own kit:

- *261EE4 = HALEON 45 EZ ADC VLP WH LT
- *255FP4 = VERTEX 15F EZ ADC VLP LT
- *250VRS = SBG 10 EZ ADC VLP WH LT VL
- *258NWJ = LSX 45 SMHB ANL BTP WH LT
- *262S76 = SBO 10 EZ ANL VLP WH LT
- *264W78 = SMHB BT
- *236VPY = SPODMRD EZ WH
- *2536SK = EC50L-M1M0A1 350MA LOG 24VAUX ON
- *2536T9 = SL50L-M1Z0Z1 350MA LOG
- *25885R = DL0561S1 350MA LOG - DTW
LightShape Option
- *184FYF = PS 150 - Power Supply for SMHB Option DTW

Note:

The LSX sensor is ordered with the SMHB option. The other sensors are ordered in the EZ version with LEDcode only.

The SMHB BT can be used with the Vertex, Haleon, SBG and SBO.

The LSX SMHB cannot be swapped with any other hardware.



HALEON



VERTEX



SBG



LSX



SBO



ECODrive 50L-M1M0A, 0-10V + AUX



SOLOdrive 50L-M1Z0Z, LEDcode



SPODMRD



SMHB BT

DUALdrive 561/S, (2x) 0-10V
for DTW LightShape Demo

PS 150

The background of the image is a repeating pattern of various sensor switch components, including circular, rectangular, and irregular shapes, all rendered in a light gray outline style. These components are scattered across the entire frame, creating a textured, technical background.

sensorswitch®

THANK YOU!