

**WPA SERIES SELECTABLE FULL CUTOFF WALL PACK**

**CONSTRUCTION**

Decorative die-cast aluminum housing and door. Rugged design protects internal components and provides excellent thermal management.  
 Door assembly hinges to side, cast aluminum housing with three 1/2" conduit entries (on top and 2 sides), for surface conduit.

**OPTICS**

Full cut-off distribution conform to dark sky requirement - individual acrylic LED optics provide IES Type III distribution.  
 CCT selectable light engine available with 3000K ~ 5000K (80CRI).



**ELECTRICAL**

80+ CRI Lumileds LED.  
 WPA-80 output selectable available with 25W / 40W / 60W / 80W.  
 WPA-120 output selectable available with 60W / 80W / 100W / 120W.  
 -40°C up to 45°C (-40°F up to 113°F) maximum operating temperature.  
 >54,000 hr LED at L70.  
 Driver operates at 120-277V input, 50/60Hz, <20% THD, 0.9 power factor.  
 Standard 15V button photocontrol included.  
 Optional 0-10V dimming driver.  
 Optional 10kV surge protector.  
 Optional 347V / 480V Driver.  
 Optional Self-Diagnostic emergency back up.

**SENSORS (OPTIONAL)**

SENSOR-820 Integral PIR on/off/dimming/photosensing.  
 SENSOR-823 Integral PIR on/off/dimming/photosensing.  
 SENSOR-BLE-619 Integral PIR ALS Control bluetooth/on/off/dimming/photosensing.  
 CONTROL-LVFA AVI-ON Bluetooth Mesh Controller.

**MOUNTING**

Wall mount over electrical box or via surface conduit.

**STANDARD FINISH**

Corrosion resistant Dark Bronze powder coating finish.

**CUSTOM FINISH**

Corrosion resistant Black, Graphite Metallic, Gray, Silver, and White, or custom RAL#

**CERTIFICATION**

Wet Location Listed.  
 Meets Buy America Act requirements.  
 Option for "BABAA" compliance upon request.  
 IDA compliant: with 3000K color temperature selection.  
 Title 24 compliant; see local ordinance for qualification information.  
 All luminaires are built to UL1598 standards and bear appropriate cETLus labels.  
 DLC® Premium (DesignLights Consortium Qualified) listed.

**WARRANTY**

5 year warranty, see Limited Warranty for additional information.

**SHIPPING DATA**

Product	Measurement	Weight
WPA-80	16"L x 11"W x 10"H	10 lb
WPA-120	16"L x 11"W x 10"H	10 lb



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**ORDER INFORMATION** **EXAMPLE: WPA 80 MC FC DB UD P**

Fixture	Series	Power & LM	CCT	Distribution	Finish	Input
	<b>WPA</b>		<b>MC</b>	<b>FC</b>		

Accessories  
Options

**A SERIES**

<b>WPA</b>	Selectable Full Cutoff Wall Pack
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**B POWER & LM**

Code	Power	LM
<b>80</b>	Selectable 25W / 40W / 60W / 80W	3,500lm ~11,200lm
<b>120</b>	Selectable 60W / 80W / 100W / 120W	8,400lm ~ 16,400lm

**C CCT**

<b>MC</b>	Selectable 3000K ~ 5000K
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**D DISTRIBUTION**

<b>FC</b>	Full Cutoff
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**E FINISH**

Standard

<b>DB</b>	Dark Bronze
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Custom Color

CC	BK	GM	GR
	Black	Graphite Metallic	Gray
	<b>SV</b> Silver	<b>WH</b> White	<b>RAL#</b>

**F INPUT**

<b>UNVD-P</b>	120-277V, 0-10V dimming, with photocell
<b>HVLD-P</b>	347-480V, 0-10V dimming, with photocell

**G ACCESSORIES/OPTIONS**

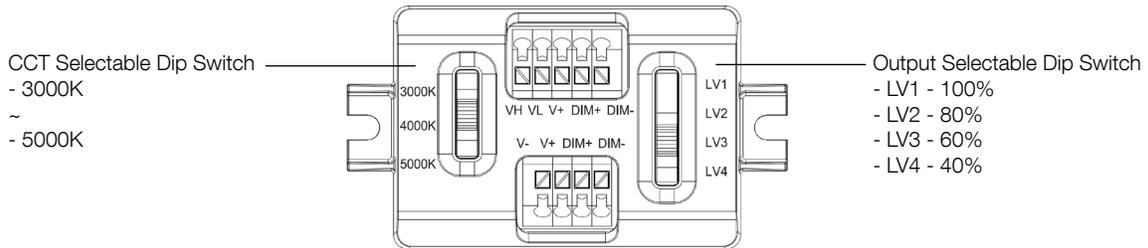
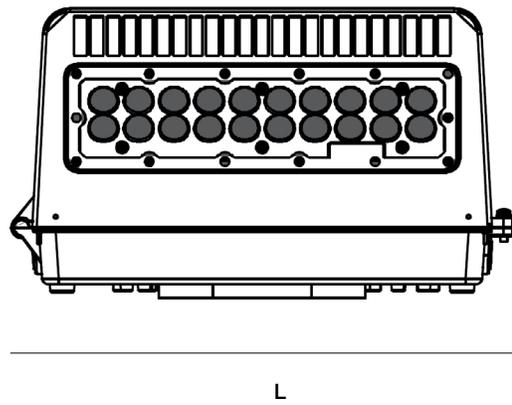
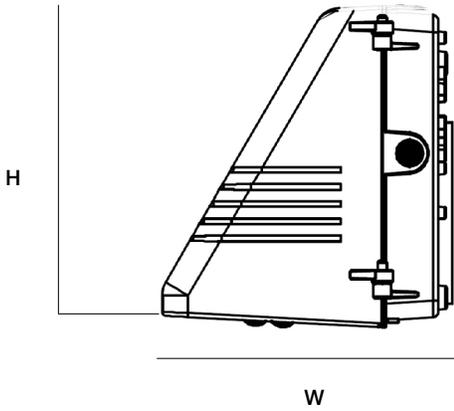
<b>AIA</b>	Assembled in America, compliant with BAA (COTS)
<b>BABAA</b>	Build America, Buy America Act (BABAA) Compliant
<b>REMOTE-RC100</b>	Handheld Remote Commissioning Tool for SENSOR-823, 820 Series
<b>EMB-8W-B*</b>	8W Emergency Battery 170VDC Forward Voltage
<b>EMB-18W-B*</b>	18W Integral Self-Diagnostic Emergency Battery, Operating Temp: 0°C ~ 50°C
<b>EMB-18W-C-B*</b>	18W Integral Self-Diagnostic Cold Weather Emergency Battery, Operating Temp -20°C ~ 50°C
<b>SENSOR-820-M8-L3*</b>	Integral PIR on/off/dimming/photosensing (120-480V)
<b>SENSOR-823-D3*</b>	Integral PIR on/off/dimming/photosensing (120-277V) / <b>L3:</b> up to 40FT, <b>L4:</b> up to 8FT
<b>SENSOR-BLE-619-L3 / L4*</b>	Integral PIR Bluetooth Daylight Sensor (ALS Control Mobile App) / <b>L3:</b> up to 40FT, <b>L4:</b> up to 8FT
<b>SURGE-LSP4-U/H</b>	10kV inline Surge Protection for Universal input / <b>U:</b> 120-277V, <b>H:</b> 480V input
<b>CONTROL-LVFA*</b>	AVI-ON Bluetooth Mesh Control System (12V DC Power by Driver)

\*see page 5 for spec

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**DIMENSIONS**

Model	L	W	H
WPA-80 / WPA-120	14.37" (364mm)	8.31" (211mm)	9.22" (234mm)



Dip Switch located in back box

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**PERFORMANCE DATA**

SYSTEM WATTS	VOLTAGE	3000K / 4000K / 5000K	
		LUMENS	LPW
WPA-25W	120-277V	3,500	140
WPA-40W	120-277V	5,600	140
WPA-60W	120-277V	8,400	140
WPA-80W	120-277V	11,200	140
WPA-60W	120-277V	8,400	140
WPA-80W	120-277V	11,200	140
WPA-100W	120-277V	13,700	137
WPA-120W	120-277V	16,400	137

**PERFORMANCE DATA / DLC CODE**

SYSTEM WATTS	CCT	VOLTAGE	LUMEN	LPW	QTY ON PALLET	PART NUMBER	DLC PRODUCT ID / ORDER CODE	DLC CLASS
WPA-80	3000K ~ 5000K	120-277V	9920	124	96	WPA-80MC-DBUNVD-P	Product ID: S-P378MI	DLC 5.1 Premium
WPA-120	3000K ~ 5000K	120-277V	15,360	128	96	WPA-120MC-DBUNVD-P	Pending	DLC 5.1 Premium

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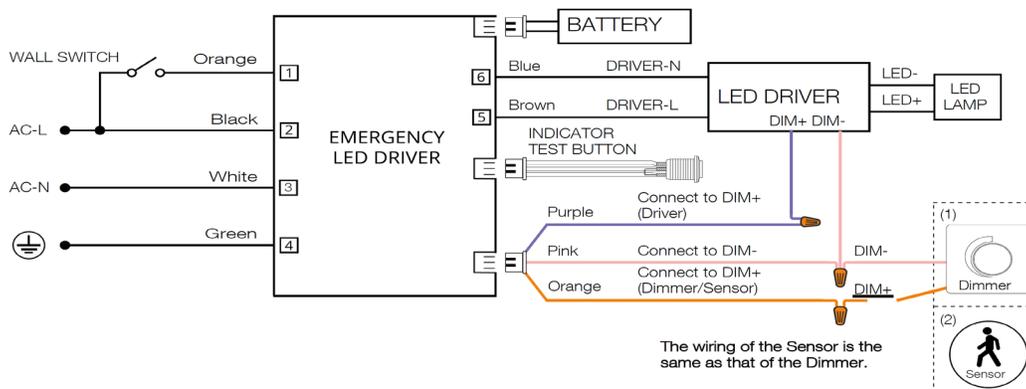
**SENSOR SPEC**

Model	Type	Mounting	Coverage	Input	Function	Programmable
SENSOR-823	PIR	L3 - 40FT L4 - 8FT	30FT radius 24FT radius	Universal	On/Off/Dimming	REMOTE-RC100
SENSOR-820	PIR	up to 40FT	30FT radius	100 ~ 480V	On/Off/Dimming Daylight Harvesting	REMOTE-RC100
SENSOR-BLE-619 (see page 9 for detail)	PIR	L3 - 40FT L4 - 8FT	30FT radius 24FT radius	12V DC	Bluetooth Mesh On/Off Daylight	ALS Control Bluetooth Mobile App
CONTROL-LVFA (see page 8 for detail)	-	-	-	12V DC	Bluetooth Mesh On/Off/Dimming Scheduling	AVI-ON Bluetooth Mobile App



**EMB SPEC**

Model	Battery Capacity	Input	Output	Output Power	Operating Temp	Installation
EMB-8W-B	90mins	100-347VAC	170VDC	8W	0°C ~ 50°C 32°F ~ 122°F	Factory or Field Install
EMB-18W-B	90mins	100-347VAC	170VDC	18W	0°C ~ 50°C 32°F ~ 122°F	Factory or Field Install
EMB-18W-C-B	90mins	100-347VAC	170VDC	18W	-20°C ~ 50°C -4°F ~ 122°F	Factory or Field Install

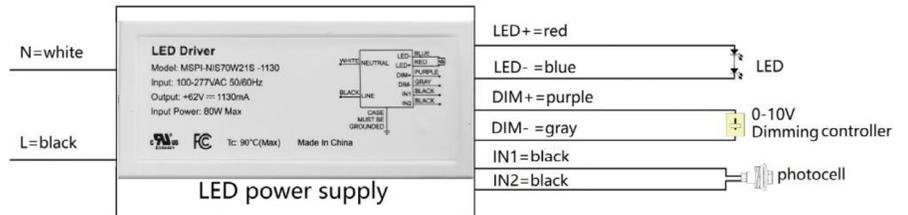
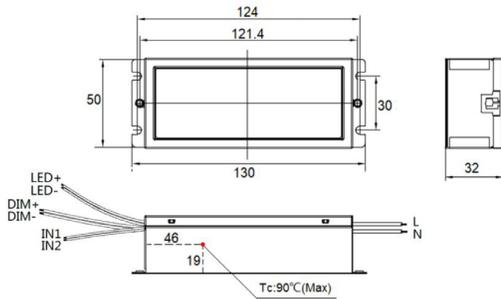
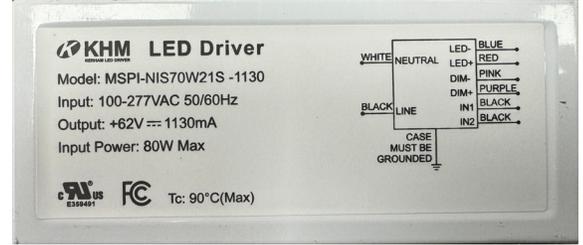


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**DRIVER SPECIFICATION**

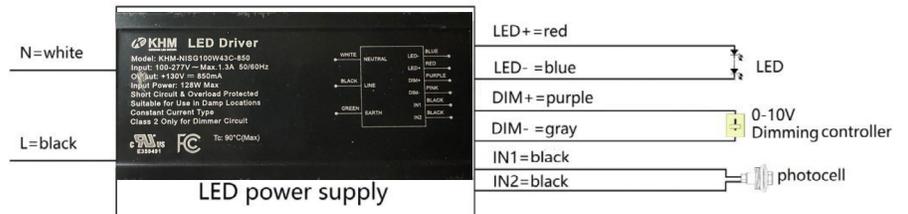
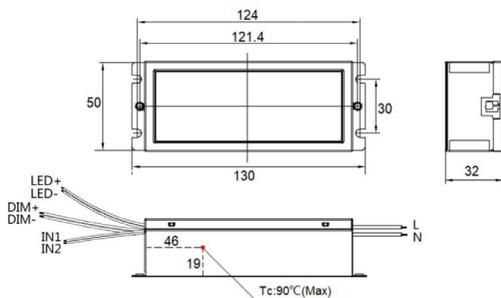
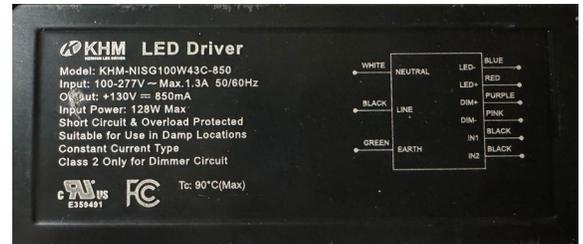
**WPA-80 Driver Spec**

- Input: 100-277Vac / 347~480Vac
- Output Wattage: 80W Max
- Output Voltage: 63Vdc Max
- Output Current: 1130mA Max
- Power Factor: 0.91
- THD: 17% MAX
- Dimming: 0-10V Dim to Off
- AUX Output: 12Vdc
- MAX Temp: 90°C



**WPA-120 Driver Spec**

- Input: 100-277Vac / 347~480Vac
- Output Wattage: 128W Max
- Output Voltage: 130Vdc Max
- Output Current: 850mA Max
- Power Factor: 0.93
- THD: 17% MAX
- Dimming: 0-10V Dim to Off
- AUX Output: 12Vdc
- MAX Temp: 90°C



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**EMB SPECIFICATION**

**CONSTRUCTION**

Red Metal Casing with separate external battery with quick connector.

**ELECTRICAL**

Universal Input: 100 ~ 347V AC, 50/60Hz

Input Current: 150mA

Recharge Power: 10W

Output Voltage: 170V DC

Surge Protection: Line-Neutral 3KV

Emergency Power: 8W / 18W

Standard Operating Temperature: **EMB-8W-B / EMB-18W-B:** 5°C ~ 50°C (41°F ~ 122°F) / **EMB-18W-C-B:** -20°C ~ 50°C (-4°F ~ 122°F)

Recharge Time: 24 Hours

Discharge Time: 90 Mins

Smart battery built-in over temperature, over charge, over discharge protections.



**Self Diagnostic Li-ion Battery**

The integrated Self-Diagnostic circuitry will automatically conduct monthly 30-second and annual 90-minute tests to verify proper emergency capability per Life Safety Code requirements.

NFPA 101, Life Safety Code Outlines the following schedule:

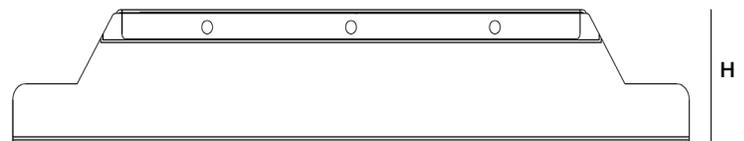
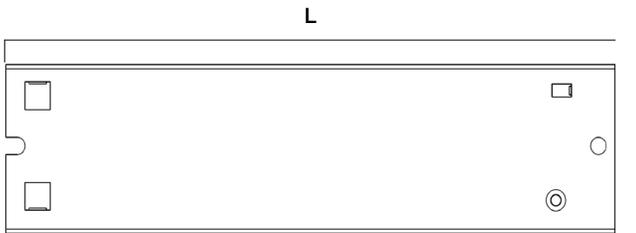
Monthly- During AC mode, the system conducts a (30)seconds self-discharge test of the emergency led driver every 30 days. And automatically restore to normal charging after (30)seconds dis-charged.

Annually- During AC mode, the system conducts a (90)minutes self-discharge test of the emergency led driver every 365 days. And automatically restore to normal charging after fully dis-charged.

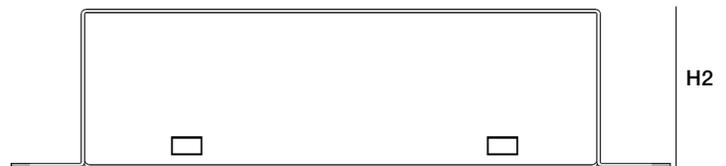
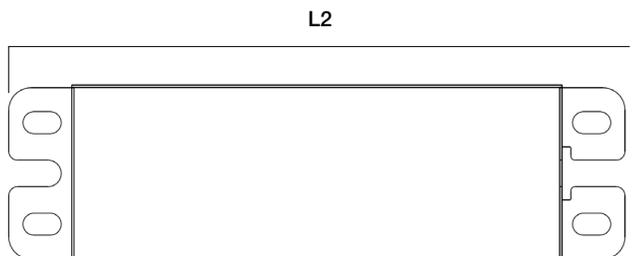
**DIMENSIONS**

MODEL	L	L2	W	W2	H	H2
EMB-8W-B	7.32" (186mm)	4.25" (108mm)	1.50" (38mm)	1.63" (42mm)	0.99" (25mm)	0.99" (25mm)
EMB-18W-B	7.32" (186mm)	7.07" (179mm)	1.50" (38mm)	1.63" (42mm)	0.99" (25mm)	0.99" (25mm)
EMB-18W-C-B	7.32" (186mm)	7.07" (179mm)	1.50" (38mm)	2.27" (58mm)	0.99" (25mm)	1.29" (33mm)

**DRIVER**



**BATTERY**



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**CONTROL-LVFA SPEC**

**Status LEDs & Config Button**

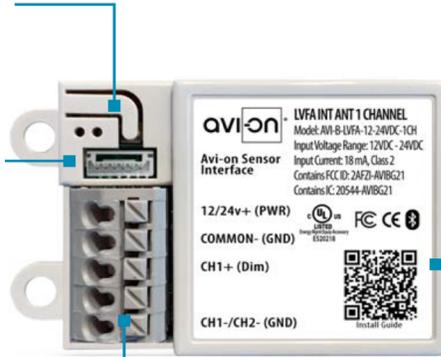
Quick and easy validation of wiring and network

**Direct Connect™ Sensor Port**

Simple and cost-effective addition to Avi-on sensors

**Terminal Blocks & Mounting Tabs**

Faster, easier and lower cost installation eliminating connectors



**Internal Antenna**

Improved performance and eliminates risk of accidentally cutting a hanging wire

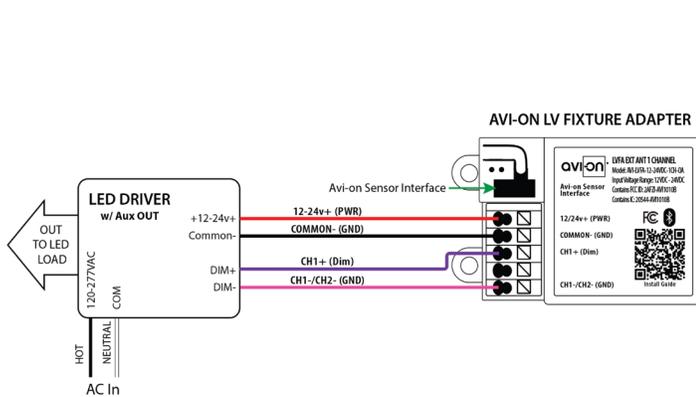
**SPECIFICATIONS**

**INPUT VOLTAGE:** 12-24VDC  
**CURRENT:** 15mA without a Sensor  
 19mA with a DC PIR Sensor  
 48mA with a DC Microwave Sensor  
**0-10V DIMMING:** 12-24VDC  
**SIZE:** 2.30in x 1.43in x 0.75in  
 (58.2mm x 36.4mm x 19mm)  
**MOUNTING:** Removable mounting tabs  
**WEIGHT:** 0.45 oz (16g)  
**OPERATING TEMP:** -22°F to +158°F (-30°C to + 70°C)

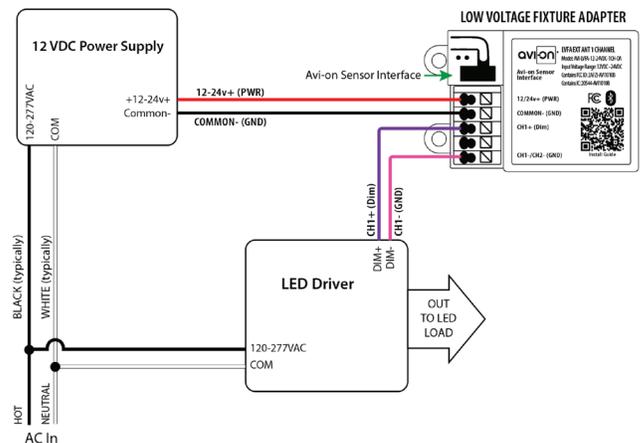
**RADIO FREQUENCY:** 2.4GHz  
**WIRELESS STANDARD:** BLE 4.2 with Mesh  
**POINT TO POINT RANGE\*:** 80ft with obstructions  
 350ft unobstructed  
**SECURITY:** AES 128-bit encryption for device to device communication  
 AES 256-bit encryption for device to cloud communication  
**WARRANTY:** 5 years; 10 years optional  
**REGULATORY:** FCC: 2AFZI-AVI1010 B  
 IC: 20544-AVI1010 B  
 BQB: D031801, DID: 86303  
 UL 916, 2043 (Plenum Rated)

\*When communicating through the mesh, range is essentially unlimited (5000ft+)

**WIRING DIAGRAM**



Fixture adapter powered by LED driver auxiliary output



Fixture adapter connected to LED driver and using power supply

**FEATURE**

- **Installation:** Factory Install - Sensor integral to fixture, lens external
- **Commissioning:** Wirelessly through ALS Control Mobile App (iOS / Android)
- **Certification:** DLC 5.1 Networked Lighting Control System
- **Control:** Hold time, High-Low setting, continuous Bi-level dimming, manual/auto - on/off
- **Sensor:** Motion (Occupancy/Vacancy/Manual) and Daylight
- **Zone Control:** Zoning and Grouping control, Scheduling

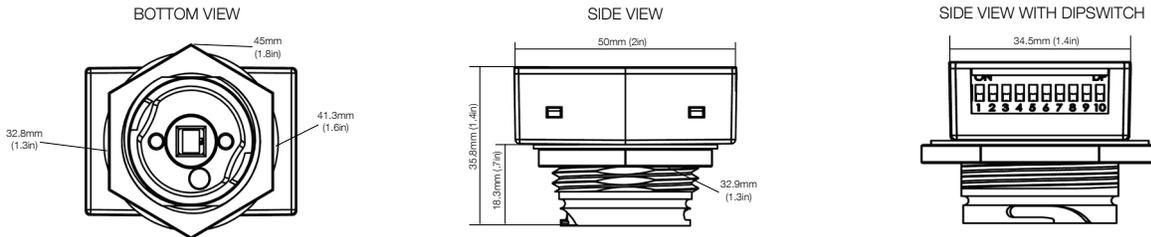


**SPECIFICATIONS**

**SENSOR TYPE:** Passive Infrared Sensor (PIR)  
**WIRELESS STANDARDS:** Bluetooth SIG Mesh  
**INPUT VOLTAGE:** 12-24VDC, >50mA  
**CONTROL OUTPUT:** 0-10V  
**OPERATING TEMP:** -40°F ~ +158°F (-40°C ~ +70°C)

**COMMISSIONING RANGE:** 50FT  
**BLUETOOTH RANGE:** Integral antenna up to 100FT  
**DETECTION ANGLE:** Vertical 90° x Horizontal 360°  
**MOUNTING HEIGHT:** 8 - 40FT  
**WARRANTY:** 5 years  
**IP RATING:** IP65

**DIMENSIONS**



**COVERAGE PATTERNS**

