



ISON® AREA LIGHT HIGH PERFORMANCE, GEN 2

IAHP2



Project Name:	
Catalog Number:	
Type:	
Note:	
Date:	



Intended Use

- The IAHP2 industry leading lumen per watt performance maximizes energy savings and leads to the lowest total cost of ownership for exterior lighting
- The IAHP2 provides uniform distribution for area and site lighting in retail, commercial, and residential applications including driveways and parking areas
- The IAHP2 provides multiple options to maximize versatility, allowing lumen output, optical beams, and smart integration to be selected for optimal lighting requirements

Construction

- Type III, IV, and Type V light distributions
- Tool-less lens change capability for quick field replacement
- Tool-less access to electrical components for field maintenance and installation
- Field selectable lumens provide a late point adjustment at the installation site
- 9,000 to 52,000 lumens
- Nine lumen packages
- Anti-corrosion stainless steel hardware
- Heavy duty die-cast aluminum housing with external heat-sink for optimal thermal management
- Precision engineered lens made of optical grade polycarbonate for maximum light intensity
- Minimum 80 CRI
- Efficacy up to 195 LPW

Electrical

- Available in 120v-277v and 200v-480v
- 10kV/5kA surge protection standard
- 20kV/10kA surge protection available
- Optional 12v DC auxiliary power provided with 7-pin NEMA receptacle
- Power factor > .90
- Total harmonic distortion < 20%
- Includes pre-installed 3ft power cord

Controls & Sensor Options

- Optional factory installed NEMA 3/5/7-pin universal photocell receptacle
- Optional factory installed 12v DC auxiliary NEMA 7-pin photocell receptacle
- Photo control and occupancy sensor options available
- Fixture comes sensor ready for field installed motion sensors and wireless network controls

Additional Options

- Lens field install kits for each light distribution type (Type III, IV, V)
- Multiple mounting options
- Light shield kit options

Installation

- Multiple mounting options available for round and square poles
- Die cast slipfitter for common 2-3/8" tenons
- Fully adjustable wall mount arm
- Trunnion mount for mounting to various surfaces
- Each kit is provided with stainless steel hardware

Fixture Certifications & Listings

- UL/cUL listed for wet locations
- RoHS compliant components
- IK09 impact rating
- IP65 rated
- 3.0 G vibration load rating per ANSI C136.31
- Title 24 Compliance when using optional sensor

Warranty

- 10-year optional warranty
- See Orion's [Product Limited Warranty](#) for more details and information



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Ordering Information Example (NOTE: No dashes or spaces unless noted below)

IAHP2B1UNVFD840BRT4SP

Ordering Information [Enter Selected Catalog Number Below for Factory-Installed Options]

Series	Nominal Lumen Code ¹	Voltage	Driver Type	CRI; CCT	Fixture Color	Light Distribution	Standard Factory Installed	Optional Sensors Field Installed	Packaging Options
IAHP2= ISON Area Light High Performance, Gen 2	A1= 9,000 lm / 12,000 lm / 15,000 lm B1= 18,000 lm / 24,000 lm C1= 30,000 lm / 36,000 lm D1= 42,000 lm / 52,000lm	UNV= 120v-277v HMV= 200v-480v	FD= Full Dimming	830= 80CRI; 3000K 840= 80CRI; 4000K 850= 80CRI; 5000K	BR= Bronze BL= Black ² WH= White ²	T3= Type III T4= Type IV T5= Type V	[Blank]= No option TS2= 20kV/10kA Surge Protection 7R01= 3/5/7-Pin Universal NEMA Receptacle* 7R02= 7 Pin NEMA Receptacle [with 12v power source]*	[Blank]= Sensor Ready Base [see field install accessories table for sensor options]	SP= Single Pack
	Note: All fixtures are set to max lumen range output						Note: *Universal NEMA 7-Pin receptacle used. See Page 3 for photocell options Shorting cap not included. Order separately	Note: Use of sensor and photocell together is not recommended	

Additional Specification Information

¹For actual lumens, see performance table

²Special order item, lead times vary



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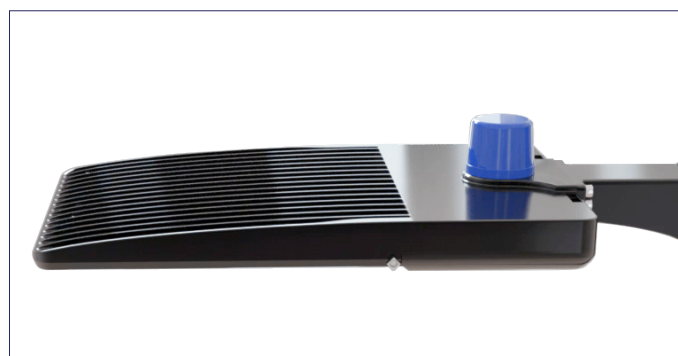
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Accessories (Field Installed) View our Install Instructions [Here](#)

Remote Required for Commissioning	
RM51	Keilton Basic Sensor IR Remote Controller [for EFS07-AUX-W, B1-HB40 sensors]
Sensor Options	
EFS07-AUX-W.B1-HB40	Keilton Basic: 3.5mm Fixture Mount Sensor - 0-10V Dimming, Input Voltage 12V, Photocell and PIR Motion without lens, IP65, Rating, IR Remote Programmable
EFS106-AUX-W.B4-HB40	Keilton+Autani: Bluetooth Mesh Sensor, Long Range, Input Voltage 12v DC, 0-10v Dimming, Photocell and PIR Motion, High Bay Lens 40' Mounting Height, Wet Location, IP65 Rating, Keilton Mobile App Programmable
Fixture Controller	
WPPA102-AUX-W.B1	Keilton+Autani: Bluetooth Mesh Fixture Controller, Input Voltage 12v DC, 0-10v Dimming, IP65 Rating, Keilton Mobile App Programmable
Keilton+Autani Ecosystem Accessories	
Accessories can be commissioned and controlled via Keilton+Autani app as they are a part of the same ecosystem as the Bluetooth Keilton+Autani sensors. For more information, please visit this link .	
CR02-W-ENCL	Keilton+Autani Protected Long-Range Real-Time Clock Enclosure, 120-277VAC, IP65, ABS Housing, 20kA Surge Protection, PPA1025.C1, SPD, CR02-W.A0, TX5, with Combination Lock and Pole Mount Kit



Sensor Ready Base



Nema Receptacle (shorting cap not included)



Field Replaceable Lens



Back Shield

Photocells and Shorting Cap Options	
EXT-IAHP-PE3-001	Twist-lock Photocell On/Off Daylight Sensing Only, 120-277v
EXT-IAHP-PE3-002	Twist-lock Photocell On/Off Daylight Sensing Only, 347v
EXT-IAHP-PE3-003	Twist-lock Photocell On/Off Daylight Sensing Only 480v
EXT-IAHP-SHC-001	Shorting Cap
*Note: When ordering field installed control options, 7R01 or 7R02 needs to be selected in the factory ordering information on Page 2.	

Lens Kit Options	
ROL-IAHP2-S-T3-1	Lens replacement: IAHP2, A1 / B1, Type III [T3] Light Distribution
ROL-IAHP2-S-T4-1	Lens replacement: IAHP2, A1 / B1, Type IV [T4] Light Distribution
ROL-IAHP2-S-T5-1	Lens replacement: IAHP2, A1 / B1, Type V [T5] Light Distribution
ROL-IAHP2-L-T3-1	Lens replacement: IAHP2, C1 / D1, Type III [T3] Light Distribution
ROL-IAHP2-L-T4-1	Lens replacement: IAHP2, C1 / D1, Type IV [T4] Light Distribution
ROL-IAHP2-L-T5-1	Lens replacement: IAHP2, C1 / D1, Type V [T5] Light Distribution

Light Shield Options	
EXT-IAHP2-BLS-001	Bronze Integral Back Light Shield, Small A1/B1
EXT-IAHP2-BLL-001	Bronze Integral Back Light Shield, Large C1/D1
Note: To order a light shield: for black change "001" to "002" or for white change "001" to "003." Example: EXT-IAHP2-BLS-002	



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Accessories (Field Installed)

Mounting Options	
EXT-IAHP-SFT-001	Bronze Slipfitter, 2-3/8" Tenons
EXT-IAHP-TRN-001	Bronze Trunnion Mount, Min. 5.5" Square Pole
EXT-IAHP-ADJ-001	Bronze Adjustable Arm, Min. 4" Square Pole
EXT-IAHP-UPM-001	Bronze Universal Pole Mount Min. 3" Square or 4" Round Pole Kit
EXT-IAHP-UPM5-001	Bronze Universal Pole Mount Min. 3" Square or 5" Round Pole Kit
EXT-IAHP-UPM6-001	Bronze Universal Pole Mount Min. 3" Square or 6" Round Pole Kit
EXT-IAHP-SLM-0016	Bronze Slide and Lock, Min. 3" Square or 3-4" Round Pole
EXT-IAHP-WMA-001	Bronze Adjustable Wall Mount Arm Kit

Note: To order a fixture bracket: for black change "001" to "002" or for white change "001" to "003." Example: EXT-IAHP-SFT-002



Slipfitter
[EXT-IAHP-SFT-001]



Universal Pole Mount Kit
[EXT-IAHP-UPMx-001]



Adjustable Arm Mount
[EXT-IAHP-ADJ-001]



Trunnion Mount
[EXT-IAHP-TRN-001]



Adjustable Wall Mount Arm Kit
[EXT-IAHP-WMA-001]



Slide and Lock Mount
[EXT-IAHP-SLM-001]



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Performance Information [277v, 4000K, >80CRI]

Lumen Code	Nominal Lumens	Wattage	Type III			Type IV			Type V		
			Lumens	LPW	BUG	Lumens	LPW	BUG	Lumens	LPW	BUG
A1	9,000	48	9,136	189	B1-U0-G2	9,222	191	B1-U0-G2	9,402	195	B3-U0-G2
	12,000	66	12,297	187	B2-U0-G2	12,413	189	B1-U0-G2	12,655	192	B4-U0-G2
	15,000	80	14,542	182	B2-U0-G2	14,680	183	B2-U0-G2	14,966	187	B4-U0-G2
B1	18,000	101	18,142	180	B2-U0-G2	18,314	182	B2-U0-G3	18,671	185	B4-U0-G2
	24,000	139	25,598	184	B3-U0-G3	25,840	186	B2-U0-G4	26,344	190	B5-U0-G3
C1	30,000	166	30,361	183	B3-U0-G4	30,648	185	B3-U0-G4	31,245	189	B5-U0-G3
	36,000	198	34,746	175	B3-U0-G4	35,075	177	B3-U0-G5	35,759	180	B5-U0-G4
D1	42,000	240	42,491	177	B3-U0-G4	42,893	178	B3-U0-G5	43,729	182	B5-U0-G4
	52,000	297	50,279	170	B3-U0-G5	50,754	171	B3-U0-G5	51,743	174	B5-U0-G5

3000K - Lumens Scaling Factor	0.91
5000K - Lumens Scaling Factor	1.01

Ambient Operating Temperatures

Nominal Lumen Code	Standard Operating Range
All Lumen Packages	-40°C to 50°C [-40°F to 122°F]
Operating Ranges with Sensors	
All Sensors	-30°C to 50°C [-22°F to 122°F]

Lumen Maintenance

Nominal Lumen Code	Nominal Lumens	Operating Temperature	Calculated Lumen Maintenance		
			L70	L80	L90
A1 / B1	9,000 12,000 15,000 18,000 24,000	25°C	167,000	105,000	51,000
		50°C	165,000	104,000	50,000
C1 / D1	30,000 36,000 42,000 52,000	25°C	167,000	105,000	51,000
		50°C	159,000	100,000	48,000

Additional Specification Information

⁵Actual performance may vary up to ±10% of values listed; facility factors and fixture options can affect performance values

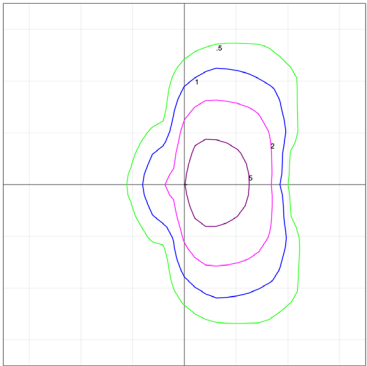
⁶Calculated hours based on TM-21 projections and components used at the time of testing. Warranty is not associated with calculated lumen maintenance



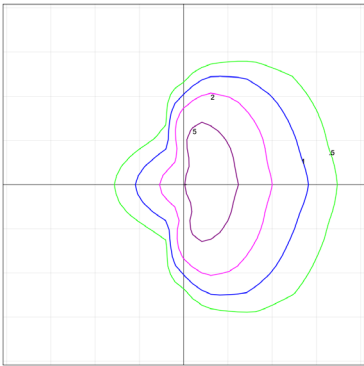
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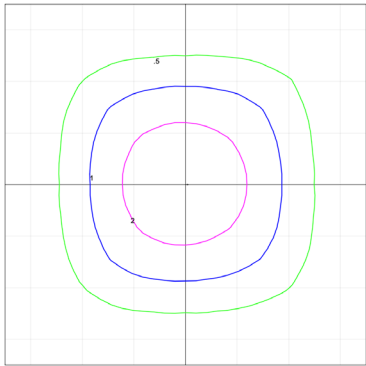
Photometrics



D1 T3
Distance is in Units of Mounting Height
Mounting Height 35'



D1 T4
Distance is in Units of Mounting Height
Mounting Height 35'

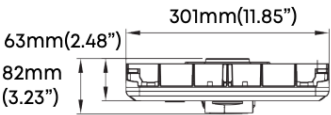
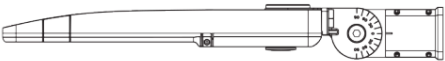
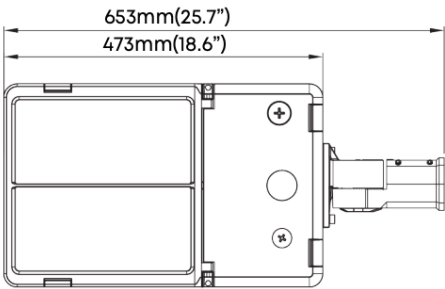


D1 T5
Distance is in Units of Mounting Height
Mounting Height 35'

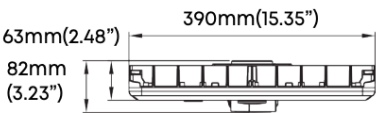
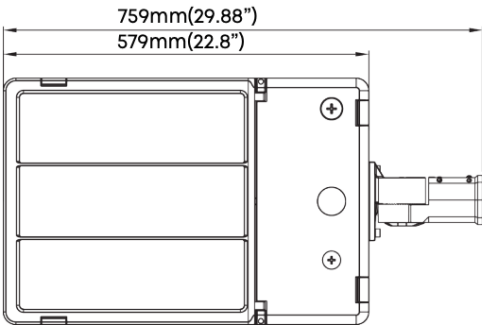
Physical Information

Nominal Lumen Code	Length	Height	Width	Weight	EPA (side) Using Slipfitter
A1 / B1	18.60"	2.48"	11.85"	12.60 lbs	0.44 ft²
C1 / D1	22.80"	2.48"	15.35"	17.90 lbs	0.52 ft²

A1 / B1



C1 / D1





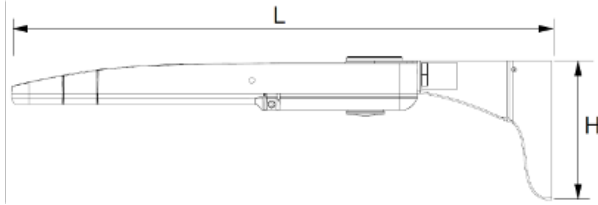
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Fixture with Mounting Dimensions and Physical Information

Note: Do not install aiming up. Not for up light application. Maximum tilt up to 70 deg from horizontal.

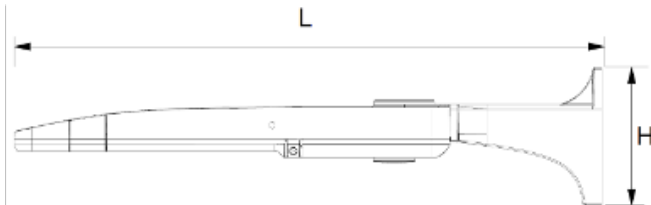
Slide and Lock Mount (EXT-IAHP-SLM)



Lumen Code	Length	Height	Width	Weight	EPA (side @ 0 deg)
A1 / B1	24.78"	6.57"	11.85"	13.1 lbs	0.44 ft ²
C1 / D1	28.96"	6.57"	15.35"	18.4 lbs	0.52 ft ²

Note: This mounting kit can adapt to 3"-4" round or min. 3" square pole
Min. 4" pole at 90deg for C1/D1

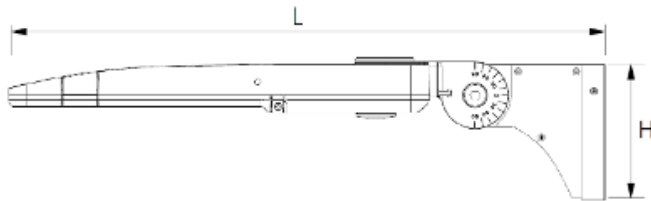
Universal Pole Mount (EXT-IAHP-UPM)



Lumen Code	Length	Height	Width	Weight	EPA (side @ 0 deg)
A1 / B1	25.33"	5.90"	11.85"	14.1 lbs	0.47 ft ²
C1 / D1	29.29"	5.90"	15.35"	19.4 lbs	0.53 ft ²

Note: This mounting kit can adapt to 4"/5"/6" round or min. 3" square pole

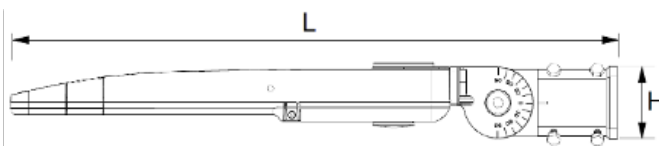
Adjustable Arm Mount (EXT-IAHP-ADJ) - Adjustable Wall Mount (EXT-IAHP-WMA)



Lumen Code	Length	Height	Width	Weight	EPA (side @ 0 deg)
A1 / B1	26.38"	6.40"	11.85"	12.6 lbs	0.53 ft ²
C1 / D1	30.53"	6.40"	15.35"	17.9 lbs	0.59 ft ²

Note: The arm mount [EXT-IAHP-ADJ] can only adapt to min. 4" square pole

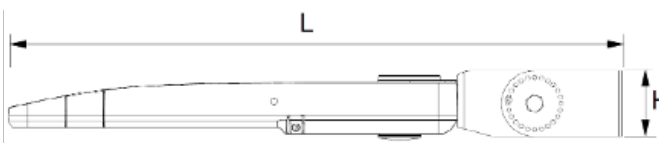
Slipfitter Mount (EXT-IAHP-SFT)



Lumen Code	Length	Height	Width	Weight	EPA (side @ 0 deg)
A1 / B1	25.71"	3.22"	11.85"	12.6 lbs	0.44 ft ²
C1 / D1	29.88"	3.22"	15.35"	17.9 lbs	0.52 ft ²

Note: This slipfitter can adapt to 2-3/8" tenons

Trunnion Mount (EXT-IAHP-TRN)



Lumen Code	Length	Height	Width	Weight	EPA (side @ 0 deg)
A1 / B1	25.47"	2.90"	11.85"	13.6 lbs	0.44 ft ²
C1 / D1	29.64"	2.90"	15.35"	18.9 lbs	0.50 ft ²

Note: This mounting kit can adapt to min. 5.5" square pole

Additional Specification Information

⁷Weight will vary based on option selection



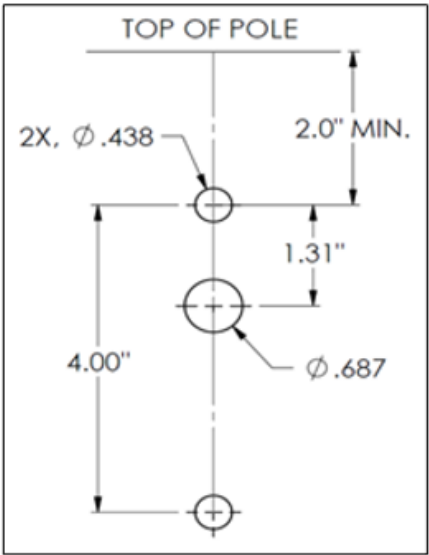
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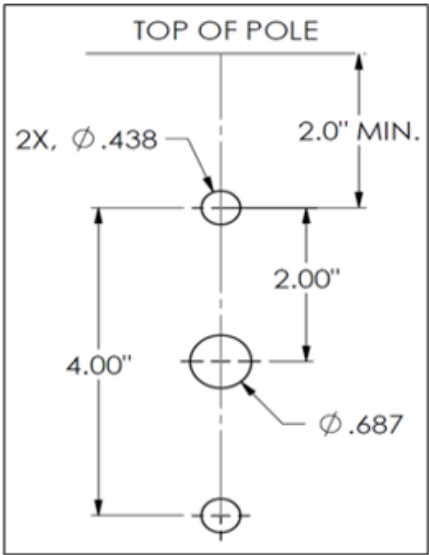
Pole Drilling

Pole Mounting Options	Drilling Template	Single	2 Heads @ 90		2 Heads @ 180		3 Heads @ 90		3 Heads @120 (Round Pole)	4 Heads @ 90		
		Minimum Acceptable Outside Pole Dimensions										
		Round Pole	Square Pole	Round Pole	Square Pole	Round Pole	Square Pole	Round Pole	Square Pole	Round Pole	Round Pole	Square Pole
EXT-IAHP-UPM	#1	4"	3"	4"	3"	4"	3"	4"	3"	4"	4"	3"
EXT-IAHP-UPM5	#1	5"	3"	5"	3"	5"	3"	5"	3"	5"	5"	3"
EXT-IAHP-UPM6	#1	6"	3"	6"	3"	6"	3"	6"	3"	6"	6"	3"
EXT-IAHP-SLM	#2	3"	3"	4"	4"	3"	3"	4"	4"	3"	4"	4"
EXT-IAHP-ADJ	#2		4"		4"		4"		4"			4"

Template #1



Template #2





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Pole Top Adapter - Vertical Tenon

Series	Pole Size	Pole Shape	Mounting Option	Finish
VTA = Vertical Tenon Adapter	3 = 3" Pole 4 = 4" Pole 5 = 5" Pole 6 = 6" Pole	S = Square Pole R = Round Pole	I = Inside Pole O = Outside Pole	BZ = Bronze BK = Black WH = White

Application

- Provides a 2-3/8" outside diameter by 4" tall tenon to an existing square or round pole

Construction

- Heavy duty steel tubing construction
- Anti-corrosion stainless steel hardware provided

Finish

- Electrostatically applied durable Polyester powder coat finish

Inside Pole



Outside Pole



Tenon Adapter - Square Straight Bull Horn

Series	Configuration	Finish
BHA = Bull Horns Adapter	2 = 2 tenons in-line 3 = 3 tenons in-line 4 = 4 tenons in-line 3120 = 3 tenons at 120 C4 = 4 tenons at 90	BZ = Bronze BK = Black WH = White

Application

- Square straight bull horns designed to mount directly onto a 2-3/8" OD tenon to allow mounting multiple fixtures

Construction

- Heavy duty steel tubing construction
- Each vertical tenon is 2-3/8" outside diameter by 4" tall
- Anti-corrosion stainless steel hardware provided

Finish

- Electrostatically applied durable Polyester powder coat finish





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Controls

Bluetooth Mesh Sensors – Keilton+Autani [EFS106-AUX-W.B4-HB40 + WPPA102-AUX-W.B1]

DLC-listed gateway-free local room-based Bluetooth® mesh commercial lighting control software and hardware products that include mobile apps, sensors, controllers, switches and other devices for commercial lighting.

- [EFS106-AUX-W.B4-HB40](#) – The EFS106 is ideal for Luminaire Level Lighting Control (LLLC/NLC5) applications. Featuring integrated daylight harvesting and PIR motion sensors, the sensors are equipped with the AlgoH2 algorithm to maximize detection for high bay applications up to 40 ft without false triggers.
- [WPPA102-AUX-W.B1](#) – The WPPA102-AUX-W.B1 Remote is used to program the configurations of the Keilton+Autani Bluetooth® mesh sensors.

For more detailed instructions on commissioning, settings, and features please visit [Keilton+autani App Guide](#)

