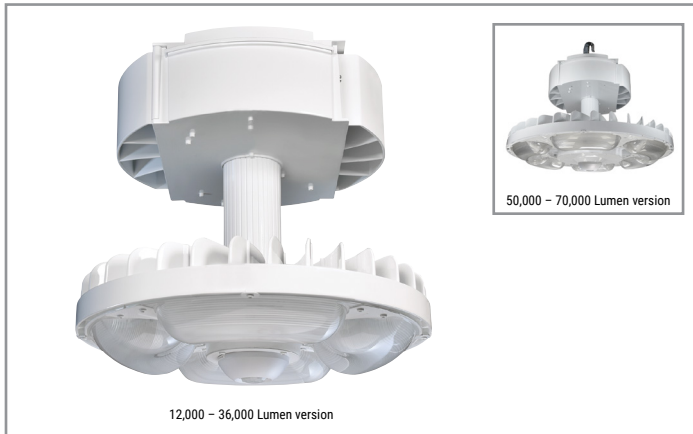


Project		Catalog #		Type	
Prepared by		Notes		Date	



# Metalux

## BMK LED

### Benchmark High Bay

#### Typical Applications

Industrial • Manufacturing • Sports Venues

#### Interactive Menu

- Order Information [page 2](#)
- Photometric Data [page 4](#)
- Control Solutions [page 5](#)
- Product Warranty

#### Product Certification



#### Product Features

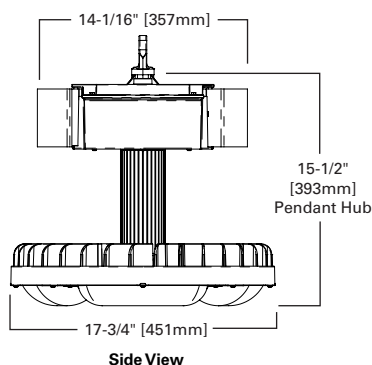


### Top Product Features

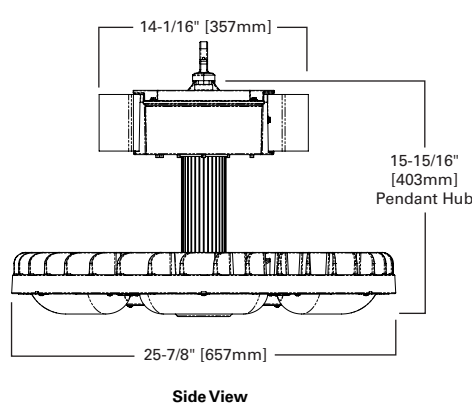
- High lumen packages available up to 75,000 delivered lumens
- cULus listed for wet locations -40°C to 65°C ambient environments
- IP66 listed for demanding and complex environments
- Impact protection rating IK10 Lens and IK10 Housing
- Integrated WaveLinx Wireless Sensor – provides 1200 sq ft. coverage
- High performance efficacy up to 181 lm/W
- Options to meet Buy American and other domestic preference requirements

### Dimensional and Mounting Details

12,000 up to 36,000 Lumen Versions



50,000 up to 70,000 Lumen Versions



[additional product diagrams](#)

## Order Information

SAMPLE ORDER NUMBER: **BMK-36-MCL-UNV-L750-CD-U**

Domestic Preferences	Series	Revision	Lumen Package	Distribution/Shielding	Voltage	CCT/CRL	Options
<b>[Blank]</b> =Standard <b>BAA</b> =Buy American Act <b>TAA</b> =Trade Agreements Act	<b>BMK</b> =Benchmark High Bay	<b>[Blank]</b> =	12=12,000 Lumens 15=15,000 Lumens 18=18,000 Lumens 24=24,000 Lumens 30=30,000 Lumens 36=36,000 Lumens 50=50,000 Lumens 60=60,000 Lumens 70=70,000 Lumens	<b>NCL</b> =Narrow Clear <b>NFL</b> =Narrow Frosted <b>MCL</b> =Medium Clear <b>MFL</b> =Medium Frosted <b>WCL</b> =Wide Clear <b>WFL</b> =Wide Frosted	120V=120 Volt 277V=277 Volt 347V=347 Volt 480V=480 Volt UNV=Universal Voltage 120-277 UNC=Universal Voltage 347/480	L735=70CRI / 3500K L740=70CRI / 4000K L750=70CRI / 5000K L835=80CRI / 3500K L840=80CRI / 4000K L850=80CRI / 5000K	<b>EL20-W-REM</b> =20-watt 120V-277V emergency battery pack remote mounted (3),(4),(5) <b>GTR2</b> =Bodine Generator Transfer Device (6) <b>ETRD</b> =Emergency Transfer Relay with dimming control (6),(24)
<b>Notes</b> (1) Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to <a href="#">DOMESTIC PREFERENCES</a> website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.	<b>Notes</b> (2) DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to <a href="#">www.designlights.org</a> for details.						<b>Notes</b> (3) EL20W-REM rated for 0°C to 50°C ambient and damp location only. (4) EL20W-REM battery pack must be remote mounted to building structure or electrical enclosure. (5) EL20W-REM battery pack not available with 347/480V + SWPD, LWR, or WLS4 Sensors. (6) Used to transfer fixture to secondary power during outage. Must be used in conjunction with UL 1008 device (provided by others). GTR require 2 relays on fixtures with dimming drivers. ETRD option only requires one relay when used on a dimming fixture. A maximum of two devices can be used on one product. 3 or 4 driver products cannot use GTR. Must specify voltage as 120V or 277V when ordering GTR option. (24) When using ETRD with fixtures 60K lumens and above, the fixture will not deliver full lumen output when in emergency mode (consult factory).

Driver Type	Color	Mounting	Wiring	Motion Sensors	Packaging
<b>CD</b> =0-10V Dimming Driver <b>SLTD</b> =Fifth Light DALI (7)	<b>[Blank]</b> =White <b>GRY</b> =Gray <b>BLK</b> =Black	<b>[Blank]</b> =3/4" Treaded Hub (8),(9),(10)	<b>C3DIM</b> =1 Circuit with low voltage wires, 3' white Cord with no plug <b>C6DIM</b> =1 Circuit with low voltage wires, 6' white Cord with no plug 10KV=10KV Surge Protector <b>C3 (1)</b> =1 Circuit, 3' Cord with no Plug <b>C3 (2)</b> =2 Circuits, 3' Cord with no Plug <b>C6 (1)</b> =1 Circuit, 6' Cord with no Plug <b>C6 (2)</b> =2 Circuits, 6' Cord with no Plug <b>C10 (1)</b> =1 Circuit, 10' Cord with no Plug <b>C10 (2)</b> =2 Circuits, 10' Cord with no Plug <b>PC3/120</b> =(NEMA L5-15P) 3' Cord with NEMA Plug (11) <b>PC3/277</b> =(NEMA L7-15P) 3' Cord with NEMA Plug (11) <b>PC3/347</b> =(NEMA L24-20P) 3' Cord with NEMA Plug (11) <b>PC3/480</b> =(NEMA L8-20P) 3' Cord with NEMA Plug (11) <b>PC6/120</b> =(NEMA L5-15P) 6' Cord with NEMA Plug (11) <b>PC6/277</b> =(NEMA L7-15P) 6' Cord with NEMA Plug (11) <b>PC6/347</b> =(NEMA L24-20P) 6' Cord with NEMA Plug (11) <b>PC6/480</b> =(NEMA L8-20P) 6' Cord with NEMA Plug (11)	<b>MS</b> =360° or 180° Motion Sensor Installed, (specify voltage) (13),(14) <b>LWR</b> =Enlightened Wireless Sensor system (12),(15) <b>WLS4</b> =WaveLinX LITE, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting (12),(15) <b>WPS4</b> =WaveLinX PRO, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting (12),(15)	<b>U</b> =Unit Pack <b>PALC</b> =Job Pack, in carton
<b>Notes</b> (7) SLTD drivers not available for 50, 60, & 70 lumen SKUs at 347V/480V/UNC.		<b>Notes</b> (8) IP-66 other than stem mount must use 1/2" NPT access fittings. (9) Rigid mount not recommended in gymnasiums. Due to potential impact from projectiles, hook mount is recommended. (10) Fixture cannot be surface mounted and must be a minimum of 18" below ceiling surface.	<b>Notes</b> (11) Voltage must be specified when ordering accessory cord and plug. Modular plug not available.	<b>Notes</b> (12) EL20W-REM battery pack not available with 347/480V + SWPD, LWR, or WLS4 Sensors. (13) When ordering MS option, specify either 120-277V or 347-480V. (14) Damp location only. (15) 30-36K lumen fixtures with SWPD, LWR, or WLS4 sensor are UNV only. (16) Sensors not available on 50, 60, & 70 lumen SKUs at 347V/480V/UNC.	

### Accessories

#### Accessories (order separately) (23)

**BMK-WG17**=17" Wire Guard (for use with 12,000 to 36,000 lumens only)  
**BMK-WG25**=25" Wire Guard (for use with 50,000 to 70,000 lumen fixtures)  
**SHK/IP**=IP Rated Fixture Hook (17)  
**SHK**=Fixture Hook with through Hole (not IP rated) (18)  
**SWPD3**=WPS4 WaveLinX Wireless Sensor (to be installed with "ZW" sensor ready fixtures only) (19),(21)  
**LOOP-310**=Ten Foot Loop Hanger, #3 Cable (20)  
**LOOP-330**=Thirty Foot Loop Hanger, #3 Cable (20)  
**LOOP-410**=Ten Foot Loop Hanger, #4 Cable (20),(22)  
**LOOP-430**=Thirty Foot Loop Hanger, #4 Cable (20),(22)

#### Notes

(17) IP-66 other than stem mount must use 1/2" NPT access fittings. (18) Damp location only and used for center cable entry. (19) EL20W-REM battery pack not available with 347/480V + SWPD and LWR Sensors. (20) The accessory Loop Hanger shall be utilized only as a secondary safety and not the primary means of mounting. (21) 30-36K lumen fixtures with SWPD or LWR sensor are UNV only. (22) The 10' #4 cable is included on 50, 60, & 70 lumen SKUs from the factory and does not need to be ordered separately. #3 cable cannot be used on 50, 60, & 70 lumen SKUs. (23) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

## Product Specifications

### Construction

- Constructed of die cast and extruded aluminum
- Impact protection rating IK10 Lens and IK10 Housing

### Optics

- Precision optics deliver highly efficient illumination
- Three distribution options available for superior performance in key areas: narrow, medium, and wide

### LED and Light Engine

- Drivers available in 120-277V, 347V and 480V
- 0-10V dimming driver is standard
- Available in 4000K and 5000K in either 70 or 80 CRI

### Emergency Battery Options

- Optional 120-277V emergency battery available in 7W or 14W
- 90-minute backup period for code compliance
- Constant power to LED system for controlled, predictable discharge
- Integrated test switch/indicator light installed on fixture
- Integral emergency transfer relay available for generator equipped power systems

### Finish

- Standard white polyester powder coat finish
- Painted after fabrication for increased durability and corrosion resistance

### Mounting

- Designed for suspension mounting
- 3/4" NPT internal thread with locking set screw

### Compliance

- cULus listed for wet locations -40°C to 65°C ambient environments
- EM option rated for 0°C to 50°C ambient
- RoHS compliant
- Tested to IESNA LM-79 and LM-80
- Stated life tested to TM21 standards

### Warranty

- Five-year limited warranty standard.

## Energy and Performance Data

BMK 5000K 70CRI													
Catalog Number	Lumen Output						Watts		Efficacy (LPW)				
	NCL	NFL	MCL	MFL	WCL	WFL	277V	NCL	NFL	MCL	MFL	WCL	WFL
BMK-12	13171	13038	13234	12906	13485	13101	74	177	175	178	174	181	176
BMK-15	16661	16494	16742	16326	17059	16574	95	175	174	176	172	180	174
BMK-18	19931	19731	20028	19530	20407	19827	114	175	173	176	172	179	174
BMK-24	26471	26206	26600	25939	27103	26333	156	170	169	171	167	174	169
BMK-30	32678	32351	32837	32021	33458	32507	203	161	159	162	158	165	160
BMK-36	38921	38531	39110	38138	39850	38717	243	160	159	161	157	164	159
BMK-50	53719	53003	53901	52820	55438	55099	332	162	160	162	159	167	166
BMK-60	63353	62509	63567	62293	65380	64980	406	156	154	157	154	161	160
BMK-70	74547	73555	74800	73301	76933	76462	501	149	147	149	146	154	153

BMK 5000K 80CRI													
Catalog Number	Lumen Output						Watts		Efficacy (LPW)				
	NCL	NFL	MCL	MFL	WCL	WFL	277V	NCL	NFL	MCL	MFL	WCL	WFL
BMK-12	12256	12133	12315	12009	12548	12192	74	165	163	166	162	169	164
BMK-15	15504	15349	15579	15192	15874	15423	95	163	162	164	160	167	162
BMK-18	18547	18361	18637	18174	18990	18450	114	163	161	164	160	167	162
BMK-24	24633	24386	24753	24138	25221	24504	156	158	157	159	155	162	158
BMK-30	30409	30104	30556	29797	31135	30249	203	150	148	151	147	153	149
BMK-36	36218	35855	36394	35490	37083	36028	243	149	148	150	146	153	148
BMK-50	49991	49326	50161	49155	51591	51276	332	151	149	151	148	155	154
BMK-60	58957	58172	59157	57971	60844	60472	406	145	143	146	143	150	149
BMK-70	69375	68451	69610	68215	71595	71157	501	139	137	139	136	143	142

NCL=Narrow Distribution, Clear Lens, NFL=Narrow Distribution, Frosted Lens, MCL=Medium Distribution, Clear Lens, MFL=Medium Distribution, Frosted Lens, WCL=Wide Distribution, Clear Lens, WFL=Wide Distribution, Frosted Lens

### Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (hours)
25°C	> 92%	> 355,000

### Ambient Ratings

Lumen Package	Ambient Rated	EM
BMK-12	65°C	50°C
BMK-15	65°C	50°C
BMK-18	65°C	50°C
BMK-24	65°C	50°C
BMK-30	65°C	50°C
BMK-36	65°C	50°C
BMK-50	65°C	50°C
BMK-60	55°C	50°C
BMK-70	45°C	45°C

### Shipping Data

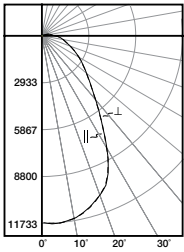
Catalog No.	Wt.
BMK-12	32 lbs.
BMK-15	32 lbs.
BMK-18	32 lbs.
BMK-24	32 lbs.
BMK-30	38 lbs.
BMK-36	38 lbs.
BMK-50	55 lbs.
BMK-60	55 lbs.
BMK-70	55 lbs.

### IK Rating

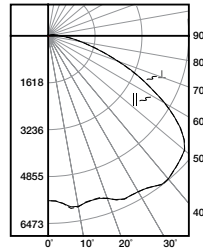
BMK	IK Rating
Lens	IK10
Housing	IK10

## Photometric Data

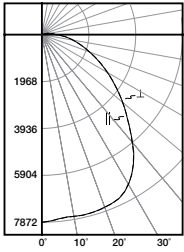
[View IES files](#)



**BMK-24-NFL-UNV-L850-CD-U**  
 Dimming Driver  
 Linear LED 5000K  
 Spacing criterion: (H) 1.06 x mounting height,  
 (L) 1.06 x mounting height  
 Lumens: 24386  
 Input Watts: 156W  
 Efficacy: 157 LPW  
 Test Report:  
 BMK-24-NFL-UNV-L850-CD-U.IES



**BMK-24-WFL-UNV-L850-CD-U**  
 Dimming Driver  
 Linear LED 5000K  
 Spacing criterion: (H) 1.7 x mounting height,  
 (L) 1.7 x mounting height  
 Lumens: 24504  
 Input Watts: 156W  
 Efficacy: 158 LPW  
 Test Report:  
 BMK-24-WFL-UNV-L850-CD-U.IES



**BMK-24-MFL-UNV-L850-CD-U**  
 Dimming Driver  
 Linear LED 5000K  
 Spacing criterion: (H) 1.33 x mounting height,  
 (L) 1.33 x mounting height  
 Lumens: 24138  
 Input Watts: 156W  
 Efficacy: 155 LPW  
 Test Report:  
 BMK-24-MFL-UNV-L850-CD-U.IES

## MWS Modular Wiring Options

MWS options are available for use with all F-Bay products. The modular power supply allows external fixture disconnect for safe and easy servicing. There is no need to access the inside of the fixture to disconnect fixture power with MWS. Access to the individual fixture's power supply allows servicing without turning off all the fixtures, causing unnecessary disruption. MWS is a time saver in installation – **simply plug & power.**

DS Drop SO Cord

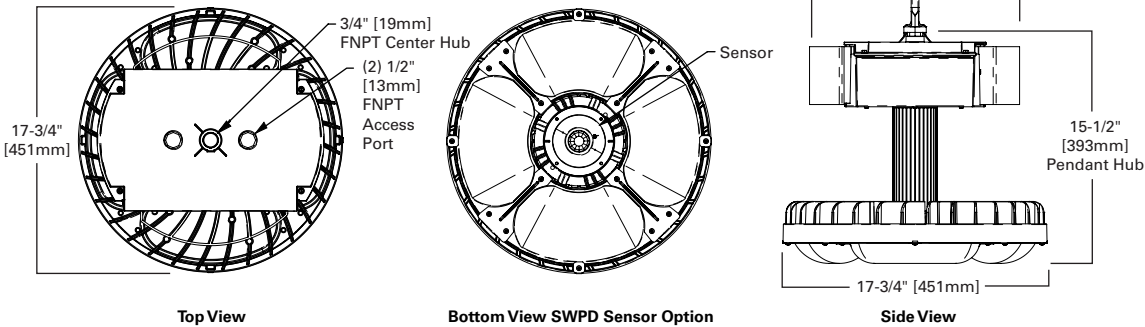


DC Drop Cable

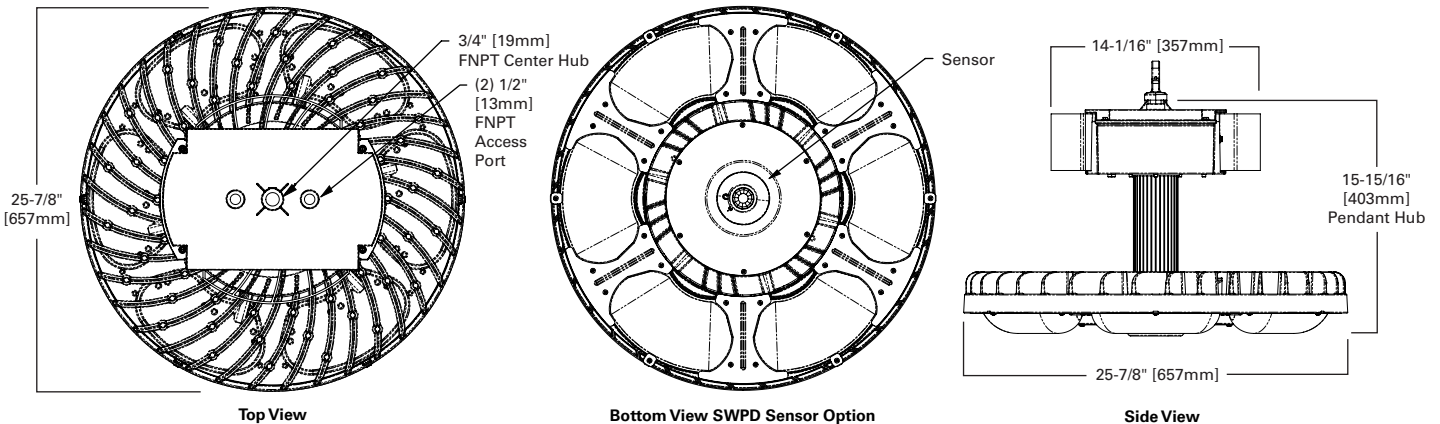


## Dimensional and Mounting Details

12,000 up to 36,000 Lumen Versions



50,000 up to 70,000 Lumen Versions



## Control Solutions

- WaveLinX LITE wireless
- WaveLinX PRO wireless
- WaveLinX CAT wired
- WaveLinX Wired



The BMK with WaveLinX offers no-hassle lighting control with multiple luminaire level control solutions.



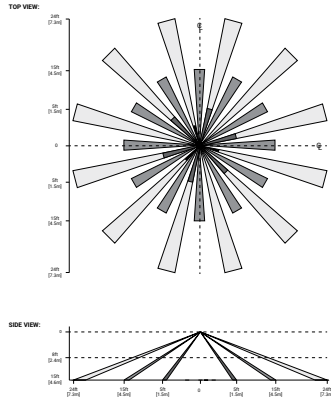
**WaveLinX PRO** is a wireless lighting control solution, for connected spaces, that significantly reduces a building's energy consumption. From a single floor to an entire campus, WaveLinX PRO connects more than lighting assets; it shares aggregated sensor data with the WaveLinX CORE platform and other building systems, so building owners can improve operations, spaces environment, and tenants' experience. WaveLinX PRO offers a rich portfolio of wireless devices, WaveLinX PRO-enabled luminaires, and an intuitive WaveLinX mobile app for office, education, warehouse, and parking garage applications.



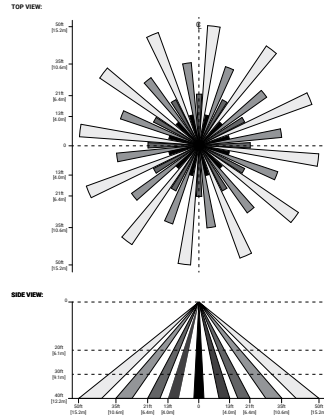
**WaveLinX LITE** is a cost effective, wireless digital lighting control solution, with out-of-the-box functionality, that saves energy and meets code. It's designed for applications that require occupancy-based, daylighting, or manual light control. Customize installations for office, education, warehouse and parking garages using the secure, simple mobile app.

## Integrated Sensor Coverage Pattern

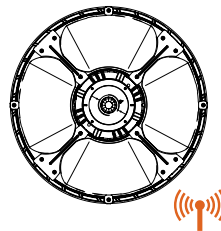
WaveLinX PRO/LITE Sensor – WLS2 and WPS2



WaveLinX PRO/LITE Sensor – WLS4 and WPS4



### With Integrated WaveLinX Sensor



### Integrated Controls Options

Option	Out of the Box Functionality	Luminaire Level Lighting Control (LLLC)	Automatic Dimming Photocell	Occupancy Sensing	CCT Control
WLS	X	X	X	X	
WPS		X	X	X	

## Systems comparison chart

Cooper Lighting Solutions provides many lighting system solutions designed to satisfy code requirements and meet the unique needs of any project.



**Luminaire with standalone sensor**



**Standalone Spaces WaveLinX LITE**



**Standalone Spaces WaveLinX CAT**



**Networked Spaces WaveLinX PRO**



**Enterprise WaveLinX CORE**

	Luminaire with standalone sensor	Standalone Spaces WaveLinX LITE	Standalone Spaces WaveLinX CAT	Networked Spaces WaveLinX PRO	Enterprise WaveLinX CORE
<b>Occupancy</b>	Yes	Yes	Yes	Yes	Yes
<b>Daylighting</b>	Yes	Yes	Yes	Yes	Yes
<b>Wallstations</b>	-	Yes	Yes	Yes	Yes
<b>Gateways</b>	-	-	-	1 WAC	300 WACs
<b>Devices (MAX)</b>	-	40 per Area (1120 per space)	40 per Area	200 per WAC2	32,500 per CORE Enterprise
<b>Software</b>	-	WaveLinX LITE Mobile App	WaveLinX CAT Mobile App	WaveLinX Mobile App	CORE
<b>Areas</b>	-	28 per Space	Unlimited	50 per WAC2	up to 3,000
<b>Zones</b>	-	16 per Area	16 per Area	16 per Area	up to 9,000
<b>Scheduling</b>	-	-	-	Local	Global
<b>VividTune™</b>	-	-	-	Yes	Yes
<b>Plug-Load Control</b>	-	Yes	Yes	Yes	Yes
<b>Low-Voltage Power</b>	-	-	Yes	Yes	Yes
<b>Integration</b>	-	-	-	-	BACnet, API
<b>Dashboards</b>	-	-	-	-	Energy, Occupancy
<b>Configuration</b>	-	Installer	Installer	Technician	Technician / IT