

FORM AND FUNCTION

- Sleek, low profile housing
- Engineered for optimum thermal management
- Low depreciation rate
- Optical system designed for:
 - Parking Lots
 - Commercial Applications
- Spider Mount or Direct Pole mount

CONSTRUCTION

- Die Formed heavy duty Aluminum
- Corrosion resistant external hardware
- One-piece silicone gasket ensures IP-65 seal for electronics compartment
- Two-piece silicone Micro Optic system ensures IP-67 level seal around each PCB

FINISH

- 3-5 mils electrostatic powder coat.
- NLS' standard high-quality finishes prevent corrosion protects against extreme environmental conditions

WARRANTY

Five-year limited warranty for drivers and LEDs.



LISTINGS

- Certified to UL 1598
- CSA C22.2 No. 250.0
- DesignLights Consortium® (DLC)
- DesignLights Consortium Premium® (DLCP)
- IP65/ IP67 Rated



LED WATTAGE CHART

	16L	32L	48L	64L	80L	96L
350 milliamps	18w	-	-	-	-	-
530 milliamps	28w	56w	-	-	-	-
700 milliamps	36w	71w	104w	136w	-	-
1050 milliamps	56w	106w	156w	205w	263w	316w

VSS-S

VSS-1

VSS-2

Project Name:

Type:

Cat #	Light Dist.	No. of LEDs	Milliamps	Kelvin	Volts	Mounting	Color	Options
Value Series Square Small (VSS-S)	Type 2 (T2)	VSS-S	350	3000K	120-277	Direct Pole Single, D180 6" (DP6)	Bronze (BRZ)	Bird Spikes (BS)
		16 (16L)	(35)	(30K)	(UNV)		White (WHT)	Marine Grade Finish (MGF)
Value Series Square 1 (VSS-1)	Type 3 (T3)	VSS-1	530	4000K	340-480	D90, T90, T120, OD 10" (DP10) <i>*For Round Poles please order RPA Adaptor *See next page for Arm Configurations</i>	Silver (SVR)	Surge Protector (10K)
		32 (32L)	(53)	(40K)	(HV)		Black (BLK)	Nema 7-Pin Receptacle (PE7)
Value Series Square 2 (VSS-2)	Type 4 (T4)	VSS-1	700	5000K		Knuckle Mount (KM) *VSS-1, VSS-2 Only	Graphite (GPH)	Photocell (PC) *Universal Voltage 120-277
		48 (48L)	(7)	(50K)			Grey (GRY)	Motion Sensor (MS)
	Type 5 (T5)	VSS-2	1050			Trunion Mount (TM) *VSS-1, VSS-2 Only	Custom (CS)	*ESP-211 with Motion Sensor (UNV Voltage) For 8' + Below (FSP-8)
		80 (80L)	(1)				Spider Mount Over 2 3/8" Tenon (SPM2) Over 3" Tenon (SPM3) *VSS-1, VSS-2 Only	For 9' to 20' (FSP-20) For 21' to 40' (FSP-40) <i>*Motion Sensor and FSP-211 are integral to the fixture</i>
		96 (96L)				Wall Mount (WM) <i>*Includes 6" Bolt On Arm</i>		Quick Mount Bracket (QMB)
								Retrofit Quick Mount Bracket (RQMB)
								Internal Microwave Motion Sensor (IMMS)
								Rotate Optic Right (ROR)
								Rotate Optic Left (ROL)
								Round Pole Adaptor 3"-4" Pole (RPA4)
								Round Pole Adaptor 5"-6" Pole (RPA5)
								House Side Shields (HSS)
								Acrylic Optics (AO)

ELECTRICAL

- 120-277 Volts (UNV) or 347-480 Volts (HV)
- 0-10V dimming driver by Philips Advance
- Driver power factor at maximum load is $\geq .95$, THD maximum load is 15%
- All internal wiring UL certified for 600 VAC and 105°C
- All drivers, controls, and sensors housed in enclosed IP-65 compartment
- Lumileds Luxeon MX LED's
- CRI >70
- Color temperatures: 3000K, 4000K, 5000K

OPTIONS

- **BIRD DETERRANT (BD)**—offers effective and humane deterrent for larger bird species and provides cost-effective long-term solution to nuisance bird infestations and protect your property.
- **MARINE GRADE FINISH (MGF)**—A multi-step process creating protective finishing coat against harsh environments.
 - Chemically washed in a 5 stage cleaning system.
 - Pre-baked
 - Powder coated 3-5 mils of Zinc Rich Super Durable Polyester Primer.
 - 1-2 feet inside pole coverage top and bottom.
 - Oven Baked.
 - Finished Powder Coating of Super Durable Polyester Powder Coat 3-5 mil thickness.
- **HOUSE SIDE SHIELD (HSS)**—Micro Optics' House Side Shield (HSS) is designed for full property line cut-off.
- **ROUND POLE ADAPTER (RPA)**— When using round poles, specify Round Pole Adapter (RPA). Specify RPA4 when installing on 3"-4" round poles, and RPA5 when installing on 5"-6" round poles.

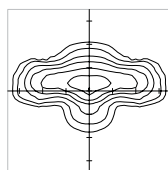
CONTROLS

- **FSP-211 (FSP-X)**—Passive infrared (PIR) sensor providing multi-level control based on motion/daylight contribution.
 - All control parameters adjustable via wireless configuration remote storing and transmitting sensor profiles.
 - FSP-8 mounting heights 8 feet and below.
 - Includes 5 dimming event cycles, 0-10V dimming with motion sensing, reprogrammable in the field.
- **NEMA 7-PIN RECEPTACLE (PE7)**—An ANSI C136.41-2013 receptacle provides electrical and mechanical interconnection between photo control cell and luminaire. Dimming receptacle available two or four dimming contacts supports 0-10 VDC dimming methods or Digital Addressable Lighting Interface (DALI), providing reliable power interconnect.
- **INTERNAL MICROWAVE MOTION SENSOR (IMMS)**—IMMS is an innovative motion sensor, switch on light on movement detection, switch off after hold time if no motion detected. Built-in daylight sensor reads brightness value, the sensor does not switch on if sufficient natural light.
 - **DETECTION AREA** —Detection area can be reduced by selecting DIP switches for each application precisely
 - **HOLD TIME** —Time period lamp remains at 100% illumination after no motion detected.
 - **DAYLIGHT SENSOR** —Sensor can be set to restrict lamp illumination below specific ambient brightness threshold. When set to Disable Mode, daylight sensor switches lamp on, when motion detected regardless of ambient light levels.
 - **MODE**— When set to Disable, microwave sensor function is inactive, lights turned on or off manually. When set to Sensor, microwave sensor function is active.

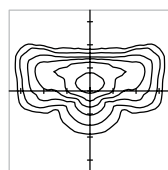
OPTICS

Silicone optics high photothermal stability and light output provides higher powered LEDs with minimized lumen depreciation LED life. UV and thermal stability with scratch resistance increases exterior application durability.

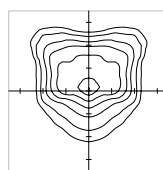
- IES Types



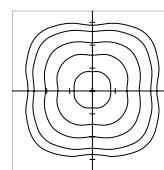
TYPE II (T2)



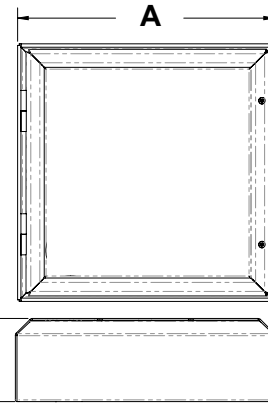
TYPE III (T3)



TYPE IV (T4)

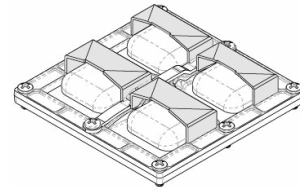


TYPE V (T5)

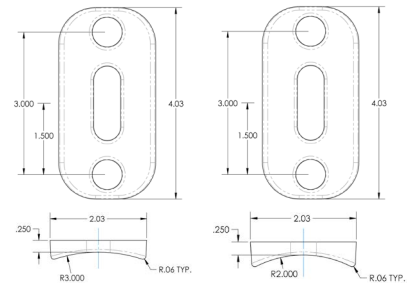
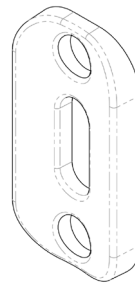


DIMENSION	VSS-S	VSS-1	VSS-2
A	12.5 in. SQ	17 in. SQ	21.5 in SQ
B	4 in.	5 in.	8 in.
Weight	11 lbs	23 lbs	34 lbs

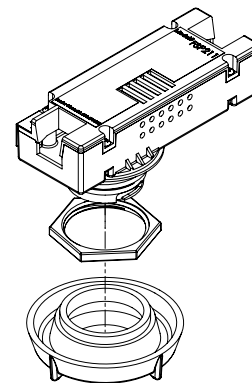
HOUSE SIDE SHIELD



RPA4 / RPA5

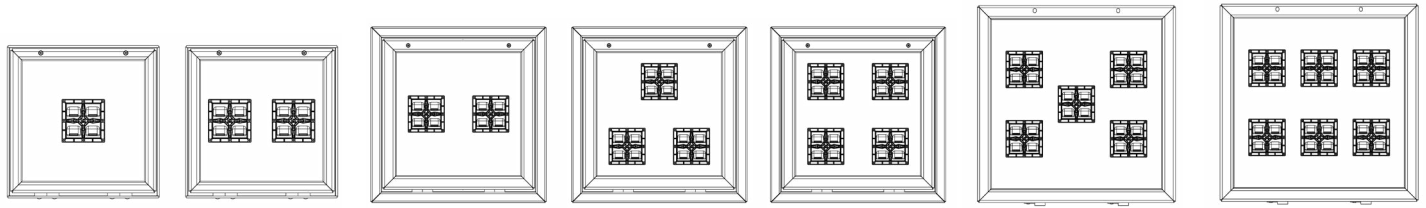


FSP-211



OPTICAL CONFIGURATIONS

Rotatable Optics (ROR) Rotated Right, (ROL) Rotated Left options available. Optics field and factory rotatable.



VSS-S / 16L

VSS-S / 32L

VSS-1 / 32L

VSS-1 / 48L

VSS-1 / 64L

VSS-2 / 80L

VSS-2 / 96L

LUMENS

PART NUMBER	T2 LUMENS	LM/W	DLC	BUG	T3 HSS LUMENS	LM/W	BUG	T3 LUMENS	LM/W	DLC	BUG	T4 HSS LUMENS	LM/W	BUG	T4 LUMENS	LM/W	DLC	BUG	T5 LUMENS	LM/W	DLC	BUG	W
VSS-S-16L-35-30K	1980	110	P	B1-U0-G1	1044	58	B0-U0-G0	1944	108	P	B1-U0-G1	1026	57	B0-U0-G0	2034	113	P	B1-U0-G1	2220	123	P	B2-U0-G1	18
VSS-S-16L-35-40K	2142	119	P	B1-U0-G1	1116	62	B0-U0-G0	2106	117	P	B1-U0-G1	1098	61	B0-U0-G0	2196	122	P	B1-U0-G1	2304	128	P	B2-U0-G1	18
VSS-S-16L-35-50K	2304	128	P	B1-U0-G1	1188	66	B0-U0-G0	2268	126	P	B1-U0-G1	1170	65	B0-U0-G0	2470	137	P	B1-U0-G1	2408	133	P	B2-U0-G1	18
VSS-S-16L-53-30K	2968	106	S	B1-U0-G1	1624	58	B0-U0-G0	2940	105	S	B1-U0-G1	1596	57	B0-U0-G1	3080	110	P	B1-U0-G1	3192	114	P	B2-U0-G1	28
VSS-S-16L-53-40K	3220	115	P	B1-U0-G1	1736	62	B0-U0-G1	3192	114	P	B1-U0-G1	1708	61	B0-U0-G1	3332	119	P	B1-U0-G1	3332	119	P	B2-U0-G1	28
VSS-S-16L-53-50K	3472	124	P	B1-U0-G1	1848	66	B0-U0-G1	3416	122	P	B1-U0-G1	1820	65	B0-U0-G1	3584	128	P	B1-U0-G1	3472	124	P	B2-U0-G1	28
VSS-S-16L-7-30K	3672	102	S	B1-U0-G1	2088	58	B0-U0-G1	3636	101	S	B1-U0-G1	2052	57	B0-U0-G1	3816	106	S	B1-U0-G1	3960	110	P	B3-U0-G1	36
VSS-S-16L-7-40K	3996	111	P	B1-U0-G1	2232	62	B0-U0-G1	3924	109	P	B1-U0-G1	2196	61	B0-U0-G1	4104	114	P	B1-U0-G1	4140	115	P	B3-U0-G1	36
VSS-S-16L-7-50K	4284	119	P	B1-U0-G1	2376	66	B0-U0-G1	4248	118	P	B1-U0-G1	2340	65	B0-U0-G1	4428	123	P	B1-U0-G1	4392	122	P	B3-U0-G1	36
VSS-S-16L-1-30K	5544	99	S	B1-U0-G1	3248	58	B0-U0-G1	5488	98	S	B1-U0-G1	3192	57	B0-U0-G1	5408	96	S	B1-U0-G1	5992	107	S	B3-U0-G1	56
VSS-S-16L-1-40K	6048	108	S	B1-U0-G1	3472	62	B0-U0-G1	5936	106	S	B1-U0-G1	3416	61	B0-U0-G1	5992	107	S	B1-U0-G2	6496	116	P	B3-U0-G1	56
VSS-S-16L-1-50K	6496	116	P	B1-U0-G1	3696	66	B0-U0-G1	6384	114	P	B1-U0-G1	3640	65	B0-U0-G1	6440	115	P	B1-U0-G2	6608	118	P	B3-U0-G2	56
VSS-S-32L-53-30K	5936	106	S	B1-U0-G1	3248	58	B0-U0-G1	5880	105	S	B1-U0-G1	3192	57	B0-U0-G1	6160	110	S	B1-U0-G2	6440	115	P	B3-U0-G2	56
VSS-S-32L-53-40K	6440	115	P	B1-U0-G1	3472	62	B0-U0-G1	6384	114	P	B1-U0-G1	3416	61	B0-U0-G1	6664	119	P	B2-U0-G2	6664	119	P	B3-U0-G2	56
VSS-S-32L-53-50K	6944	124	P	B1-U0-G1	3696	66	B0-U0-G1	6832	122	P	B2-U0-G2	3640	65	B0-U0-G1	7168	128	P	B2-U0-G2	6888	123	P	B3-U0-G2	56
VSS-S-32L-7-30K	7242	102	S	B1-U0-G1	4118	58	B0-U0-G1	7171	101	S	B2-U0-G2	4047	57	B0-U0-G1	7455	105	S	B2-U0-G2	7810	110	S	B3-U0-G2	71
VSS-S-32L-7-40K	7881	111	S	B2-U0-G2	4402	62	B0-U0-G1	7739	109	S	B2-U0-G2	4331	61	B0-U0-G1	8094	114	P	B2-U0-G2	8165	115	P	B3-U0-G2	71
VSS-S-32L-7-50K	8520	120	P	B2-U0-G2	4686	66	B0-U0-G1	8378	118	P	B2-U0-G2	4615	65	B0-U0-G2	8733	123	P	B2-U0-G2	8449	119	P	B3-U0-G2	71
VSS-S-32L-1-30K	10494	99	S	B2-U0-G2	6148	58	B0-U0-G2	10265	97	S	B2-U0-G2	6042	57	B0-U0-G2	10494	99	S	B2-U0-G2	11342	107	S	B4-U0-G2	106
VSS-S-32L-1-40K	11448	108	S	B2-U0-G2	6572	62	B0-U0-G2	11342	107	S	B2-U0-G2	6466	61	B0-U0-G2	11342	107	S	B2-U0-G2	12296	116	S	B4-U0-G2	106
VSS-S-32L-1-50K	12402	117	S	B2-U0-G2	6996	66	B0-U0-G2	12190	115	S	B2-U0-G2	6890	65	B0-U0-G2	12190	115	S	B2-U0-G2	12508	118	S	B4-U0-G2	106
VSS-1-32L-7-30K	7384	104	S	B1-U0-G1	4118	58	B0-U0-G1	7242	102	S	B2-U0-G2	4047	57	B0-U0-G1	7668	108	S	B2-U0-G2	8179	115	P	B3-U0-G2	71
VSS-1-32L-7-40K	8023	113	P	B2-U0-G2	4402	62	B0-U0-G1	7952	112	P	B2-U0-G2	4331	61	B0-U0-G1	8307	117	P	B2-U0-G2	8946	126	P	B3-U0-G2	71
VSS-1-32L-7-50K	8662	122	P	B2-U0-G2	4686	66	B0-U0-G1	8520	120	P	B2-U0-G2	4615	65	B0-U0-G2	8946	126	P	B2-U0-G2	9585	135	P	B3-U0-G2	71
VSS-1-32L-1-30K	10706	101	S	B2-U0-G2	6148	58	B0-U0-G2	10600	100	S	B2-U0-G2	6042	57	B0-U0-G2	10812	102	S	B2-U0-G2	11125	105	S	B4-U0-G2	106
VSS-1-32L-1-40K	11660	110	S	B2-U0-G2	6572	62	B0-U0-G2	11554	109	S	B2-U0-G2	6466	61	B0-U0-G2	11766	111	S	B2-U0-G2	12190	115	S	B4-U0-G2	106
VSS-1-32L-1-50K	12508	118	S	B2-U0-G2	6996	66	B0-U0-G2	12402	117	P	B2-U0-G2	6890	65	B0-U0-G2	12508	118	S	B2-U0-G2	13144	124	P	B4-U0-G2	106
VSS-1-48L-7-30K	10816	104	S	B2-U0-G2	6032	58	B0-U0-G2	10712	103	S	B2-U0-G2	5928	57	B0-U0-G2	11232	108	S	B2-U0-G2	12272	118	P	B4-U0-G2	104
VSS-1-48L-7-40K	11752	113	S	B2-U0-G2	6448	62	B0-U0-G2	11648	112	S	B2-U0-G2	6344	61	B0-U0-G2	12168	117	S	B2-U0-G2	13312	128	P	B4-U0-G2	104
VSS-1-48L-7-50K	12688	122	P	B2-U0-G2	6864	66	B0-U0-G2	12480	120	P	B2-U0-G2	6760	65	B0-U0-G2	13104	126	P	B3-U0-G3	14248	137	P	B4-U0-G2	104
VSS-1-48L-1-30K	16559	106	S	B3-U0-G3	9048	58	B0-U0-G2	15756	101	S	B3-U0-G3	8892	57	B1-U0-G2	15912	102	S	B3-U0-G3	16536	106	S	B4-U0-G2	156
VSS-1-48L-1-40K	17160	110	S	B3-U0-G3	9672	62	B1-U0-G2	17004	109	S	B3-U0-G3	9516	61	B1-U0-G2	17316	111	S	B3-U0-G3	17940	115	S	B4-U0-G2	156
VSS-1-48L-1-50K	18408	118	P	B3-U0-G3	10296	66	B1-U0-G2	18252	117	P	B3-U0-G3	10140	65	B1-U0-G2	18408	118	P	B3-U0-G3	19188	123	P	B4-U0-G2	156
VSS-1-64L-7-30K	14144	104	S	B2-U0-G2	7888	58	B0-U0-G2	13736	101	S	B3-U0-G3	7752	57	B0-U0-G2	14688	108	S	B3-U0-G3	16048	118	S	B4-U0-G2	136
VSS-1-64L-7-40K	15368	113	S	B3-U0-G3	8432	62	B0-U0-G2	14824	109	S	B3-U0-G3	8296	61	B1-U0-G2	15912	117	P	B3-U0-G3	17408	128	S	B4-U0-G2	136
VSS-1-64L-7-50K	16592	122	P	B3-U0-G3	8976	66	B0-U0-G2	16048	118	P	B3-U0-G3	8840	65	B1-U0-G2	17136	126	P	B3-U0-G3	18632	137	P	B4-U0-G2	136
VSS-1-64L-1-30K	21730	106	S	B3-U0-G3	11890	58	B1-U0-G2	22075	101	S	B3-U0-G3	11685	57	B1-U0-G2	20910	102	S	B3-U0-G3	21730	106	S	B5-U0-G3	205
VSS-1-64L-1-40K	22550	110	S	B3-U0-G3	12710	62	B1-U0-G2	22345	109	S	B3-U0-G3	12505	61	B1-U0-G3	22755	111	S	B3-U0-G3	23575	115	S	B5-U0-G3	205
VSS-1-64L-1-50K	24190	118	P	B3-U0-G3	13530	66	B1-U0-G2	23780	116	P	B3-U0-G3	13325	65	B1-U0-G3	24190	118	P	B3-U0-G4	25215	123	P	B5-U0-G3	205
VSS-2-80L-1-30K	27878	106	S	B3-U0-G3	15254	58	B1-U0-G3	27089	103	S	B3-U0-G3	14991	57	B1-U0-G3	26826	102	S	B3-U0-G4	28404	108	P	B5-U0-G3	263
VSS-2-80L-1-40K	29456	112	S	B3-U0-G3	16306	62	B1-U0-G3	29193	111	S	B3-U0-G4	16043	61	B1-U0-G3	28930	110	P	B3-U0-G4	30771	117	S	B5-U0-G4	263
VSS-2-80L-1-50K	31823	121	P	B3-U0-G4	17358	66	B1-U0-G3	31560	120	P	B3-U0-G4	17095	65	B1-U0-G3	31034	118	P	B3-U0-G4	33138	126	P	B5-U0-G4	263
VSS-2-96L-1-30K	33496	106	S	B3-U0-G4	18328	58	B1-U0-G3	32548	103	S	B3-U0-G4	18012	57	B1-U0-G3	32232	102	S	B3-U0-G4	34128	108	P	B5-U0-G4	316
VSS-2-96L-1-40K	35392	112	S	B3-U0-G4	19592	62	B1-U0-G3	35076	111	S	B4-U0-G4	19276	61	B1-U0-G4	34760	110	P	B4-U0-G4	36972	117	S	B5-U0-G4	316
VSS-2-96L-1-50K	38236	121	P	B4-U0-G4	20856	66	B1-U0-G4	37920	120	P	B4-U0-G4	20540	65	B1-U0-G4	37288	118	P	B4-U0-G4	39816	126	P	B5-U0-G4	316

*DLC = Standard
P= Premium

L70/L90 DATA

Temp.	VSS-S				VSS-1		VSS-2	
25°C	L70 (16L)	L90 (16L)	L70 (32L)	L90 (32L)	L70	L90	L70	L90
	483,000	180,000	483,000	>60,000	483,000	>60,000	483,000	>60,000
50°C	L70 (16L)	L90 (16L)	L70 (32L)	L90 (32L)	L70	L90	L70	L90
	550,000	180,000	190,000	>60,000	180,000	>60,000	180,000	>60,000

DPX ARM LENGTH

DPX ARM LENGTH	SGL	D90	D180	T90	T120	QD
VSS-S	6"	10"	6"	10"	10"	10"
VSS-1	6"	10"	6"	10"	10"	10"
VSS-2	6"	10"	6"	10"	10"	10"

6" - DPX6 | 10" - DPX10

EPA

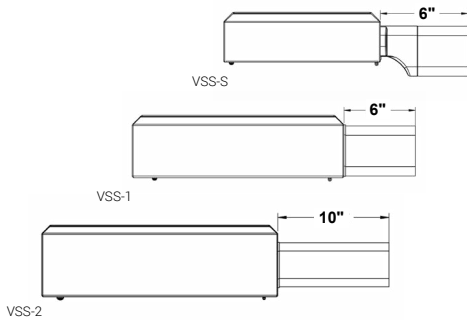
EPA	SGL	D90	D180	T90	T120	QD
VSS-S	0.59	0.87	1.18	1.43	1.49	1.43
VSS-1	0.90	1.52	1.80	2.34	2.43	2.34
VSS-2	1.49	2.36	2.98	3.56	3.72	3.56



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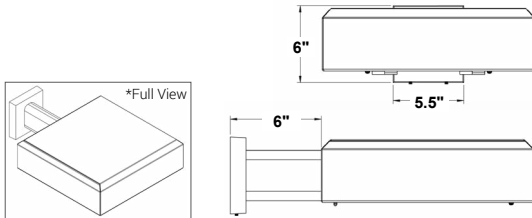
MOUNTING OPTIONS



DIRECT POLE (DP)

Standard mounting arm is extruded aluminum in lengths of 6", And 10"

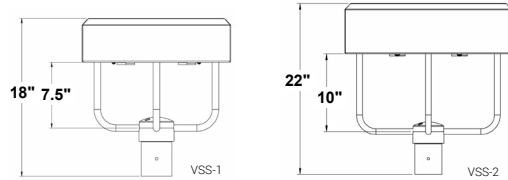
*Arm lengths may vary depending on configuration



WALL MOUNT (WM)

Cast Aluminum Plate for direct wall mount.

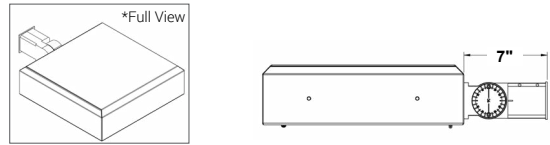
6" extruded aluminum arm mounts directly to a cast wall mount box.



SPIDER MOUNT (SPMX)

Aluminum, 4-bar spider arm mounts over round tenon at two outer dimensions.

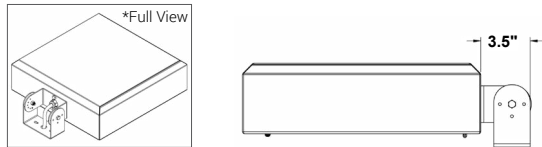
- Over 2-3/8" (SPM2)
- Over 3" (SPM3)



KNUCKLE MOUNT (KM)

Die Cast Knuckle great for adjustable installation on 2-3/8" OD vertical or horizontal tenon.

- Max Uplift of 110 degrees
- Adjustable in 5 degree increments

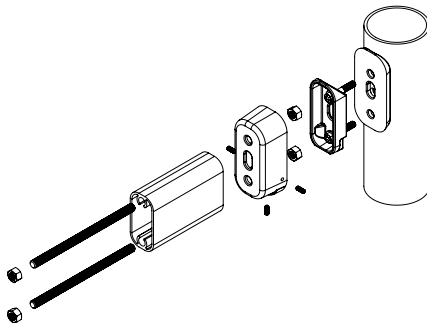


TRUNNION MOUNT (TM)

Steel bolt-on-mounting for adjustable installation with a maximum uplift of 90°.

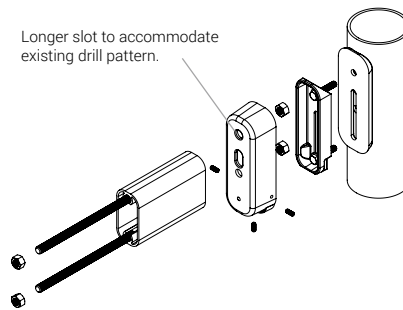
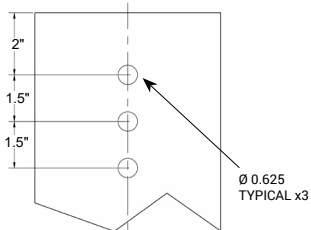
OPTIONAL

Optional Cast Aluminum Bracket designed for quick mounting on Direct Square or Round Poles. Cleat mounts directly to pole for easily hung fixtures.



QUICK MOUNT BRACKET (QMB) DIRECT POLE (DP6/DP11)

DRILL PATTERN



RETROFIT QUICK MOUNT BRACKET (RQMB)

RQMB DRILL PATTERN

