



Gardco SlenderForm SFP luminaires combine LED performance excellence and advanced Gardco LED thermal management technology with a distinct yoke design to provide outdoor lighting that is both energy efficient and aesthetically pleasing. SlenderForm is defined by its high performance, sleek low profile design and rugged construction. The housing has a maximum profile of just 3".

Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

Ordering guide

example: SFP-32L-250-NW-G2-T2-2-120-DD-F1-HIS-BK

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage	Controls	Electrical	Luminaire	Finish	
SFP											
SFP SlenderForm Square Post Top luminaire	32L 32 LEDs	250 250mA 500 500mA	NW-G2 Neutral White 4000K, 70CRI Gen 2	T2 Mounts to a 2-3/8" x 4" Tenon (must be ordered and shipped as a separate accessory)	2 Type 2 (aimed between the yoke supports) 2-270 Type 2 Rotated right 270° (aimed toward one yoke support)	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V (50/60Hz) HVU 347-480V (50/60Hz)	DD 0-10V Dimming Driver ⁶ DynaDimmer: Automatic Profile Dimming CS50 Safety 50% Dimming, 7 hours ¹ CM50 Median 50% Dimming, 8 hours ¹ CE50 Economy 50% Dimming, 9 hours ¹ DA50 All Night 50% Dimming ¹ Photoelectric/Receptacle Systems PCB Photocontrol Button ^{2,3} Pole Mounted Infrared Motion Response Systems with DynaDimmer CS50-IMRO with Safety 50% Dimming ¹⁷ CM50-IMRO with Median 50% Dimming ¹⁷ CE50-IMRO with Economy 50% Dimming ¹⁷ DA50-IMRO with All Night 50% Dimming ¹⁷	Fusing F1 Single (120, 277, 347VAC) ² F2 Double (208, 240, 480VAC) ² F3 Canadian Double Pull (208, 240, 480VAC) ² Pole Mount Fusing FP1 Single (120, 277, 347VAC) ² FP2 Double (208, 240, 480VAC) ² FP3 Canadian Double Pull (208, 240, 480VAC) ² Surge Protection SP1 Standard 10KVA SP2 Increased 20KVA	HIS Internal House Side Shield ⁴ DL Diffuse lens ⁸	Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray Customer specified RAL Specify optional color or RAL (ex: OC-RAL7024) CC Custom color (Must supply color chip for required factory quote)	
	48L 48 LEDs	700 700mA	WW-G2 Warm White 3000K, 70CRI Gen 2	T3 Mounts to a 3" x 4" Tenon (standard)	3 Type 3 (aimed between the yoke supports) 3-270 Type 3 Rotated right 270° (aimed toward one yoke support)	4 Type 4 (aimed between the yoke supports) 4-270 Type 4 Rotated right 270° (aimed toward one yoke support)					
	64L 64 LEDs	850 850mA	CW-G2 Cool White 5700K, 70CRI Gen 2			5 Type 5					

- Available only on 120, 208, 240, and 277 (or UNV).
- Specify input voltage.
- Not available with 347V or 480V.
- HIS not available with Type 5.
- Not compatible with SFV fixtures.
- DD option is required for pole mount motion sensor.
- Pole mounted sensor must be ordered separately (See accessories page).
- Not available with 64L.

SFP SlenderForm LED luminaire

Site & Area – Square Post Top

Accessories (order separately)

House Side shield

Standard orientation:

HIS-32-V Internal House Side Shield for 32 LEDs (2 modules)

HIS-48-V Internal House Side Shield for 48 LEDs (3 modules)

HIS-64-V Internal House Side Shield for 64 LEDs (4 modules)

At 90° or 270° orientation:

HIS-32-H Internal House Side Shield for 32 LEDs (2 modules)

HIS-48-H Internal House Side Shield for 48 LEDs (3 modules)

HIS-64-H Internal House Side Shield for 64 LEDs (4 modules)

Pole Mount Motion Sensor

MS-A-120V 120V Input

MS-A-277V 277V Input

MS-P 120V or 277V Input Pedestrian Motion Sensor

(DD or Dynadimmer option required)

T2 Post Top 2-3/8 Tenon SFRP

For 2 3/8" x 4" Tenon

LED Wattage and Lumen Values Standard SFP square post top luminaire

Order Code	LED Qty	System Current (mA)	Color Temp (K)	Ave System Watts (W) ¹	Type 2			Type 3			Type 4			Type 5		
					Lumen Output ^{2,3}	BUG Rating	Efficacy (lm/W)	Lumen Output ^{2,3}	BUG Rating	Efficacy (lm/W)	Lumen Output ^{2,3}	BUG Rating	Efficacy (lm/W)	Lumen Output ^{2,3}	BUG Rating	Efficacy (lm/W)
SFP-32L-250-NW-G2-x	32	250	4000	27	3407	B1-U0-G1	129	3207	B1-U0-G1	121	3319	B1-U0-G1	125	3458	B2-U0-G1	130
SFP-32L-500-NW-G2-x	32	500	4000	51	6459	B2-U0-G1	127	6079	B1-U0-G2	120	6292	B1-U0-G2	124	6555	B3-U0-G1	129
SFP-48L-700-NW-G2-x	48	700	4000	104	12336	B3-U0-G2	118	11609	B2-U0-G2	111	12017	B2-U0-G2	115	12519	B4-U0-G2	120
SFP-64L-850-NW-G2-x	64	850	4000	168	19216	B3-U0-G2	115	18084	B3-U0-G3	108	18719	B3-U0-G3	112	19501	B5-U0-G3	116

- Wattage may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
- Values shown are for luminaires without the DL options. Contact outdoorlighting.applications@signify.com if any approximate estimates are required for design purposes.
- Lumen values based on tests performed in compliance with IESNA LM-79.

Dimensions – SFP

Top View



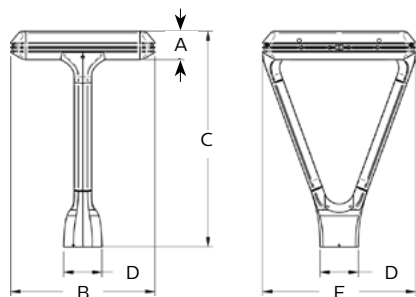
Effective Projected Area ft² / m²

Type	Single
SFP	0.95 / 0.088

Type	Approx. Single Luminaire Weight
SFP	26 lbs / 11.794 kgs

Dimensions: Inches / Centimeters

A	3.00" / 7.62cm
B	15.17" / 38.532cm
C	22.67" / 57.582cm
D	4.02" / 10.211cm
E	16.10" / 40.894cm



SFP SlenderForm LED luminaire

Site & Area - Square Post Top

Luminaire Configuration Information

Dimming (DD)

Gardco SlenderForm LED luminaire provided with 0-10V dimming for connection to a control system provided by others.

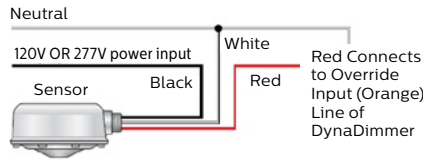
Dynadimmer Automatic Profile Dimming

Automatic dimming profiles (CS50/CM50/CE50) offer safety, median, or economy settings, for shorter or longer duration. Dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. 50% dimming is standard. DA50 offers 50% instantaneous dimming all night (during all dark hours). 75% and 25% dimming is also available if different light levels are required (contact Technical Support for details).

Profile	Dimming		
	Level	Duration	Example
Economy	50%	9 hours	9AM - 6PM
Median	50%	8 hours	10AM - 6PM
Safety	50%	7 hours	11AM - 6PM
Reactive 50	50%	dynamic	all night

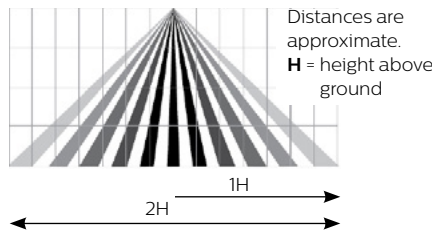
IMRO is available in 120V through 277V input only to the luminaire. Motion sensors accept 120V OR 277V input only.

The Pedestrian PIR motion sensor is the WattStopper HB350W-L3. One motion sensor per pole is required and is ordered separately as the MS-P accessory, see page 2. The Pedestrian sensor accepts 120V or 277V input.

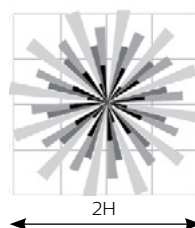


The pedestrian motion detector provides coverage equal to the sensor height above ground, in all directions from the sensor (360°).

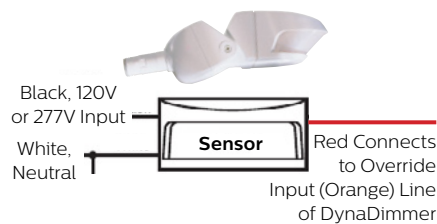
Side Coverage Pattern



Top Coverage Pattern

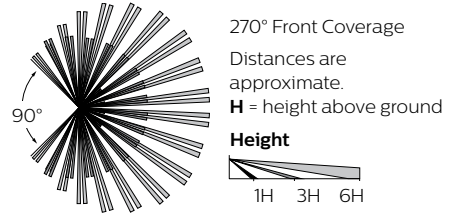


The Area PIR motion sensor is the WattStopper EW-200-120-W (120V Input - MSA-120V) or the WattStopper EW-200-277-W (277V Input - MSA-277V.) One motion sensor per pole is required and is ordered separately (See accessories on page 2). Area sensors require single voltage 120V or 277V input.



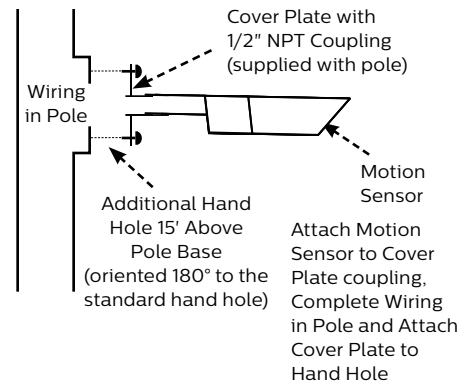
The area motion detector provides coverage equal to up to 6 times the sensor height above ground, 270° from the front-center of the sensor.

Area PIR Motion Sensor Coverage Pattern:



Motion response requires that the pole include an additional hand hole 15 feet above the pole base, normally oriented 180° to the standard hand hole. For Gardco poles, order the pole with the Motion Sensor Mounting (MSM) option which includes the hand hole and a special hand hole cover plate for the sensor with a 1/2" NPT receptacle centered on the hand hole cover plate into which the motion sensor mounts. Once the motion sensor is connected to the hand hole cover plate, then wiring connections are completed in the pole. The plate (complete with motion sensor attached and wired) is then mounted to the hand hole. If poles are supplied by others, the customer is responsible for providing suitable mounting accommodations for the motion sensor in the pole.

Mounting to a Gardco Pole:



Gardco SlenderForm LED luminaire with Automatic Profile Dimming, with Motion Response Override. Combines the benefits of both automatic profile dimming and motion response, using the DynaDimmer module. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for SFP-APD. If motion is detected during the time that the luminaire is operating at 50%, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

SFP SlenderForm LED luminaire

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Luminaire Configuration Information (Continued)

Notes:

Automatic Profile Dimming, with Motion Response Override is available in 120V through 277V input only to luminaire. The motion sensors requires either 120V OR 277V input to the motion sensor.

Automatic Profile Dimming, with Motion Response Override has the same pole requirements and utilizes the same motion sensors as the pole mounted motion response sensor. The motion sensor mounts and wires identically as well. It utilizes the identical dimming profile.

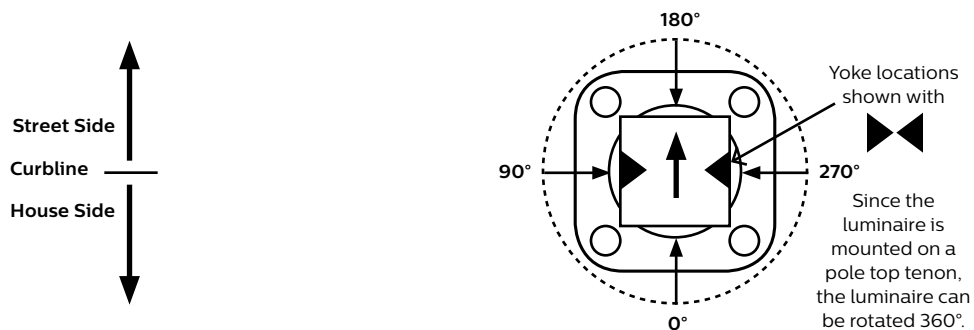
By combining the benefits of automatic profile dimming and motion response, the Automatic Profile Dimming, with Motion Response Override assures maximum energy savings, and insures that adequate light is present if motion is detected. All motion sensors utilized consume 0.0 watts in the off state.

Asymmetric Optical Orientation Information

Standard Optic Position

Aimed Between The Yoke Supports

Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:

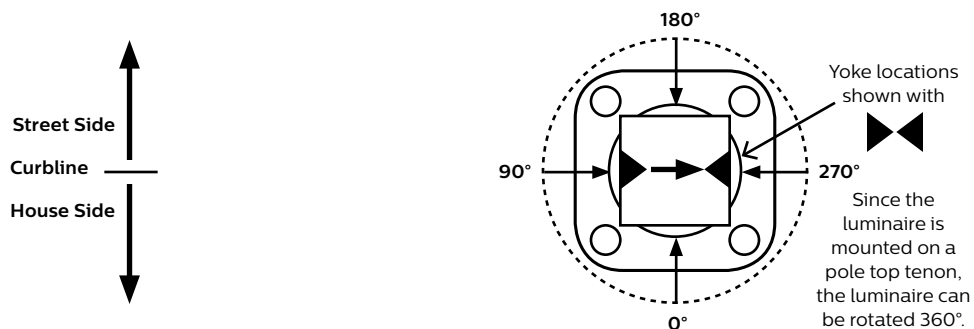


Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Right (270°) Optic Position

Aimed Toward One Yoke Support

Luminaires ordered with asymmetric optical systems in the Optic Rotated RIGHT (270°) optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

SFP SlenderForm LED luminaire

Site & Area – Square Post Top

Specifications

Housing

The Gardco SlenderForm housing consists of a rugged extruded aluminum housing body with an integral LED thermal management system, with die cast aluminum end caps. SFA and SFV luminaires arrive with the arm factory installed. As a result, the luminaires provide the functionality, strength and installation ease of an integral arm luminaire.

IP Rating

SlenderForm light engines have a rating of IP66.

Vibration Resistance

SlenderForm carries a 3G vibration rating that conforms to standards set forth by ANSI C136.31. Testing includes vibration to 3G acceleration in three axes, all performed on the same luminaire.

Electrical

Luminaires are equipped with an LED driver that accepts 120V through 277V, or 347V through 480V, 50hz to 60hz, input. Driver output is based on the LED wattage selected. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 302°F / 150°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. Power factor is not less than 90%. Luminaire consumes 0.0 watts in the off state. All motion sensors utilized consume 0.0 watts in the off state. Surge protector standard. 10KA per AN SI/IEEE C62.41.2.

LED Thermal Management

The Gardco SlenderForm LED provides integral thermal radiation fins to provide the excellent thermal management so critical to long LED system life.

FULL Cutoff performance

Full cutoff performance means a luminaire distribution where zero candela intensity occurs at an angle at or above 90° above nadir. Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.

Optical Systems

The advanced LED optical systems provide IES Types II, III, IV and V distributions. All optical systems feature unitized lens optic construction. SlenderForm luminaires are provided standard with with sealed light engines with no glass lens, for maximized performance. A diffuse lens is available as an option, resulting in reduced performance. All SlenderForm luminaires provide full cutoff performance.

Listings

All luminaires bear UL or CUL (where applicable) Wet Location labels.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Warranty

Gardco luminaires feature a 5 year limited warranty. Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED Drivers also carry a 5 year limited warranty. Motion sensors are covered by warranty for 5 years by the motion sensor manufacturer. See Warranty Information on signify.com/outdoorluminaires for complete details and exclusions.

Predicted Lumen Depreciation Data

Ambient Temperature °C	System Current	LED Current	Calculated L ₇₀ hrs ^{1,2}	L ₇₀ per TM21 ^{2,3}	Lumen Maintenance @ 60,000hrs
25 °C	850 mA	850 mA	>100,000	>60,000	96%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM 21-11. Published L₇₀ hours limited to 6 times actual LED test hours.

