

Date: _____ Customer: _____

Project: _____

Type: _____ Qty: _____



Discera Gen5 LED Solar



Order Code: DSCLS - - - - -

Pole Order Code: _____

	Series	Height	Finish	Options					
<u>DSCLS</u>	Series	See pages 8 and 9 for details.							
	DSCLS Discera Gen5 LED Solar								
	Optics	R1 Type I	R2 Type II	R3 Type III	R3W (Wide) Type III	R4 Type IV	R5R (Round) Type V		
	Mounting	1 Single	2 Double						
	Light Engine	L17 17W	L25 25W	L35 35W	L50 ¹ 50W	L65 ¹ 65W	¹ Single Mounting Only		
	CCT	27 ^{1*} 2700K	30 ¹ 3000K	35* 3500K	40 4000K	50* 5000K	¹ 2700K and 3000K IDA Approved * Consult factory for lead time		
*	Batteries	B1 One 12V 118 Ah	B2 Two 12V 118 Ah	B3 One 12V 146 Ah	B4 Two 12V 146 Ah	B5 One 12V 176 Ah	B6 Two 12V 176 Ah		
*	Panel	P1 110W Single	P2 110W Double	P3 160W Single	P4 160W Double				
*	Operation Profile (see page 4)	1 ___ Hours PM Dim % Hours AM	2 XXX All night 100%	3 XXX All Night 30%	4 XXX 4 hours PM 0 hours AM	5 XXX 6 hours PM 0 hours AM	6 XXX 8 hours PM 0 hours AM	7 XXX 2 hours PM 2 hours AM	8 XXX 4 hours PM 2 hours AM
*	Panel Mounting Angle	PM0 3°	PM1 15°	PM3 30°	PM4 45°	PM6 60°			
	Finish	WH White	BK Black	BL Semi-Matte Black	BZ Bronze	SV Silver	GV Galvanized	SP Specify Premium Color	
	Options	MS Motion Sensor	HS ³ House Side Shield (180)					³ Type I, II, III, and IV only	

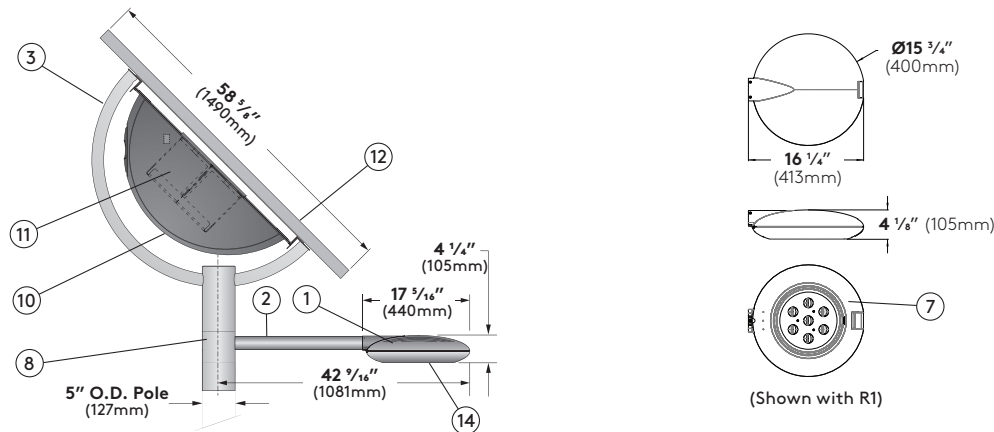
*To be determined by Selux engineering for every project. For system sizing quote, please complete spec sheet and solar questionnaire (under "Additional Downloads" on Selux.us solar web pages) for submission to selux.technical@selux.com

Approvals

Date: _____



DSCLS



Specifications

1. Luminaire Housing - High pressure die cast low-copper aluminum housing (IP66).

2. Mounting Arm - Welded steel with powder coat finish.

3. Panel Support Frame - Steel frame supports solar panels and storage batteries. Integrated pole fitter allows orientation independent of luminaire.

4. Gasketing - (not shown) Silicone gasketing provides seal at door and glass opening.

5. Optics - (not shown) Technical optics (R1, R2, R3, R3W, R4, and R5R) use Selux signature light pattern acrylic lens holder to secure proprietary silicone optics. Internal micro house side shield available for distribution types I, II, III, and IV.

6. Light Engine - (not shown) High Flux LEDs mounted to PC board and attached to aluminum heat sink for maximum LED/ performance and life. CCT tolerance 3-step binning for 2700K, 3000K, and 4000K. CRI minimum 80. Complete light engine can be removed easily for future upgrade.

7. Access Latch - One hand operated flush latch releases lower section of luminaire housing with integral die cast hinges for easy access to light engine.

8. Pole fitter - Fitter for upper assembly and luminaire secured with six stainless steel, Allen head set screws. Fitters are designed to fit 5" (127mm) poles or tenons.

9. Smart Controller - (not shown) Monitors and regulates charging and discharging of batteries. Programmable to control hours of operation (in relation to dusk and dawn). Maximum power-point tracking (MPT) increases power production by up to 30%. Limited warranty by controller manufacturer for 5 years. Surge protection built in.

10. Battery Covers - Battery compartment is enclosed with molded recycled ABS with integrated UV protective outer shell. Covers are removable and lock in place.

11. Batteries - (1-2) 12 Volt 118, 146, 176 Amp Hour maintenance free, non-spillable, sealed absorbed glass matt (AGM) batteries. Battery Capacity is rated at a C-100 discharge rate. Batteries are mounted to hinged tray for easy access.

12. Solar Panels - Poly-crystalline photovoltaic modules, in (1-2) 110W or (1-2) 160W panels. Panel wattages are nominal.

13. Motion Sensor - (not shown) 180° coverage, sensor mounted to pole fitter.

14. Access Door - Lower casting features tempered glass lens and a stainless steel hinge that attaches to upper casting and is secured with a toolless latch for ease of maintenance.

15. Lens - Tempered and screened glass lens protects and helps seal optical chamber.

Exterior Luminaire Finish -

Selux utilizes a high quality Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity

resistance as well as ultraviolet resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI.

Standard exterior colors are White (WH), Black (BK), Semi-Matte Black (BL), Bronze (BZ), and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide. Hot Dip Galvanized finish (GV) on all steel parts also available.

5 Year Limited LED Luminaire Warranty -

Selux offers a 5 Year Limited Warranty to the original purchaser that the Discera Gen5 LED Solar luminaire shall be free from defects in material and workmanship for up to five (5) years from date of shipment. This limited warranty covers the LED driver and LED array when installed and operated according to Selux instructions. Fixture suitable for ambient temperature of 40°C (104°F).

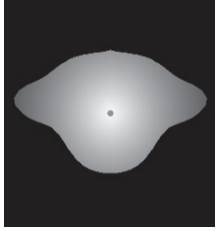
Solar Components Warranty -

PV Panels - 20 year performance warranty
Controller - 5 years
Batteries - 1 year (prorated)
For details and exclusions, see "Selux Terms and Condition of Sale."

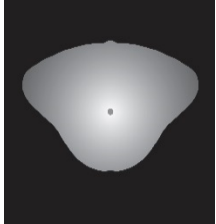
Listings and Ratings: Tested to IESNA LM-79-08 and LM-80 test standards.

Visit selux.us for our LED End of Life recycling policy.

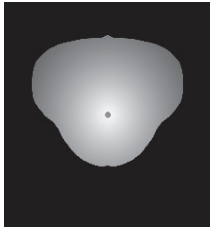
For Buy American compliance on poles, please consult factory.



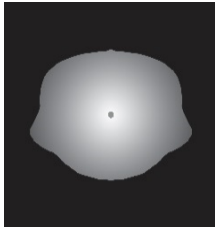
R1 - Gen5 Distribution Type I/II				
Light Engine	Lumen Output	CCT	Input Watts	lm/W
L17	1,785	3000K	17	105
L25	2,600	3000K	25	104
L35	3,570	3000K	35	102
L50	4,850	3000K	50	97
L65	6,305	3000K	65	97



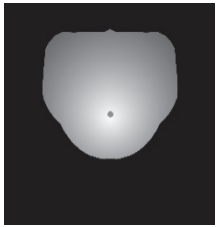
R2 - Gen5 Distribution Type II				
Light Engine	Lumen Output	CCT	Input Watts	lm/W
L17	1,785	3000K	17	105
L25	2,575	3000K	25	103
L35	3,570	3000K	35	102
L50	4,850	3000K	50	97
L65	6,305	3000K	65	97



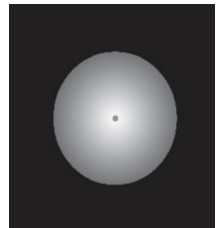
R3 - Gen5 Distribution Type III				
Light Engine	Lumen Output	CCT	Input Watts	lm/W
L17	1,870	3000K	17	110
L25	2,600	3000K	25	104
L35	3,745	3000K	35	107
L50	5,100	3000K	50	102
L65	6,630	3000K	65	102



R3W - Gen5 Distribution Type III (wide)				
Light Engine	Lumen Output	CCT	Input Watts	lm/W
L17	1,819	3000K	17	107
L25	2,625	3000K	25	105
L35	3,640	3000K	35	104
L50	4,900	3000K	50	98
L65	6,370	3000K	65	98



R4 - Gen5 Distribution Type III/IV				
Light Engine	Lumen Output	CCT	Input Watts	lm/W
L17	1,768	3000K	17	104
L25	2,575	3000K	25	103
L35	3,570	3000K	35	102
L50	4,800	3000K	50	96
L65	6,240	3000K	65	96



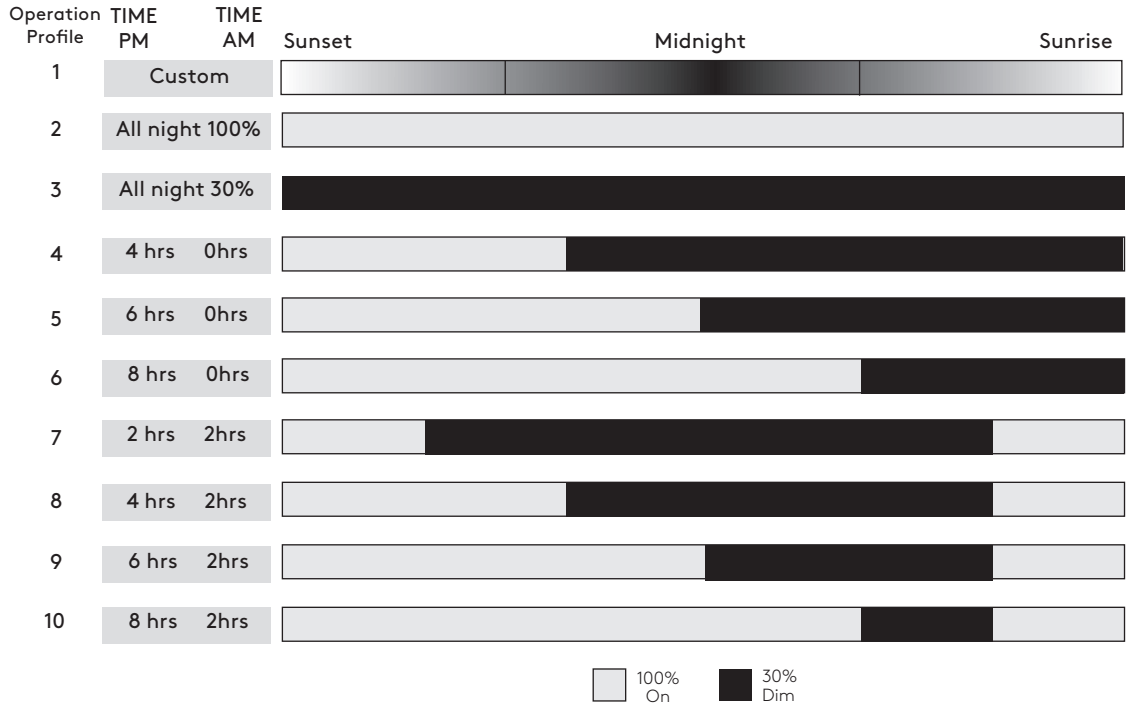
R5R - Gen5 Distribution Type V (round)				
Light Engine	Lumen Output	CCT	Input Watts	lm/W
L17	1,921	3000K	17	113
L25	2,800	3000K	25	112
L35	3,570	3000K	35	102
L50	4,800	3000K	50	96
L65	6,240	3000K	65	96

CCT Multiplier Chart	
2700K	0.962
3000K	1.000
4000K	1.063

Operation Profile Options

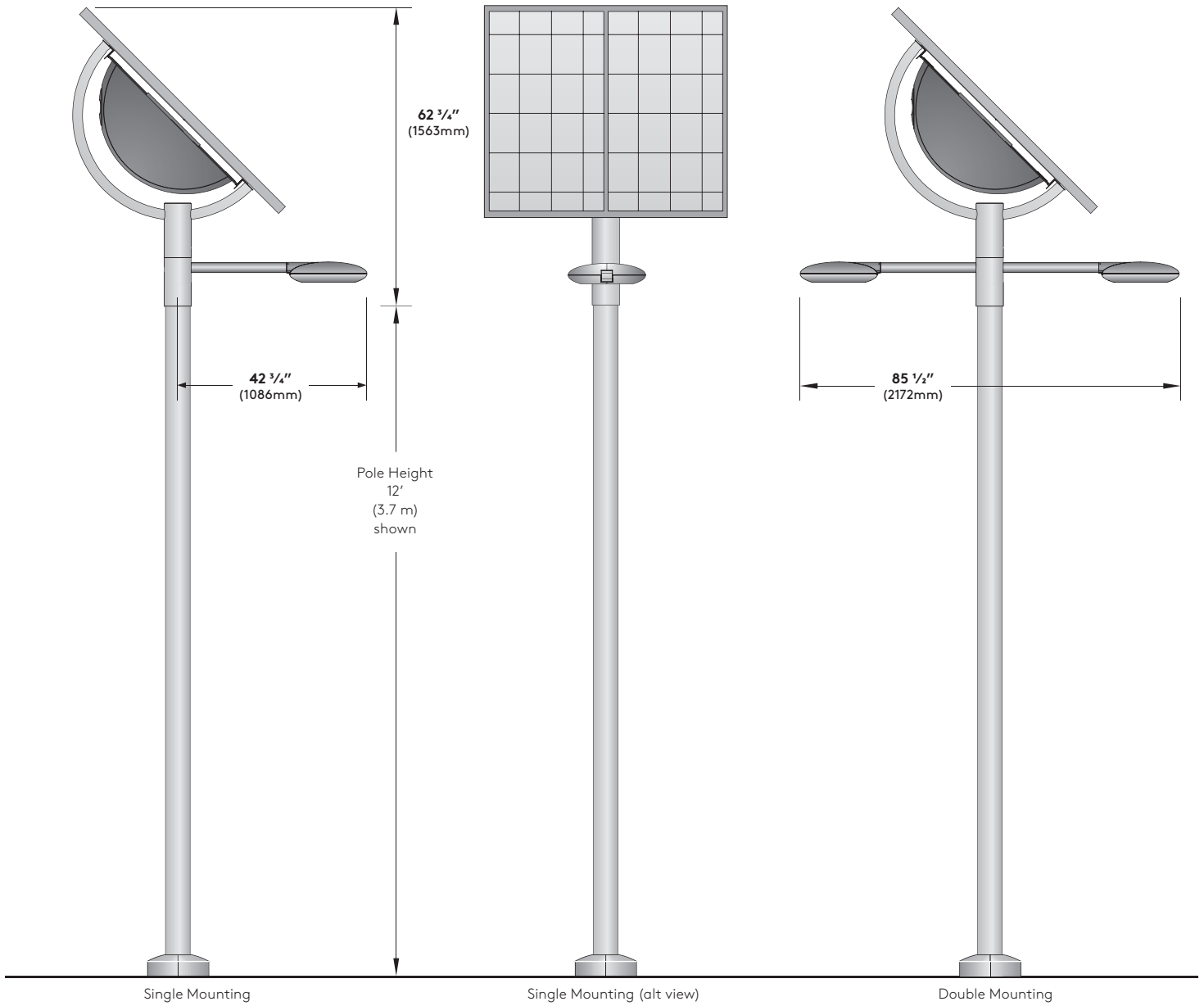
Create a (4) digit code to design your own profile. Example:

1 5 3 4
 Profile Hours Dim Hours
 PM % AM



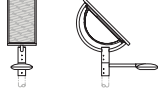
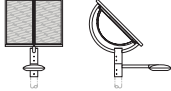
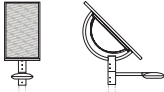
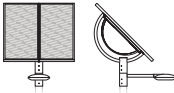
- Profiles 3-10 dim to 30% between PM and AM hours by default.
- Profile 1 provides a custom profile. Dim level can be specified with a single number between 1 and 9. (e.g. 2 = 20% LEDs dim to 20% power)

Mounting Details



* = Dimension changes based on panel angle and size configurations. P4 Panel with PM4 (45°) Angle shown. See page 7 for details.

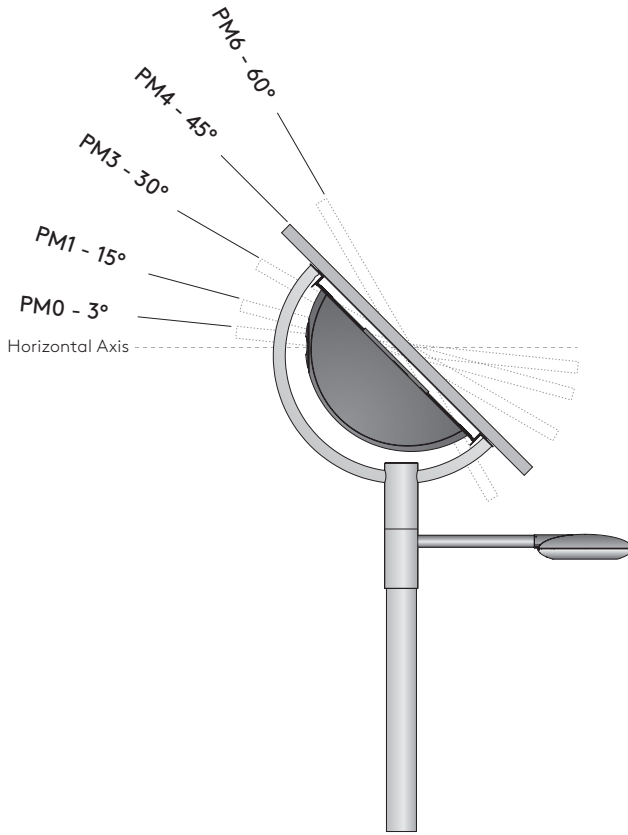
Weight Chart for all Configurations

Fixture Assembly Weights				
Panel	Batteries	Weights		Systems
		lbs.	kg.	
P1 110W Single Panel (110 Watt)	B1 (1 x 118Ah)	216	98	
	B2 (2 x 118Ah)	279	127	
	B3 (1 x 146Ah)	228	103	
	B4 (2 x 146Ah)	303	137	
	B5 (1 x 176Ah)	244	111	
	B6 (2 x 176Ah)	319	145	
P2 110W Double Panels (220 Watt)	B2 (2 x 118Ah)	303	137	
	B4 (2 x 146Ah)	327	148	
	B6 (2 x 176Ah)	359	163	
P3 160W Single Panel (160 Watt)	B1 (1 x 118Ah)	227	103	
	B2 (2 x 118Ah)	290	132	
	B3 (1 x 146Ah)	239	108	
	B4 (2 x 146Ah)	314	142	
	B5 (1 x 176Ah)	255	116	
	B6 (2 x 176Ah)	346	157	
P4 160W Double Panels (320 Watt)	B2 (2 x 118Ah)	317	144	
	B4 (2 x 146Ah)	341	155	
	B6 (2 x 176Ah)	373	169	

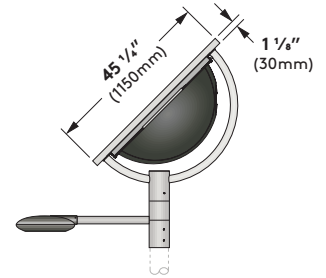
Mounting Option Details

Panel angle and Fixture EPA information

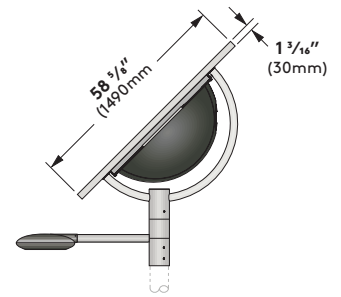
Panels must always be oriented towards the equator. Hence locations in the Northern Hemisphere should be facing SOUTH and locations in the Southern Hemisphere should be facing NORTH.



P1/P2 Detail



P3/P4 Detail



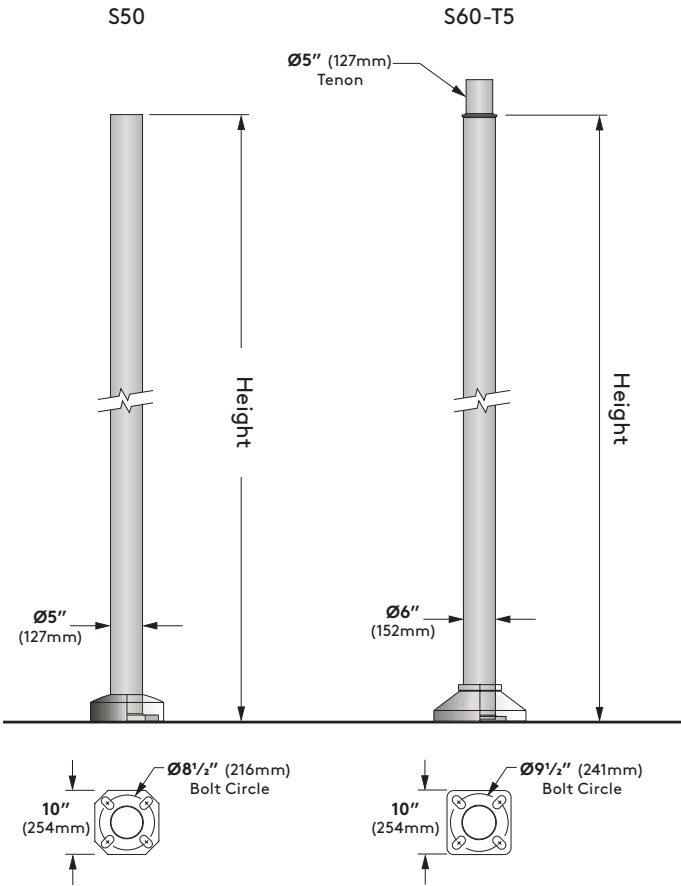
PM0 has a 3° angle to allow for drainage. Batteries, Panel, and Hours of Operation requirements to be determined by Selux engineering for every project, please consult factory. Please consult Selux for specific sizing at your geographic location.

Panel Angle	P1 (110W, Single)			P2 (220W, Double)			P3 (160W, Single)			P4 (320W, Double)		
	Height (h)	Width (w)	EPA (ft ² /m ²)	Height (h)	Width (w)	EPA (ft ² /m ²)	Height (h)	Width (w)	EPA (ft ² /m ²)	Height (h)	Width (w)	EPA (ft ² /m ²)
PM0 3°	47 1/2" (1207mm)	26 9/16" (675mm)	6.4/0.59	47 1/2" (1207mm)	53" (1345mm)	6.5/0.60	47 7/8" (1216mm)	26 9/16" (675mm)	6.3/0.58	47 7/8" (1216mm)	53" (1345mm)	6.5/0.60
PM1 15°	52" (1322mm)	26 9/16" (675mm)	6.5/0.60	52" (1322mm)	53" (1345mm)	7.4/0.69	3 19/16" (1367mm)	26 9/16" (675mm)	7.7/0.72	53 13/16" (1367mm)	53" (1345mm)	10/0.93
PM3 30°	57" (1450mm)	26 9/16" (675mm)	7.3/0.67	57" (1450mm)	53" (1345mm)	12.2/1.13	60 1/2" (1537mm)	26 9/16" (675mm)	10.9/1.01	60 1/2" (1537mm)	53" (1345mm)	15.3/1.42
PM4 45°	61" (1550mm)	26 9/16" (675mm)	9.4/0.87	61" (1550mm)	53" (1345mm)	16.4/1.5	65 5/8" (1674mm)	26 9/16" (675mm)	13.9/1.29	65 5/8" (1674mm)	53" (1345mm)	20.4/1.89
PM6 60°	63 3/4" (1620mm)	26 9/16" (675mm)	11.0/1.02	63 3/4" (1620mm)	53" (1345mm)	19.7/1.83	69 1/16" (1771mm)	26 9/16" (675mm)	16.3/1.51	69 1/16" (1771mm)	53" (1345mm)	24.1/2.24

Please consult Selux engineering to determine wind load requirements for your specific project. For weight information, see chart on page 6.

Mounting Option Details

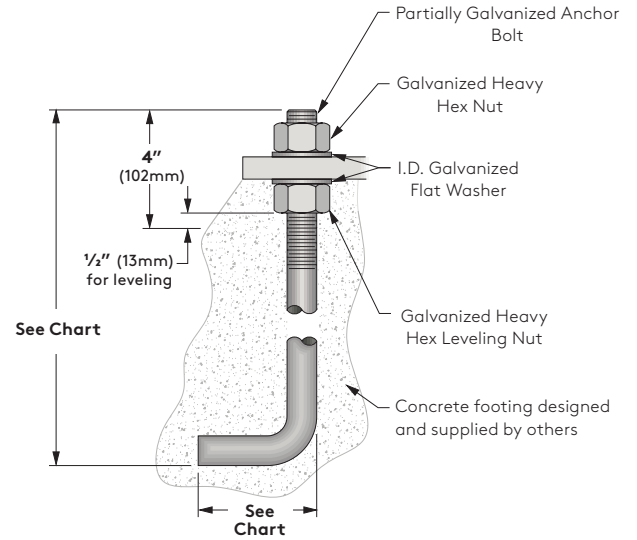
Straight Steel Pole Information



10" x 10" x .75" Base Plate for S50, and a 10" x 10" x 1" Base Plate for S60. Use caution when setting anchor bolts. Bolts must be vertical and centered on dimensions shown. A Ø5" Tenon is required for all poles over Ø5".

Straight Pole Anchor Bolt Detail

See Anchor Bolt (AB) chart below for dimensions.

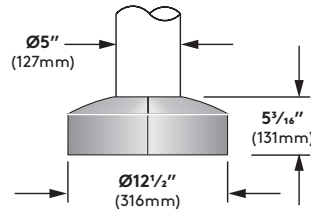


Base Cover Information

Refer to pole specification sheets for construction details, anchorage information and additional options.

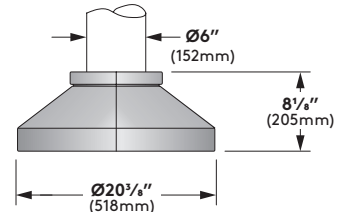
BC3 Standard Base Cover for S50 poles

Two-piece die cast aluminum, field installable base cover.



BC9 Standard Base Cover for S60 poles

Two-piece die cast aluminum, field installable base cover.



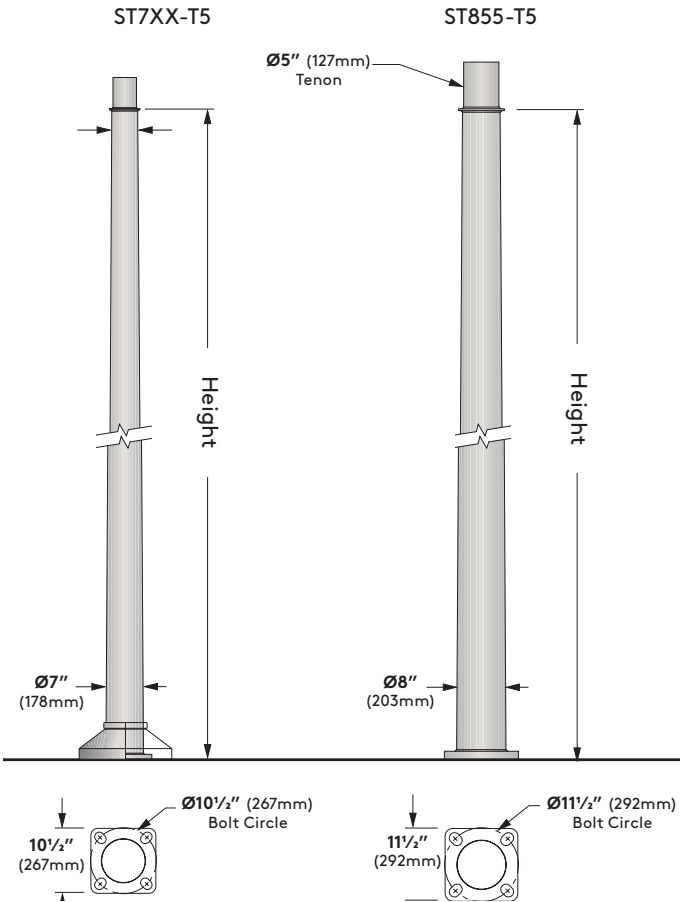
Pole Series	Bolt Circle	AB Size	EPA Information							Height	Finish	Options
			90mph	100mph	110mph	120mph	130mph	140mph	150mph			
S50 5" (127mm) Diameter Straight Steel Pole	Ø8 1/2"	1" x 36" x 4"	34.5	28	23.5	19.5	16.5	14.5	12.5	10 10 ft.	WH White	BC3 Optional Two-Piece Cast Aluminum Base Cover (for S50 poles only)
S50 5" (127mm) Diameter Straight Steel Pole	Ø8 1/2"	1" x 36" x 4"	29	23.5	19.5	16.5	14	12	10.5	12 12 ft.	BK Black BL Semi-Matte Black	
S60 6" (152mm) Diameter Straight Steel Pole	Ø9 1/2"	1" x 36" x 4"	60	49	40.5	34.5	29	25	22	14 14 ft.	BZ Bronze	BC9 Optional Two-Piece Cast Aluminum Base Cover (for S60 poles only)
S50 5" (127mm) Diameter Straight Steel Pole	Ø8 1/2"	1" x 36" x 4"	24.5	20	16.5	14	11.75	10	8.75	14 14 ft.	SV Silver	
S60 6" (152mm) Diameter Straight Steel Pole	Ø9 1/2"	1" x 36" x 4"	51	42	35	29.5	25	21.5	19	16 16 ft.	GV Galvanized	
S60 6" (152mm) Diameter Straight Steel Pole	Ø9 1/2"	1" x 42" x 6"	44	36	30	25	21.5	18.5	16	16 16 ft.	SP Specify Premium Color	
S50 5" (127mm) Diameter Straight Steel Pole	Ø8 1/2"	1" x 36" x 4"	17.5	14	11.5	9.75	8.25	7	6	18 18 ft.		
S60 6" (152mm) Diameter Straight Steel Pole	Ø9 1/2"	1" x 42" x 6"	38	31	26	21.5	18.5	16	13.75			

EPA calculations designed for 3 Second Gust Wind Speeds in mph at 33 ft above ground accordance with the Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, Fifth Edition, ASSHTO 2009 LTS-5-E

Please consult Selux engineering to determine wind load requirements for your specific project. See chart on p.7 for fixture and panel EPA values.

Mounting Option Details

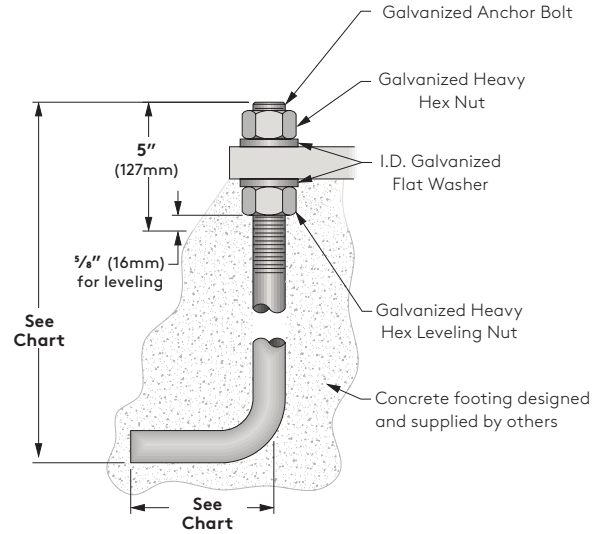
Tapered Steel Pole Information



10.5" x 10.5" x 1.25" Base Plate for ST7, and a 11.5" x 11.5" x 1.25" Base Plate for ST845. Use caution when setting anchor bolts. Bolts must be vertical and centered on dimensions shown. A Ø5" Tenon is required for all poles over Ø5".

Tapered Pole Anchor Bolt Detail

See Anchor Bolt (AB) chart below for dimensions.

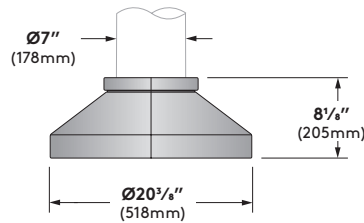


Base Cover Information

Refer to pole specification sheets for construction details, anchorage information and additional options.

BC10 Standard Base Cover for Ø7" tapered steel poles.

Two-piece die cast aluminum, field installable base cover.



Pole Series	Bolt Circle	AB Size	EPA Information							Height	Finish	Options
			90mph	100mph	110mph	120mph	130mph	140mph	150mph			
ST75 Ø7" (178mm)- Ø5 5/8" (143mm) Tapered Steel Pole	Ø10"	1.25" x 42" x 6"	>62	51	42	35	30	26	23	12 12 ft.	WH White BK Black BZ Bronze BL Semi-Matte Black SV Silver GV Galvanized SP Specify Premium Color	BC10 Optional Two-Piece Cast Aluminum Base Cover (for ST75, ST747, ST745)
ST75 Ø7" (178mm)- Ø5 1/8" (135mm) Tapered Steel Pole	Ø10"	1.25" x 42" x 6"	>80	65	53	45	38	33	29	14 14 ft.		
ST747 Ø7" (178mm)- Ø5 3/8" (129mm) Tapered Steel Pole	Ø10"	1.25" x 42" x 6"	>68	56	46	39	33	29	25	16 16 ft.		
ST745 Ø7" (178mm)- Ø5 1/4" (146mm) Tapered Steel Pole	Ø11"	1.25" x 42" x 6"	>74	60	50	42	36	31	27	18 18 ft.		
ST855 Ø8" (203mm)- Ø5 1/2" (140mm) Tapered Steel Pole	Ø11"	1.25" x 42" x 6"	>64	52	43	36	31	27	23			
EPA calculations designed for 3 Second Gust Wind Speeds in mph at 33 ft above ground accordance with the Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, Fifth Edition, ASSHTO 2009 LTS-5-E												

Please consult Selux engineering to determine wind load requirements for your specific project. See chart on page 7 for fixture and panel EPA values.