

SPECIALIZED LIGHTING SOLUTIONS

Solar Bollards & Poles 2019

www.slsnw.com



Solar Bollards

<p>SLB2 - S (no reflector)</p> 	<p>SLB2 - SR (pole)</p> 	<p>SLB2 - M (marine)</p> 	
<p>SLB2 - SR2OH (dual)</p> 	<p>SLB2 - SR4OH (quad)</p> 		

SPECIALIZED
LS LIGHTING
SOLUTIONS

Solar Bollard *Lighting*

SBL2 Series Solar Powered LED Bollards



Solar Bollard Lighting



Solar Bollard Lighting based in Queensland Australia who was the main R&D company for all the groups solar lighting solutions dating back to 2003 and first developed our unique bollard design shape in late 2005 before starting production overseas in early 2006 of the 1st generation series of the solar bollard range.

All manufacturing in Australia, and make their product range "certified" Australian Made.

In 2018 the all new SBL2 Series model range is now available with an Innovation Patent and a product that will outperform all our competition in light output, light distribution, autonomy, capabilities of running at full power dusk until dawn 365 days of the year no matter what global region and finally is submersible and we use Cylindrical LiFePo4 cells to power all our lights.

Solar Bollard Lighting delivers a very high quality solar bollard for extreme conditions. Using intelligent design, latest batteries and LEDs, coupled to well testeign of the product, the SLB2 are a extremely highly quality product that will last for years.

Designed for a surface ground, burial inground, wall or pole mounting, the SLB2 can be used in any application. With or without reflector, asymmetric light patterns help light your way where electrical power cannot be run. Ideal for ocean/lake water environment, the fully light head will not leak. Optional amber LEDs for turtle friendly lighting. Manufactured from the latest Lexan and UV stabilized polycarbonate this lights heads are IK10 impact resistant. Poles are marine grade extruded aluminum pole with stainless steel hardware.

Dawn to dusk operation with a 10 year plus life span, these are truly install and forget solar bollards for the next decade.

Various models dependent on latitude





The all new SBL2 SR Series overhead solar powered LED pole top bollard light is ideal for lighting locations where cyclones/hurricanes/typhoons, tsunamis, tidal surges and generalized flooding is prominent. The sealed self-contained design combined with high quality impact resistant construction, stainless steel external reflector with proven market performance makes the SBL2 SR Series the perfect asset in high risk areas where continuous lighting is required no matter what situation

Significant benefit over mains powered lights and other solar bollard competitors:

- Low cost and quick installation, no trenching, cabling or wiring required
- No costly energy bills, lamps or batteries to change

From vandal attack, severe high wind events, flood disasters, torrential rain, crashing waves, baseball ball size hail or just daily snow coverage, no similar product will out perform our SBL2 SR Series Solar LED Bollard pole top light design for durability and continuous performance. Electronic circuit design fully operationally tested in the field from Saudi Arabia to the sub-zero snow regions of Canada

Overview

Dome Material	SABIC SLX Lexan
Housing Material	UV Stabilized Polycarbonate designed for lighting
Internal	ASA Compliant
External Reflector	Stainless steel power coated to color match
LED Chips	8 x LED Chips initial lm/W 150lm
LED	Warm White (WW) 3000K Neutral White (NW) 4300K Amber
Voltage	3.2 Vdc 
Operational Temp	-30°C to +60°C (-20°F to +140°F)
ON/Off	Solar Panel Voltage
Maintenance	Annual clean & dome polish
Warranty	5 years (with approved pole & correct installation)
Weight	4 Kg (8.8lbs)
IP Rating	IP68
Impact Rating	IK10

Solar Module

Wattage	5W Mono Crystalline
Volts	5 V
Amps	1 A
Design Life	10 years

Battery

Type	3.2 V Lithium LiFePo4
Cycles	3700 (extreme minimum)
Design Life	10 years +

Electronics

Design Life	20 years+
Runtime	Dusk until Dawn full power

Poles

Material	Marine Grade Aluminium 6106 T6
Grade	High Tensile / Light Weight
Durability	High Corrosion Resistance



Can Submerge



Vandal Resistance



No Power Bills



Simple & Low Initial Cost



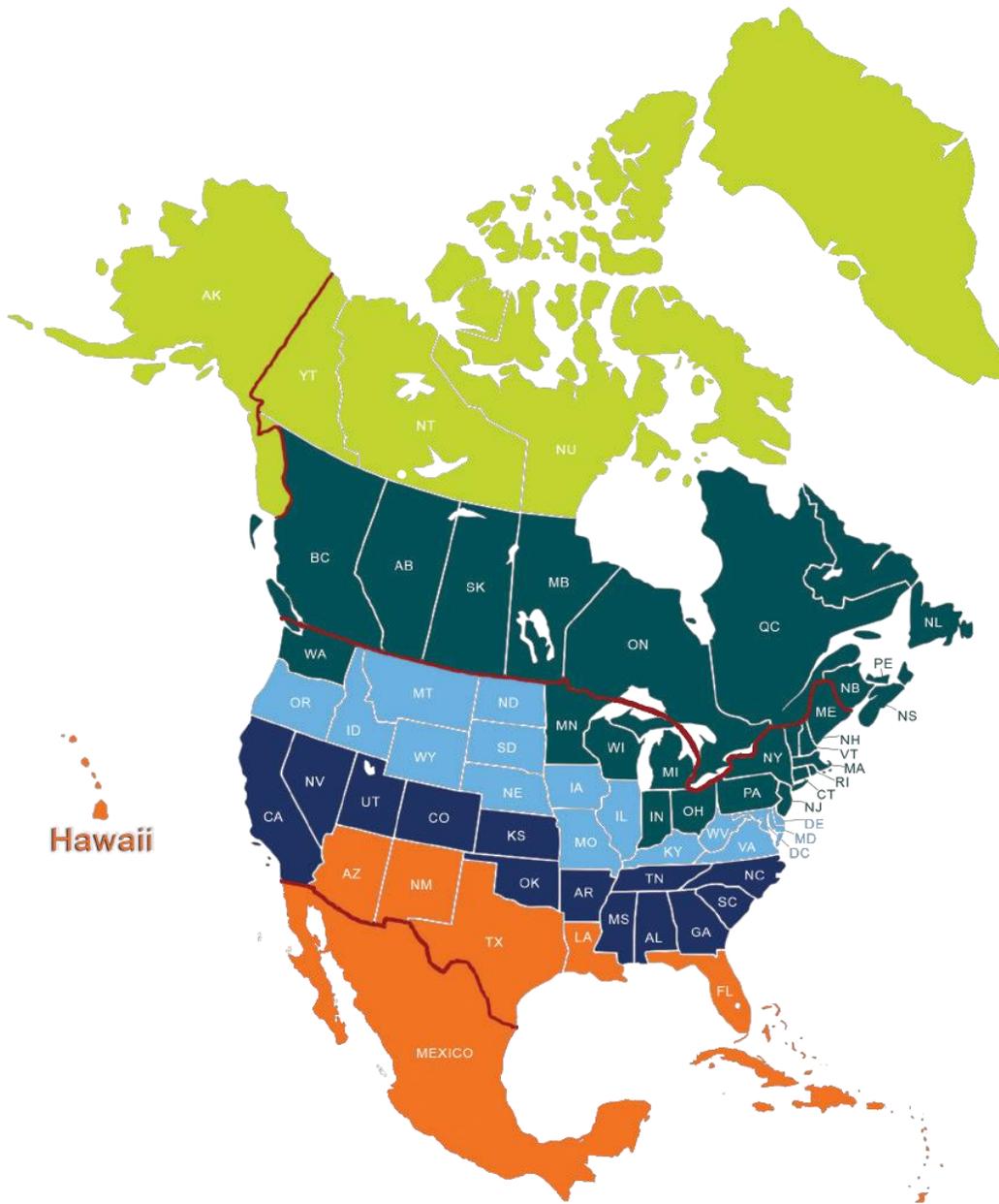
Clean Energy Lighting



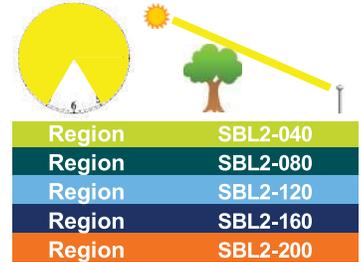
Minimal Maintenance



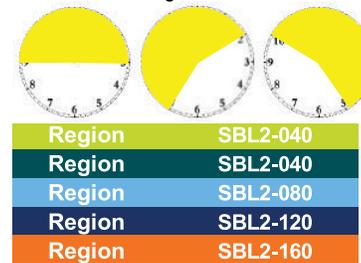
Install Yourself



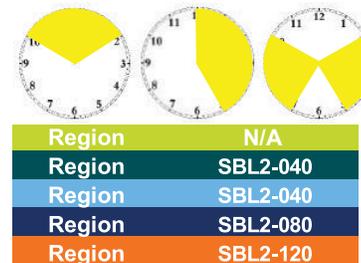
Full WINTER Sun (Lowest Annual Angle)



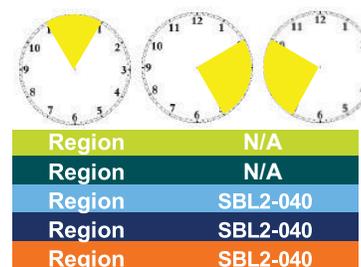
Partly in shade
Or snow covered region - Full Winter sun



Mostly in shade



Mostly in Heavy Shade - Based on 15hr runtime



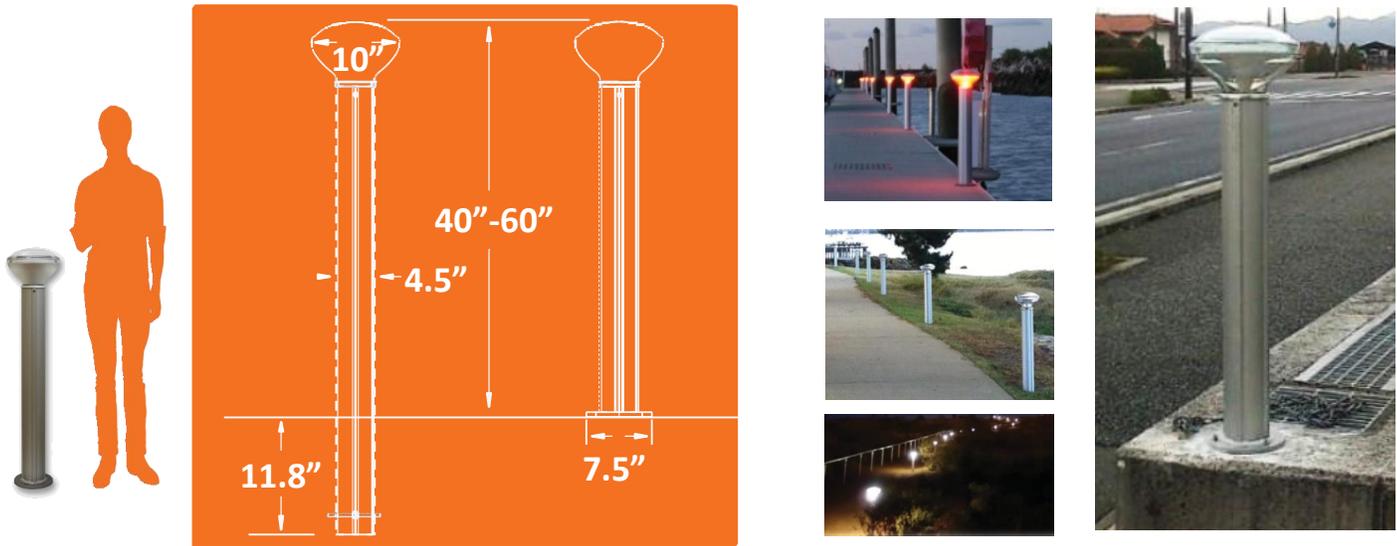
Daily Depth of Discharge / Autonomy (Zero Daily Charge assumed with 17Ah Power Cell @ 90%)

Model	Model Lumens	Power Draw mA	Location Example	Location Night Hours	TOTAL Amp/s Used	DAILY DEPTH OF DISCHARGE	AUTONOMY IN DAYS	AUTONOMY IN HOURS
SBL2-040ANW	16	40	Anchorage, AK	18.73	0.75	5%	20.4	382.5
SBL2-080ANW	32	80	Edmonton, Canada	16.73	1.34	9%	11.4	191.3
SBL2-120ANW	48	120	Billings, MT	15.56	1.87	12%	8.2	127.5
SBL2-160ANW	64	160	Denver, CO	14.79	2.37	15%	6.5	95.6
SBL2-200ANW	80	200	Houston	13.86	2.77	18%	5.5	76.5

A range of Vandal resistant high quality Solar Bollards for use in all weather conditions. This easy to install bollard is manufactured in Ultra High Impact UV stabilized Polycarbonate which houses the photovoltaic and LED system. The Bollard pole is manufactured in Low copper content Extruded Aluminum which is offered in a Anodized or UV stabilized powder coat finish.

This product is designed to withstand the harshest weather conditions as well as environments where vandalism or product tampering is prevalent. The solar bollard is a stand alone unit that requires no power and is designed to light up pathways, landscapes, parks and open spaces and has been designed not only to resist corrosion and vandals but also with aesthetics in mind.

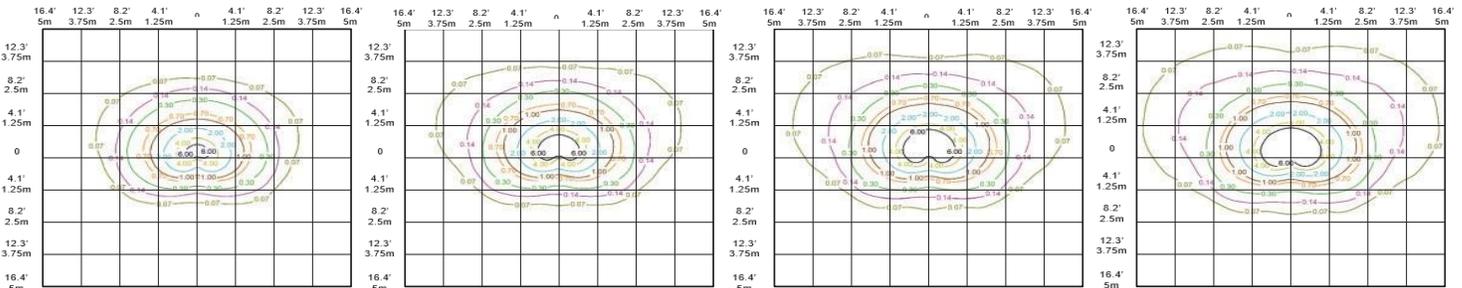
The SBL is available in several different Power Output versions depending on where the bollards will be utilized as well as a selection of pole options and decorative reflector tops, to suit designers requirements.



PHOTOMETRIC

(IES files available)

GRID = 10m / 32.8' x 10m / 32.8' All Values = Lux @ 1m / 40"



SBL2-080ANW

SBL2-120ANW

SBL2-160ANW

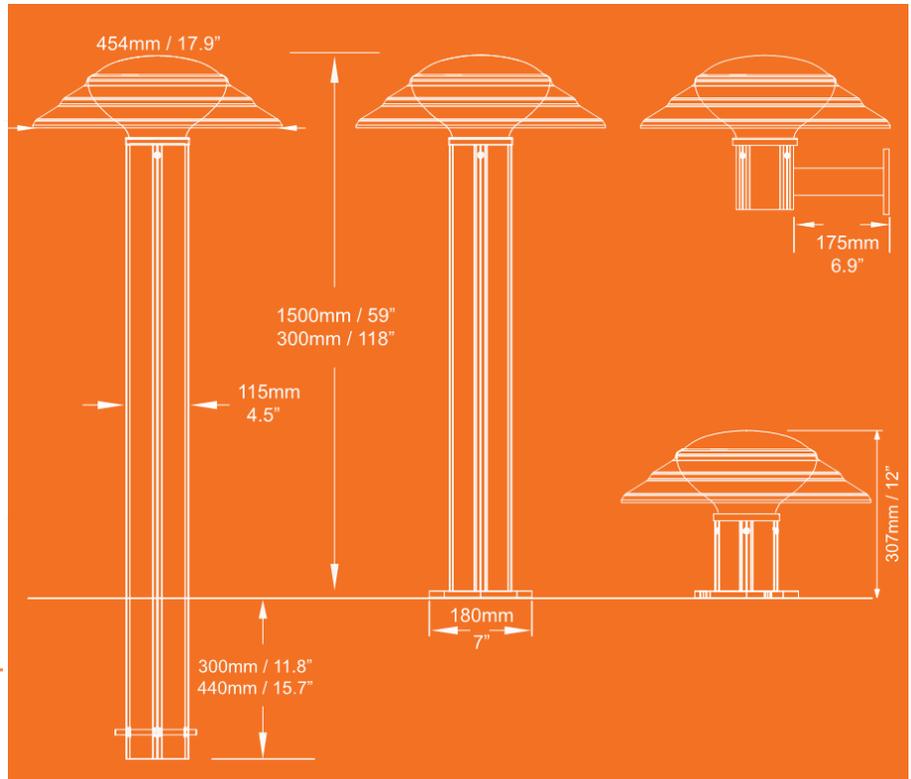
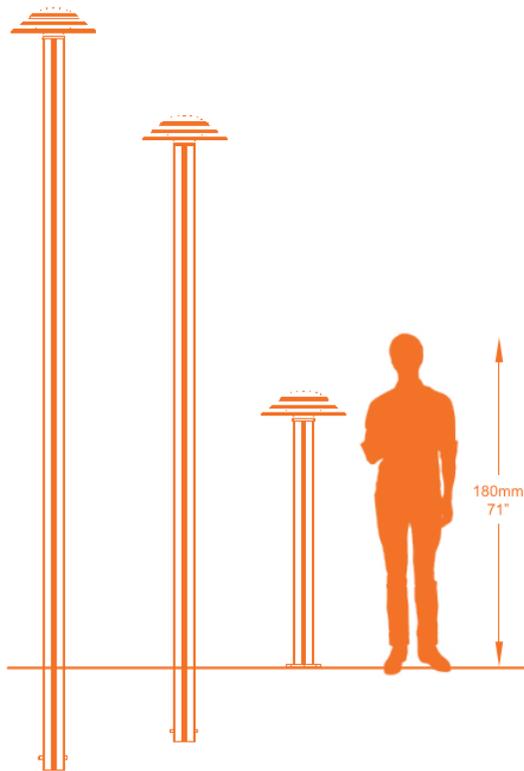
SBL2-200ANW

Power	Beam Spread	LED	Pole Length	Installed Height	Mounting	Color
040	Asymmetric *	3000K	130mm / 5.1"	290mm / 11.4"	W - Wall mount	BK - Satin Black (Default Powder Coat color)
080	Symmetric	4300K	142mm / 5.6"	302mm / 11.9"	I - In Ground (burial)	Anodized Aluminum — Silver
120			840mm / 33"	1000mm / 39.4"	G - Ground Mount (surface)	CC - Custom Color
160			1140mm / 45"	1000mm / 39.4"		
200			1340mm / 53"	1500mm / 59"		
			1790mm / 70"	1500mm / 59"		
			1840mm / 79"	2000mm / 79"		
			2440mm / 96"	2000mm / 79"		

* Standard

TYPE: LED chips come in Neutral White 4,500K , Warm White 3,000K and Amber in Symmetrical and Asymmetrical

The all new SBL2 SR Model overhead solar powered LED pole top bollard light is ideal for lighting locations where cyclones/hurricanes/typhoons, tsunamis, tidal surges and generalized flooding is prominent. The sealed self-contained design combined with high quality impact resistant construction, stainless steel external reflector with proven market performance makes the SBL2 SR Model the perfect asset in high risk areas where continuous lighting is required no matter what situation arises.



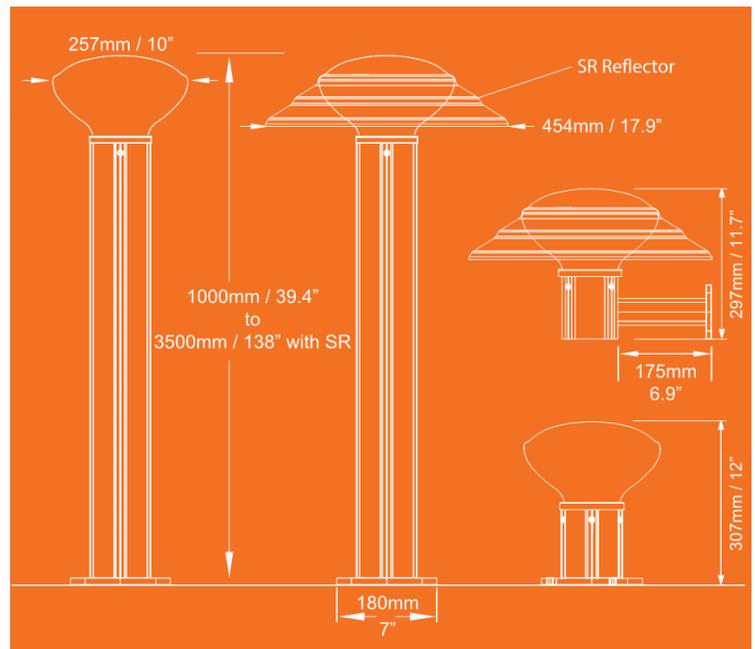
Power	Beam Spread	LED	Reflector	Pole Length	Installed	Mounting	Color
040	Asymmetric *	3000K	SR	130mm / 5.1"	290mm / 11.4"	W - Wall mount	BK - Satin Black (Default Powder Coat color)
080	Symmetric	4300K		142mm / 5.6"	302mm / 11.9"	I - In Ground (burial)	Anodized Aluminum — Silver
120				840mm / 33"	1000mm / 39.4"	G - Ground Surface Mount	CC - Custom Color
160				1140mm / 45"	1000mm / 39.4"		
200				1340mm / 53"	1500mm / 59"		
				1790mm / 70"	1500mm / 59"		
				1840mm / 79"	2000mm / 79"		
				2440mm / 96"	2000mm / 79"		
				2340mm / 92"	2500mm / 98"		
				3040mm / 119"	2500mm / 98"		
				2840mm / 112"	3000mm / 118"		
				1640mm / 143"	3000mm / 118"		
	* Standard			TYPE: LED chips come in Neutral White 4,500K , Warm White 3,000K and Amber in Symmetrical and Asymmetrical			



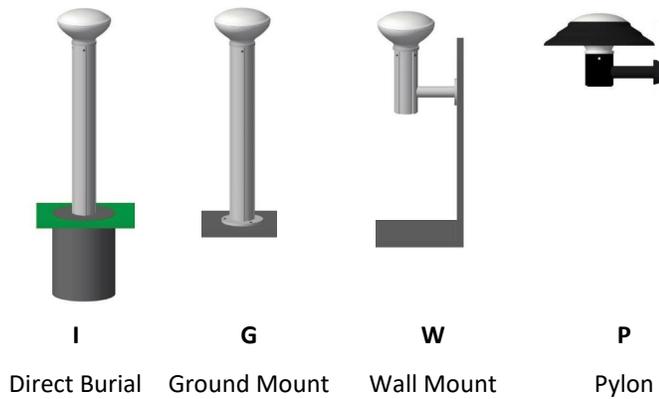
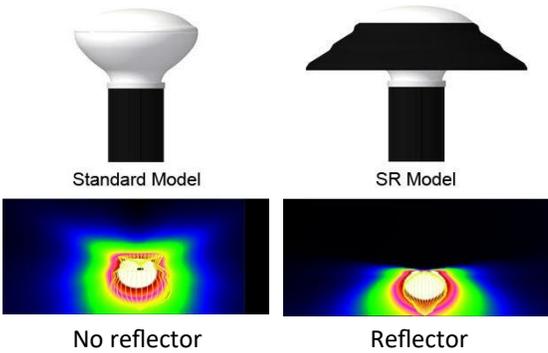
Solar Bollard Lighting

SBL2 M Series Solar Powered LED Bollards

The all new SBL2 Series M Model solar powered LED pole top bollard light was designed for lighting Pontoons, Jetties, Marina's, Floating Walkways, Ocean Front Properties. The sealed self contained design combined with high quality impact resistant construction makes the SBL2 Series M Model the perfect asset for lighting any fresh or sea water environment. It is ideal for lighting locations where cyclones/hurricanes/typhoons, tsunamis, and tidal surges occur.



Power	Beam Spread	LED	Reflector	Pole Length	Installed	Mounting	Color
040	Asymmetric *	3000K	SR	130mm / 5.1"	290mm / 11.4"	W - Wall mount	BK - Satin Black (Default Powder Coat color)
080	Symmetric	4300K		142mm / 5.6"	302mm / 11.9"	G - Ground Surface Mount	Anodized Aluminum — Silver
120				840mm / 33"	1000mm / 39.4"		CC - Custom Color
160				1340mm / 53"	1500mm / 59"		
200				1840mm / 79"	2000mm / 79"		
				2340mm / 92"	2500mm / 98"		
				2840mm / 112"	3000mm / 118"		
* Standard				TYPE: LED chips come in Neutral White 4,500K , Warm White 3,000K and Amber in Symmetrical and Asymmetrical			



Options (Specify)

	Power mA
(040)	40mA - 16 lm
(080)	80mA - 32 lm
(120)	120mA - 48 lm
(160)	160mA - 64 lm
(200)	200mA - 80 lm

Reflector

(S)	1 x Solar Light head No reflector
(SR)	1 x Solar Light head + reflector

Beam Spread

(A)	Asymmetric
(S)	Symmetric

LED Color

(K30)	3000K
(K43)	4300K

Options

	Installed Height
(xH)	_____ inches
(12H)	12 inches
(39H)	39 inches
(59H)	59 inches
(79H)	79 inches

Mounting

(I)	Inground
(G)	Ground (surface) mount
(w)	Wall
(P)	Pylon

Paint Color / Finish

(BK)	Black
(A)	Anodized Aluminum (matt silver)
(RAL #)	

Ordering Example : SLB2 - 120 - SR - A - 30K - 39H - G - BK

	Power	Reflector	Beam Spread	LED Color	Height	Mounting	Color
SBL2	_____	_____	_____	_____	_____	_____	_____



PROJECT: _____ DATE: _____ QUANTITY: _____

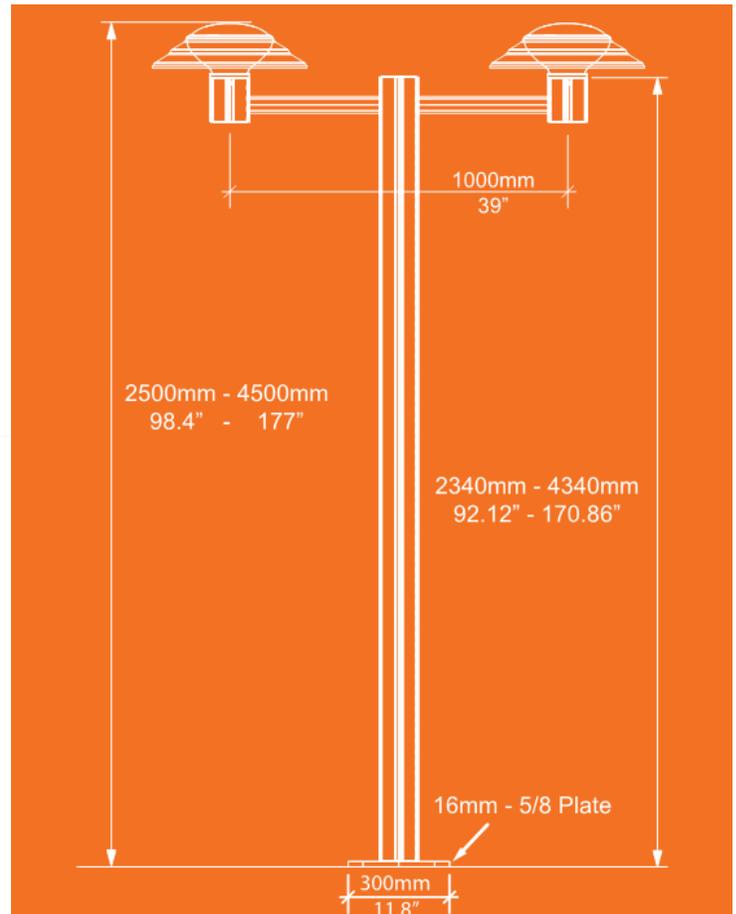
TYPE: _____ NOTE: _____



Solar Bollard Lighting

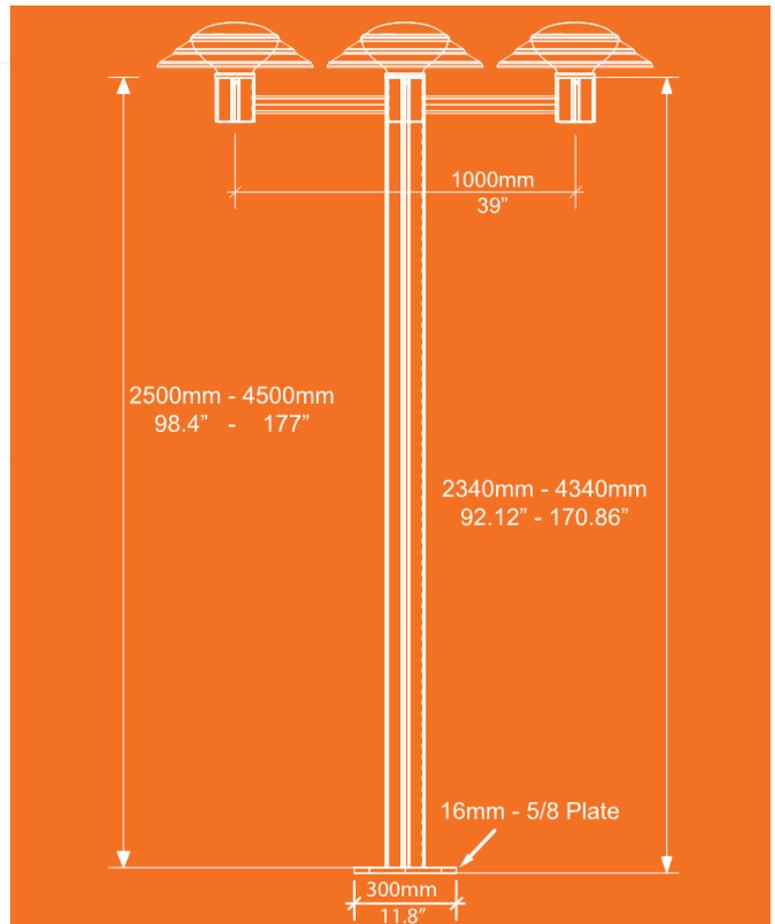
SBL2 SR20H Solar Powered LED Poles

The all new SBL2 Series SR20H Model overhead solar powered **dual** LED pole top bollard light is ideal for lighting locations where hurricanes, tsunamis, tidal surges and generalized flooding is prominent. The sealed self-contained design combined with high quality impact resistant construction, Powder-coated stainless steel external reflector with proven market performance makes the SBL2 Series SR20H Model the perfect asset in high risk areas.



Power	Beam Spread	LED	Reflector	Pole Length	Installed Height	Mounting	Color
040	Asymmetric *	3000K	SR2	2340mm / 92"	2500mm / 98"	G - Ground Surface Mount	BK - Satin Black (Default Powder Coat color)
080	Symmetric	4300K		2840mm / 112"	3000mm / 118"		Anodized Aluminum — Silver
120				3340mm / 131"	3500mm / 138"		CC - Custom Color
160				3840mm / 151"	4000mm / 158"		
200				4340mm / 170"	4500mm / 177"		
* Standard		TYPE: LED chips come in Neutral White 4,500K , Warm White 3,000K and Amber in Symmetrical and Asymmetrical					

The all new SBL2 Series SR4OH Model overhead solar powered **quad** LED pole top bollard light is ideal for lighting locations where hurricanes, tsunamis, tidal surges and generalized flooding is prominent. The sealed self-contained design combined with high quality impact resistant construction, Powder-coated stainless steel external reflector with proven market performance makes the SBL2 Series SR4OH Model the perfect asset in high risk areas.



Power	Beam Spread	LED	Reflector	Pole Length	Installed Height	Mounting	Color
040	Asymmetric *	3000K	SR4	2340mm / 92"	2500mm / 98"	G - Ground Surface Mount	BK - Satin Black (Default Powder Coat color)
080	Symmetric	4300K		2840mm / 112"	3000mm / 118"		Anodized Aluminum — Silver
120				3340mm / 131"	3500mm / 138"		CC - Custom Color
160				3840mm / 151"	4000mm / 158"		
200				4340mm / 170"	4500mm / 177"		
	* Standard			TYPE: LED chips come in Neutral White 4,500K , Warm White 3,000K and Amber in Symmetrical and Asymmetrical			



SBL2 Poles

Solar Powered LED Poles



SBL2 SR20H

Pole with 2 solar light heads



SBL2 SR40H

Pole with 4 solar light heads

Options (Specify) Power mA (each solar light)

- (040) 40mA
- (080) 80mA
- (120) 120mA
- (160) 160mA
- (200) 200mA

Reflector

- (SR2) (SR20H) 2 x Solar Heads + Reflector
- (SR4) (SR40H) 4 x Solar Heads + Reflector

Beam Spread

- (A) Asymmetric
- (S) Symmetric

LED Color

- (K30) 3000K
- (K43) 4300K

Options (Specify)

- (xH) _____ inches
- (98H) 98 inches
- (118H) 138 inches
- (158H) 158 inches
- (177H) 117 inches

Installed Height

Mounting

- (G) Ground mount

Paint Color / Finish

- (BK) Black
- (A) Anodized Aluminum (matt silver)
- (RAL #)

Ordering Example : SLB2 - 120 - SR2 - A - 30K - 158H - G - BK

	Power	Reflector	Beam Spread	LED Color	Height	Mounting	Color
SBL2	_____	_____	_____	_____	_____	_____	_____



PROJECT: _____ DATE: _____ QUANTITY: _____

TYPE: _____ NOTE: _____