

SolPol Retrofit System

Solar and light fixture retrofits for existing poles

Retrofit existing light poles with solar power and new LED fixtures, or retain electrically compatible fixtures. SolPol offers a 300W cylindrical PV module with two half-cylinder panels. We size solar generation, batteries, controls and lighting for local solar gain and required illumination.



Charging stations



Crossing signs



Solar wrapped pole with light

300W PV module specifications

Parameter	300W module
Rated peak power	300W at standard test conditions (STC)
Cell arrangement	148 cells; 74 per half-cylinder
Module dimensions	1900 ±2 mm high; panel thickness 6 mm
Panel weight	4 kg (8.8 lb), as listed; assembled weight to be confirmed
Output power tolerance	-5% / +5%
Operating temperature	-40°C to +85°C
Cell technology	Monocrystalline silicon
Connections	2 rear IP68 junction boxes; 4 mm ² cable; MC4 connectors

300W module electrical specifications at STC

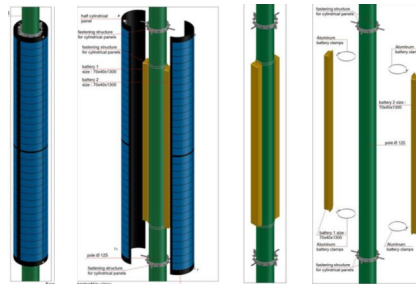
V _{mp}	I _{mp}	V _{oc}	I _{sc}
21.97V	13.62A	25.27V	14.14A

Maximum system voltage: 1000V; reverse current and series fuse: 20A. Temperature coefficients: V_{oc} -0.30%/°C; I_{sc} +0.06%/°C. Warranty: 5 years. Manufacturer data are preliminary and subject to change.

Light fixture retrofit options

Fixture	Output range	Selection
Contemporary	7–90W	CT; pole top or tenon
Cobra Head	7–120W	CH; tenon
Shoebox	7–90W	SB; square-pole spacer or tenon
Retain existing fixture	Project specific	EX; electrical compatibility verified

SolPol Retrofit Installation



Direct wrap

Panel assembly

Battery clamps

Mounting assembly

Direct-wrap pole fit and pole-side hardware are confirmed for the selected pole and 1900 mm module height. Earlier installation drawings are illustrative; verify clamp fit and installed diameter before specifying.

Retrofit model number builder

SR-300-[MT]-[PD]-[FX]-[W]-[BL]-[Wh]-[PWR]-[OPT]

Proposed ordering codes. Select one value per field; final compatibility and sizing are confirmed with the quotation.

Field	Code and selection
SR Product family	SR = SolPol Retrofit System
300 PV module	300 = 300W cylindrical PV module; sole module offered
MT Mounting	DW = Direct wrap; PS = Pole-side bracket
PD Existing pole diameter	Numeric millimeters, e.g. 125 or 150; verify pole material and clamp fit
FX Fixture	CT = Contemporary; CH = Cobra Head; SB = Shoebox; EX = Existing compatible fixture
W Fixture watts	Numeric operating watts, e.g. 10 or 40; selected by lighting and energy design
BL Battery location	IN = Inside PV cylinder; CB = Separate box if required battery is too large
Wh Battery energy	Numeric total nominal battery energy in Wh, as quoted
PWR Power arrangement	AS = Autonomous solar; AX = Solar with auxiliary line power, where specified
OPT Additional selections	N = None; MS = Motion sensor; HT = Heated/insulated box; CX = Custom. Combine with +; options confirmed by quotation.

Example model number

SR-300-DW-125-CT-10-CB-1200-AS-N

Battery options

Location	Capacity option
IN Integrated storage	Catalog concept: 25.6V, 60Ah total, 1536Wh; module fit and controls confirmed
CB Separate box	LiFePO4: 1200Wh per battery; 1–4 batteries. Use when required storage is too large for the cylinder.

We design solar generation, battery storage and fixture output to suit local solar gain, overcast conditions and required illumination. Batteries are housed inside the PV cylinder or in a separate box when the required battery size exceeds the available internal space.