# SolarOne® RFS Integra 300 -AGM/LFP

# Project Information -

Quick Facts				
Applications	Pathways and Residential Neighborhoods			
Distribution Types	IES Types R2M,R2S,R3M,R3S,4,5			
Color Temperature	4000K,3000K (2,700 Special Order)			
Lumen Range	4,194- 4711			
Mounting Height	28'			
Battery Type	AGM or Lithium Iron Phosphate			
Finish (Standard Colors)	Black			
System Warranty	10-Year			
Battery Warranty	10 Year LFP / 5 Year AGM (10 Year Option)			



#### Overview

If elegance is a priority, the RFS Integra 300 system delivers the ultimate value. A solar-skin on the surface of the pole creates best-in-class aesthetics and maximizes wind-load rating. All components are stored inside the base of the pole. There are no bulky panels and enclosures, so this solar lighting system is easier to install than a traditional street light. You will get years of reliable lighting backed by a 10-year system warranty. See details for battery warranty.

The Integra is about more than aesthetics. The CIGS solar module tecnology is as efficient as traditional mono-crystalline panels. Graffiti washes off the ETFE coating on the collector with soap and water and the tough material can take a beating. The panel's vertical orientation sheds dirt and debris, while resisting hail damage. A high security fastening system keeps vandals out.

#### Design

SolarOne will support your planning or specification process with energy balance calculations, lighting design, and a shading evaluation specific to your project location. This Virtual Site Analysis (VSA) is custom for every project so you can see the details behind the recommendation.

Our analysis is based on industry standards such as IES & CIE, credible climate data sources like NASA & NREL, and over ten years of LED Solar Powered Lighting field experience with municipalities, military bases, and industrial facilities.

#### SO-Bright® Controller

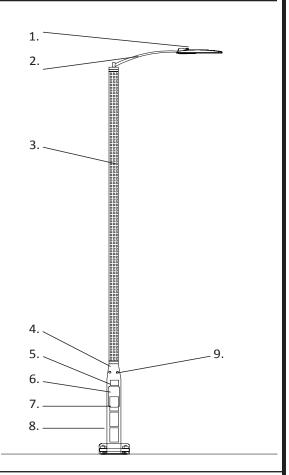
The SO-Bright® MPT-15 Controller provides wide flexibility, system protection and increased energy collection. The system provides best in class charging and extra benefits like snow/sand coverage protection and adjustable charging algorithms to allow you to use a range of battery types in the future. The controller comes pre-programmed for your environment and preferences but can be easily reprogrammed using the remote control included with every project. Local control does not require data plans, subscriptions or internet connection. For greater control and alert communications, SolarOne can provide SOFi Wireless Networking, using either cellular or network connections.





#### **Product Details**

- RFS Fixture 16LED 700mA-35W
- Choice of 1.5' straight arm or 4' sweep arm. 2.
- High efficiency (>16%) CIGs 300W solar collector is applied to the pole with a patented method to create a "solar skin"
  - Vandal resistant ETFE Coating
  - ByPass Diodes allow the panel to operated in partial shade
  - Certified to UL1703
  - Self-Cleaning Vertical Orientation
- All components are stored inside a secured compartment within the base of the pole eliminating, the need for an external battery box.
- SO-Bright® MPT-15 ETL recognized controller with maximum power tracking collects up to 30% more energy, particularly in the winter months. RTE Energy Management ensures reliable service. The SO-Bright® MPT-15 controller delivers maximum flexibility in lighting levels, lighting hours and energy management. Contact your SolarOne® Solar Lighting Specialist to see what this system can do in your location.
- Proprietary vandal-proof fastener keeps commercially available bits out.
- Choice of Deep Cycle AGM Batteries | excellent performance in below freezing temperatures or Long-life lithium iron phosphate battery.
- 27'8" T6 powder coated enclosure and aluminum pole 170 MPH wind-rating
- Motion Detector (Optional)



# Panel Specifications -

Solar Assembly	P300M-SW5
PV Technology	CIGS ( Copper Indium Gallium Diselenide)
Nameplate Power	300W
Panel Dimensions	19'4.7"Ft x 13.7in x 0.7In (2598 x 370 x 3.25 mm)
EPA & Weight	N/A No added wind loading
Certifications	UL 1703, IEC 61646, IEC 61730, cUL 1703, IEC 62716, IEC 61701 (Salt Spray)





## Power Center \_

Power Center	[PI-2B50RL-PSMPT25M-MPT15- 24V]	PI-6B26PA-MPT15-24V		
Battery Type	Lithium Iron Phosphate	AGM Deep Cycle Lead Acid		
Rated Capacity	1.2	1.2		
Controller	MPT15	MPT15		
System Voltage	24VDC	24VDC		
EPA	Power Center in Pole	Power Center in Pole		
Certifications	CE (battery) UN38.3 (battery) UL1642 & IEC62133 (cells)	UL94:HB and UL94:V0 UL MH63446		







## Luminaire - RFS-35W16LED



The RFS G2 Fixture has outstanding efficiency and output in either 3000K or 4000K. Color temperature as per ANSI/NEMA bin. Easily set the fixture with the standard integrated bubble level and built-in step adjustments. (2700K available on request. Expect longer lead time.)

A quick-release, tool-less entry, single latch, hinged, removable door opens downward for access.

A bird guard protects against birds and similar intruders.

The surface treatment achieves a minimum of 3000 hours for salt spray resistance in testing performed as per ASTM B117 standard.

LED Module	Typical Delivered Lumens	Typical Wattage	Approx. HID Equivalent	BUG Rating
4,000K, Type 2 Short	4674	38	90 - 120W	B1-U0-G1
4,000K, Type 2 Medium	4566	38	90 - 120W	B1-U0-G1
4,000K ,Type 3 Short	4643	38	90 - 120W	B1-U0-G1
4,000K, Type 3 Medium	4499	38	90 - 120W	B1-U0-G1
4,000K, Type 4	4444	38	90 - 120W	B1-U0-G1
4,000K, Type 5	4711	38	90 - 120W	B1-U0-G1
3,000K, Type 2 Short	4410	38	90 - 120W	B1-U0-G1
3,000K, Type 2 Medium	4310	38	90 - 120W	B1-U0-G1
3,000K ,Type 3 Short	4381	38	90 - 120W	B1-U0-G1
3,000K, Type 3 Medium	4247	38	90 - 120W	B1-U0-G1
3,000K, Type 4	4194	38	90 - 120W	B1-U0-G1
3,000K, Type 5	4445	38	90 - 120W	B1-U0-G1

## Product Matrix - Base System

RFS-35W16LED-			<u>M324</u> -		-P300M-SW5-		<u>-BK</u>		-
<u>Luminaire</u> Road Focus Small	Color Temp 2.7K- 2700K <sup>1</sup> 3K- 3000K 4K- 4000K	Type R2M- Type 2 Medium  R2S- Type 2 Short  R3M- Type 3 Medium  R3S- Type 3 Short	Driver M724- 700mA 24VDC Dim- ming	Shielding HS-House Side Shield NA-No House Side Shield	Solar P300M-SW5- Solar Assembly with 300W CIGS Panel	Pole Integrated Power Center  [PI-2B50RL-PSMPT25M- MPT15-24V]-  1.2 Kwh LFP Battery Capacity  [PI-6B26PA-MPT15-24V]- 1.2 Kwh AGM Battery Capacity	Finish BK- Black	Motion MD5- Motion Detector NA-No Motion Detector	Arm 1.5T-1.5' Straight Tenon Arm  4T- 4' Mast Arm- 1.5'Rise Tenon Mount
		4-Type 4 5-Type 5						*	SUE IN THE US

