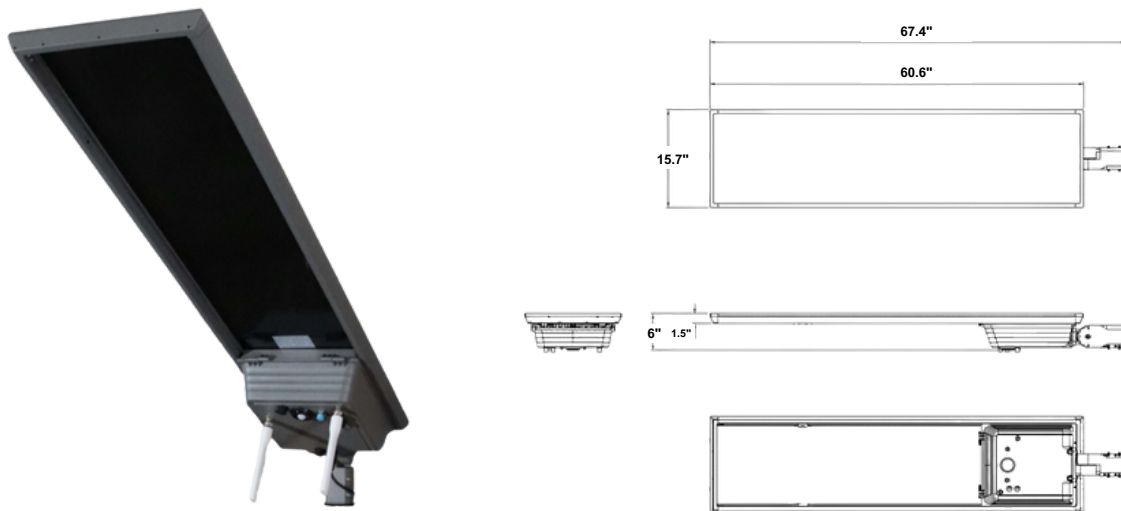


EP-SOL-POE-0136

Data Specification

Designed to provide power to POE devices with limited access to electrical utilities. The EP-SOL-POE-0136 has built in Power Over Ethernet (POE) and available integrated Wireless LTE Connectivity. Powered by an industry leading 36 AH battery and suited for rapid deployment, expand the possibilities of your POE device solutions.

Part 1: General



**System shown with optional cradlepoint cellular router*

The EP-SOL-POE-0136 Solar POE System is a dependable, solar-based, modular, off-grid power solution to POE devices in a variety of settings, from remote roads, parking lots, and greenways to campuses and construction sites. Encased in a robust, die-cast powder-coated aluminum housing with a heavy-duty mount, this system is built to withstand harsh environments, boasting weatherproof ratings of IP66 and IK08 (with the solar panel rated IK07), ensuring resilience against dust, water, and impacts.

The EP-SOL-POE-0136 Solar POE system is powered by a 36Ah lithium iron phosphate (LiFePO₄) battery, renowned for its safety and reliability with 2000 lifecycles, and harnesses solar energy through a high-quality monocrystalline solar panel. It supports two POE devices with the following possible configurations, two 48V POE+, or one 48V POE+ and one 24V POE, with an optional CradlePoint LTE Remote Router for seamless connectivity. Its smooth surface design not only minimizes debris accumulation but also self-cleans during rain, ensuring maximum efficiency and longevity. The system is designed to mount onto a 2 3/8in pole top or with our pole kit. The Solar POE Station is designed using a standard spigot size allowing the system to be mounted on existing commercially available brackets for optimal flexibility. Backed by a 2-year warranty, the Solar POE Station is an ideal solution for enhancing connectivity and safety across a wide range of applications.

1.1. Certifications and Standards

1.1.1. Mechanical Standards

- IP 66 Water and Dust Ingress Protection Rating IK 08 Impact Rating (Solar Panel IK 07)
- Report No: DER0969220659180

1.1.2. Networking

- Standard IEEE 802.3 for Ethernet
- IEEE 802.3u for Fast Ethernet
- IEEE 802.3x for flow control and back pressure IEEE802.3az for Energy Efficient Ethernet (EEE)

Part 2: Products

2.1. Manufacturer

EPOWER ON, INC
329 Habersham Road, Suite 101
High Point, NC 27260
(336) 833-0493
www.epowerontechnologies.com

2.2. Hardware

Monocrystalline Solar Panel	120W/36V	
Battery	(1) LiFePO ₄ Battery 25.6V/36AH	
POE Switch	2 Ports IEEE802.3af/at @PoE+	1 Port IEEE802.3af/at @PoE+ , and 1 Port 24v/0.5A@PoE
Housing Materials	Powder Coated Die-cast Aluminum Housing and Extruded Aluminum Frame	
Warranty	2 years	
Finishing	Dark Grey Pantone 8403C	
IP/IK	IP 66/IK 08 (Except Solar Panel IK07)	
Spigot Diameter (in.)	2 3/8 in Pole-top Tennon	

2.3. Electrical

System Voltage	24V
System Power Capabilities	18W*
Charge Time (H)	8-9 during peak sunshine

**Typical weather conditions are calculated from average daily charge values, the system is designed to support a 18 watt constant load and can sustain for up to four days in poor weather conditions with less than 50% of typical solar irradiance values. Device performance may fluctuate if weather conditions continue to persist but will return to normal once conditions improve.*

2.4. Environmental

Charge Temperature	32° F ~ 131° F 0° C ~ 55° C
Discharge Temperature	-7° F ~ 140° F -20° C ~ 60
Storage Temperature	32° F ~ 113° F 0°C~ 45°C
EPA Rating (ft2)	6.67

2.5. Packaging

Solar POE Station Dimension (in.)	60.6x15.7x5.4
Package Dimension (in.)	64.8x19x10
Net Weight (±0.5lbs)	53
Gross Weight (±0.5lbs)	62.2

2.6. Compatible Accessories

- EP-SOL-MOUNT-RP 5 in Round Pole Bracket for Single Solar Station
- EP-SOL-MOUNT- 90 90 Degree Bracket for 6x6 Wood Post

2.7. Related Documents

EP-SOL-POE-0136DBL Solar Station Spec
 FR-7N1005P(24VPOE)_SPEC
 EP-SOL-POLE-DB_SPEC

2.8. General

- The Solar POE Station is suited for outdoor environments with unobstructed south facing exposure.
- The Solar POE Station is designed to be mounted with the solar panel at approximately 35 degrees above the horizon with the Solar panel facing south to receive optimal solar irradiance.

Part 3: Sample Application



Application Requirements: Provides 24x7 Power for 2 high resolution cameras

Equipment: 1) 1 X EP-SOL-POE-0136CP
2) 2 X High Resolution Camera