

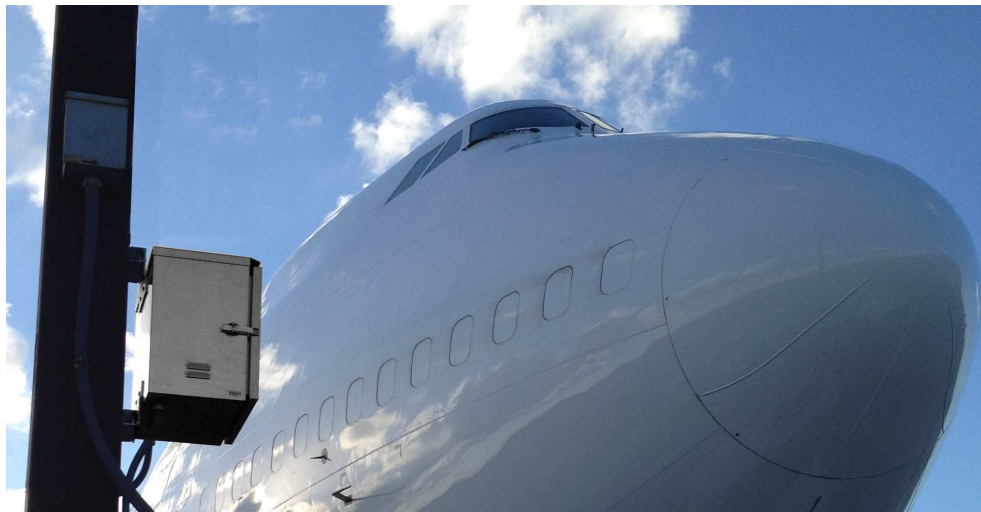
# Perpetual Power Unit

The Perpetual Power Unit (PPU) provides a clean uninterrupted flow of power to outdoor devices that require 24/7 operation such as those used for video monitoring, communications, and remote sensing, even if the power source is undependable or intermittent. A common application is for use with timed street/parking lights. When power is available, the PPU will supply power to the loads (application devices) as well as charge and maintain its own deep cycle battery bank. When the power input is cut, no down time results since the application devices continue to receive power from the battery bank.

The PPU provides functions that a UPS provides, but on a much larger scale. Depending on the load and configuration, the PPU can power application devices for days without any power input, then very rapidly recharge its own battery bank when power is provided. All this thanks to a sophisticated, monitored, and temperature compensated charging system.

In addition, the PPU makes available real time information about its power input, load, and charging system via its Ethernet interface. Warnings can be automatically sent by email or text if input power is unexpectedly absent. This allows power problems to be detected and responded to with no system down time. Also, in IP communications networks, the PPU can monitor the application devices and automatically reset them if a problem is detected (e.g., no response to ping).

For typical installations, the PPU-1 contains a single 104AH deep cycle AGM battery. For sites with high power requirements or cold weather locations, the PPU-2 provides a second 104AH battery.



## Specifications

### INPUT

Voltage Range	100-277VAC 50/60Hz – MUST BE FUSED
Max Power Consumption	225 Watts

### OUTPUT

Voltage Range	11-16VDC
Max Load	100 Watts

### BATTERY

Type	VRLA Sealed AGM Deep Cycle 12V
Capacity	104Ah (PPU-1) 208Ah (PPU-2)
Terminal Torque	70 lb-in

### CHARGE CONTROLLER

Max Charging Power	180 Watts (15 Amps)
Charging Algorithm	3 Stage (Bulk, Absorption, Float)
Temperature Compensated	Yes
Low Voltage Load Disconnect	11.5V (Current Compensated)
Electronic Protections	Overload, Short Circuit, High Voltage

### SYSTEM CONTROLLER (PPC)

Web Based	Yes
Remote Control	Yes
Remote Alerts	Yes
Connector	RJ45

### BREAKERS

Protections	Battery, DC In, PPC, Load
Torque	20 lb-in

### LOAD WIRING

Size	22-8 AWG
Stripping Length	12 mm
Torque	14 lb-in

### ENCLOSURE

Type	Vented Aluminum NEMA 3R
Dimensions	PPU1 - 16"x16"x10" PPU2 - 18"x18"x18"
Weight With Batteries	PPU1 - 90 Pounds PPU2 - 170 Pounds
Conduit Knockouts	1/2 Inch NPT

### ENVIRONMENTAL

Operating Temperature	-20C to +45C
Operating Humidity	10% - 95% Non-Condensing

