

00626-01 Energy Harvesting Bundle

Power Puck® and Power Management Solution



Power Puck® energy harvester solutions can reduce or eliminate the need for battery replacements with a variety of devices by converting heat differences from common industrial sources into usable electricity. The solution has a wide input voltage range, 2.4 – 25 VDC, and factory configurable output voltage of 3.6, 7.2, or 12 V DC.

The solution includes several components:

- Power Puck® Energy Harvester: Transforms small temperature differences between its base and the ambient air into usable electricity.
- Power Management Unit (PMU): Converts the Power Puck output into regulated power and manages switching from energy harvesting to internal backup battery capacity if ever needed.
- Two M12 Eurofast 6-meter cables: Connects the Power Puck to the PMU and the PMU to the device.

Perpetua offers this energy harvesting solution for use in Non-Hazardous locations (also referred to as "Safe Area" or "Ordinary Location").

Benefits

- Reduces or eliminates battery replacements
- Provides reliable operation where dust, moisture, debris, and extreme temperatures are common
- Switches automatically to backup battery power should the temperature delta become too small for energy harvesting

Specifications

Power Puck Energy Harvester	
Diameter, contact	60mm (2.4 in.)
Diameter, fins projected	99mm (3.9 in.)
Height	101mm (4 in.)
Weight	374g (0.8 lb.)
Electrical connector	M12 - Eurofast
Ingress Protection	IP67
Maximum Service Temperature	105°C
Minimum Service Temperature	-45°C

Power Management Unit (PMU)	
Input Voltage	2.4 to 25 VDC
Output Voltage (choose one, configured at factory)	3.6, 7.2, & 12 VDC
Dimensions	125 x 80 x 57 mm 4.9 x 3.2 x 2.3 inches
Weight	1.06 kg (2.4 lb.)
Battery Backup Capacity	38 Ah
Ingress Protection	IP68
Maximum Service Temperature	80°C
Minimum Service Temperature	-45°C

Mounting Accessories

The standard Power Puck mount is magnetic and intended for flat, metal surfaces <105°C. Other optional mounting adapters (factory-configured) are available for 1-, 2-, 3-, 4-, 6-, 8-, 10-, 12-inch NPS pipe sizes and cylindrical surfaces up to 450°C. Surfaces >105°C require extenders to reduce the temperature at the base of the Power Puck to ≤ 105°C.

The PMU comes standard with an integrated magnetic mount for attachment to ferromagnetic surfaces and can also be mounted using screws or other methods to surfaces < 80°C.

Part Number: 00626-01

When ordering, please specify the temperature range of the heat source, type of mount, and voltage range for the device to be powered.