



SOLAR STIK®

Category: Power Management

24VDC Hybrid Power Router (HyPR) 1000-120

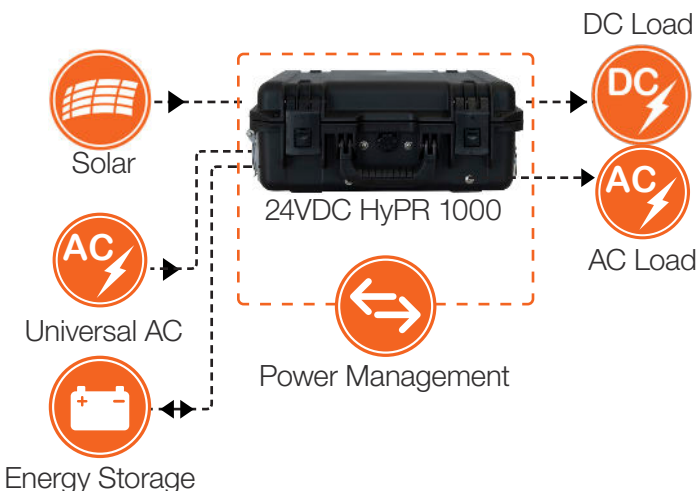
Item # 20-0302216

Streamlined Power

The 24VDC Hybrid Power Router (HyPR) 1000 provides a single point of power management, control, and distribution to a battery-based electrical circuit. The HyPR 1000 has an internal solar charge controller capable of accepting up to 400 watts of DC input power from photovoltaic panels. The universal AC charger in the HyPR 1000 accepts a wide range of AC power to charge connected batteries. The HyPR 1000 provides nominal 24 VDC and 120 VAC outputs and can support DC and AC loads simultaneously. The HyPR 1000 is designed to provide power in extreme conditions where traditional power is inconsistent or non-existent. The HyPR includes a TCP/IP interface to monitor system activity in real time.

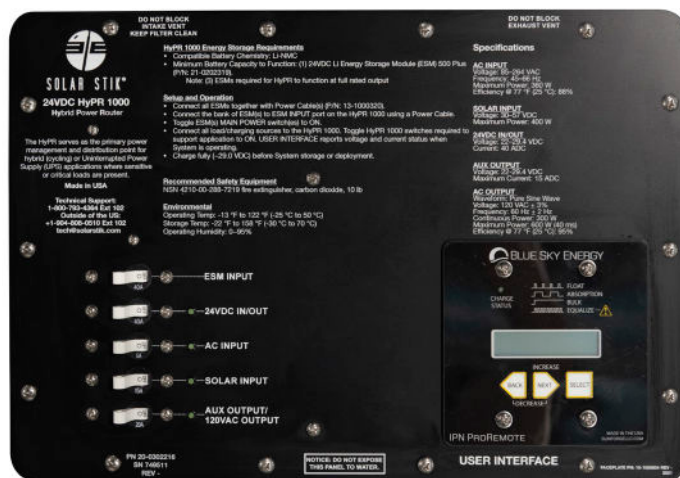
How the HyPR Works

The HyPR is the primary power management module in a small hybrid power system. The HyPR scavenges power from available AC, DC, or renewable sources to charge a connected battery or battery bank. The HyPR then pulls power from the battery or batteries to support various loads. The HyPR can be tailored to power different types of loads and provides users a streamlined control box for small power requirements.



Features

- 1000 W max input power processing with 24 VDC nominal source
- 365 W max input power processing with universal AC input source
- 1000 W max output power
- Accepts universal AC power to enable worldwide AC charging
- 300 W continuous pure sine wave 120 VAC output
- Solar Input up to 400 W to enable autonomous operation
- Intuitive LCD DC User Interface
- Open Architecture and Scalable
- Programmable to charge multiple battery types/chemistries
- Designed to MIL-STD-810H for operation in extreme environments
- Remote monitoring capability with 120 days of data logging



24VDC HyPR 1000 Faceplate





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General

Nominal Operating Voltage	24 VDC
DC Output Voltage	20.1 - 29.4 VDC
DC Output Power Rating (cumulatively between two ports)	<ul style="list-style-type: none"> 24VDC IN/OUT port: 1000 W max AUX port: 360 W max
AC Output Voltage	114 - 126 VAC
AC Output Power Rating	300 W
DC Input Power Rating	1000 W
AC Input Power Rating	365 W
Internal Cooling	(2) internal fans
User Interface	IPN ProRemote
Case	Pelican Storm Im2200
Warranty	1-year materials and workmanship

Charge Controller Specifications @77 °F (25 °C)

Maximum PV Input Voltage	57 VDC
Maximum PV Power	400 W
Efficiency	97% (typical)
Charge Control Method	Maximum Power Point Tracking (MPPT)

AC Charger Specifications @77 °F (25 °C)

AC Input Frequency	47 - 63 Hz
AC Input Voltage	85 - 264
DC Output Voltage	29.2
Continuous Output Current	~12.5 A
Charging Efficiency	93%
Compatible Battery Chemistries	Lithium ion / Lead acid

Inverter Specifications @77 °F (25 °C)

Nominal AC Output Voltage	120 VAC ± 5%
Rated Current	2.5 AAC
Output Frequency and Accuracy	60 Hz ± 0.1 Hz
Continuous Output Power	300 W
Surge Power	600 W for 40 milsec
Input Voltage	20 - 30 VDC
Efficiency	95% typ.
Waveform	Pure Sine Wave

Connections

Inputs	(1) Universal AC Input port (HBL 61CM64) (1) Solar Input (SAE 1106), (1) ESM port (ITT Cannon CB2-20-19SC)
Outputs	(1) AC Output (HBL61CM65), (1) AUX port (Amphenol MS3470W14-4P)
Inputs/Outputs	(1) 24 VDC In/Out port (Amphenol MS3470W14-4P) (1) Tech port (Amphenol 03H9929)

Safety

Breaker(s)	Main 40 A, 24VDC In/Out 40 A, AC Input 5 A, Solar Input 15A, AUX/120 VAC Output 20 A
Overtemperature Protection	Thermostatically controlled fans
Reverse Polarity	Polarized connectors

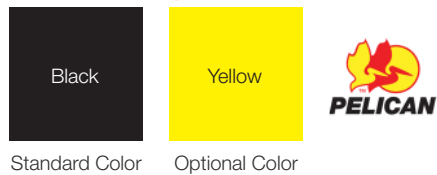
Environmental

Operating Temperature	-13 °F to 122 °F (-25 °C to 50 °C)
Storage Temperature	-22 °F to 158 °F (-30 °C to 70 °C)

Weights and Dimensions (L x W x H)

Weight	17.4 lb (7.89 kg)
Dimensions	18.2 x 12.65 x 6.55 in (41.1 x 32.2 x 16.6 cm)

Case Color Options



Recommended Components and Accessories



24VDC 2.5 Foot 3-pin Inter-Connect Cable
Item # 13-1000320



Foldable Solar Panel
Item # 11-1000076



24VDC Li ESM 500
Item # 21-0202320

