



SOLAR STIK®

Category: Power Management

# 24VDC Hybrid Power Router (HyPR) 1000

Item # 20-0302215

## 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 can accept all universal grid or generator power and provides nominal 28 VDC output to various load(s). The HyPR 1000 is designed to provide power in extreme conditions where traditional power is inconsistent or non-existent. The HyPR includes a DC power interface to monitor system activity in real time.

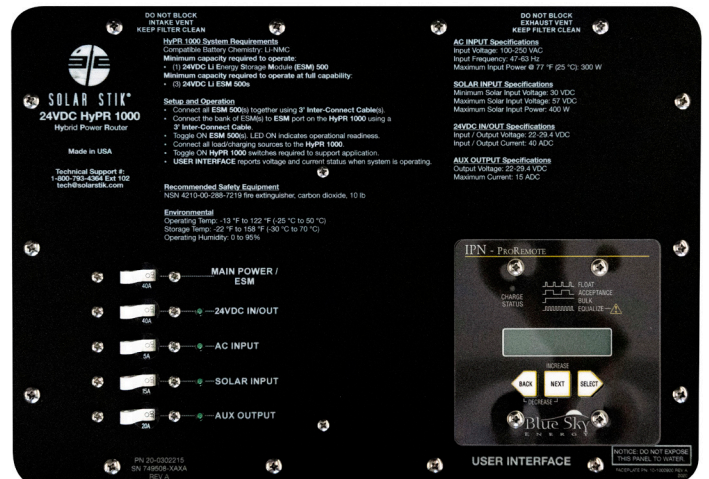
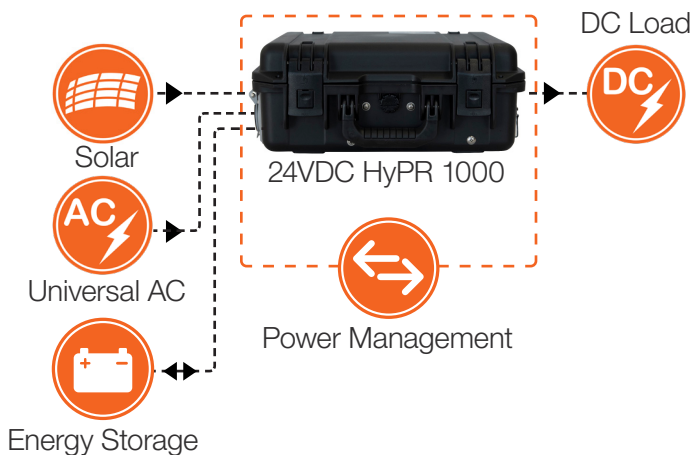
## How the HyPR Works

The HyPR is the primary power management component in a small hybrid power system. It processes all input and output power from it's attachment to a battery bank. The HyPR scavenges power from available AC, DC, or renewable sources to charge a battery bank. It then pulls and processes power from this bank to provide DC power per MIL-STD-1275E. The HyPR can be tailored to work with additional loads and provides users a streamlined control box for small power requirements.



## Features

- 1000 W max 28 VDC nominal output
- 1000 W max power processing
- Solar input up to 400 W
- Accepts universal AC power
- LCD DC User Interface
- Open Architecture and Scalable
- Programmable to charge multiple battery types/chemistries
- Designed to MIL-STD-810H and MIL-STD-1275E
- Remote monitoring capability with 120 days of data logging



24VDC HyPR 1000 Faceplate





SOLAR STIK®

Category: Power Management

# 24VDC Hybrid Power Router (HyPR) 1000

Item # 20-0302215

## General

Nominal Operating Voltage	24 VDC
Battery Voltage Range	19-29.4 VDC
Internal cooling	Forced convection with (2) fans
User Interface	IPN ProRemote
Case	Pelican Storm Im2200
Warranty	1-year materials and workmanship

## DC Output

Output Voltage	28 VDC nominal
Output Power Rating	1000 W

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

Maximum PV Input Voltage	57 VDC
Maximum PV Power	400 W
Efficiency	97%
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

## Connections

Inputs	(1) Universal AC Input port, (1) Solar Input
Outputs	(1) AUX port
Inputs/Outputs	(1) 24 VDC In/Out port, (1) ESM port, (1) Tech port

## Safety

Breaker(s)	Main 40 A, 24VDC In/Out 40 A, AC Input 5 A, Solar Input 15A, AUX 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)
Ingress Protection	Designed to IP56

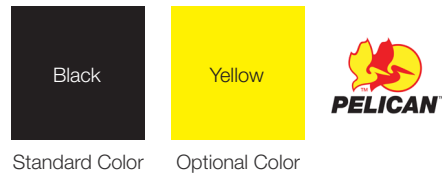
\* Operating outside of STP and this range < > will accelerate the battery aging process and increase likelihood of premature failure

\*\*Prolonged exposure to high temperatures in storage will reduce battery life

## Weights and Dimensions (L x W x H)

Weight	15 lb (6.80 kg)
Dimensions	16.2 x 12.7 x 6.6 in (41.1 x 32.2 x 2.5 cm)

## Case Color Options



## Recommended Components and Accessories



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



**24VDC Li ESM 500**  
Item # 21-0202320

