



24VDC Hybrid Power Router (HyPR) 2000

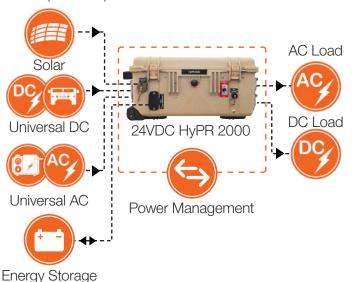
Item # 20-0102009

Versatile Power Manager

The 24VDC Hybrid Power Router (HyPR) 2000 provides a single point of power management, control and distribution to a battery-based electrical circuit. It's universal AC charger can accept any grid or generator power to charge batteries and then converts stored energy to provide 1200 W continuous of pure sine wave 120 VAC output. The HyPR 2000 also has the capability to provide nominal 28 VDC compliant with MIL-STD-1275E and includes a dual USB charging port. Connected batteries can also be charged by input power from photovoltaic panels and other DC sources in the 9 to 36 VDC range. The HyPR 2000 is designed to provide power in extreme environmental conditions where power is inconsistent or non-existent. The HyPR 2000 can also be used in conjunction with connected batteries as an uninterruptible power supply (UPS).

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 with 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 clean AC and DC power simultaneously. The HyPR can be tailored to work with additional loads and provides users a streamlined control box for small power requirements.









Features

- Selected by multiple tactical units as their primary expeditionary power management module
- Multiple power scavenging capabilities
- Up to 2000 W of universal AC power processing to charge connected batteries
- Up to 400 W of solar input and up to 2400 W from other
 DC power sources to charge connected batteries
- Up to 1200 W continuous of 120 VAC output power via four convenience receptacles
- Plug and play operation with user friendly interface
- Open architecture and scalable
- Auto start/stop operation with 3kW TQG and Novatio man-portable generators in single or parallel operation
- Designed to MIL-STD-810H and MIL-STD-1275E

Compatible auto-start generators

- Novatio 1kW
- Novatio 2kW
- Honda 1kW
- Honda 2kW
- MEP-831A TQG 3kW
- MEP-802A TQG 5kW





Category: Power Management

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| General | |
|---------------------------|----------------------------------|
| Nominal Operating Voltage | 24 VDC |
| User Interface | IPN Pro-Remote |
| Case | Pelican 1610 |
| Warranty | 1-year materials and workmanship |

| DC Charger Specifications @77 °F (25 °C) | DC Charger S | Specifications | @77 °F | (25 °C) |
|------------------------------------------|--------------|-----------------------|--------|---------|
|------------------------------------------|--------------|-----------------------|--------|---------|

Universal AC Input (80-240 VAC, 47-65 Hz) 15 A Max 28 VDC Input 50 A Max

| Inverter Specifications (@77 °F/25 °C) | | |
|----------------------------------------|-----------------------|--|
| Nominal AC Output Voltage | 120 VAC ± 3.0% | |
| Rated Current | 15 A | |
| Output Frequency and Accuracy | 50 or 60 Hz ± 0.1% | |
| Continuous Output Power | 1200 W (2000 W Surge) | |
| Efficiency | 90% | |
| Transfer Time | Zero | |
| Waveform | Pure sine wave | |

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

| Maximum PV Input Voltage | 57 VDC |
|--------------------------|-------------------------------------|
| Maximum PV Input Current | 30 A (@ 24 VDC nominal) |
| Maximum PV Power | 400 W |
| Efficiency | 95.5% (typical) |
| Charge Control Method | Maximum Power Point Tracking (MPPT) |

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|-------|----|----|-----|-----|----|

| Input(s) | (1) AC input, 80-240 VAC, 47-65 Hz, 30 A (NEMA L5-30) (1) PV input, 30 - 57 VDC, 15 A (SAE) (1) Inter-Connect port, 24 VDC, 100 A (Deltran 224-0061-BK) (1) 12 VDC input |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output(s) | (2) AC output 120 VAC, 20.0 A (NEMA L5-15) (1) Inter-Connect port, 24 VDC, 100 A (Deltran 224-0061-BK) (1) CLA, 12VDC, 10 A (Cigarette Lighter Adapter) (2) USB, 5 VDC, 1 A (USB) |

| 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) |
| Operating Humidity | 0 to 95% RH noncondensing |
| Cooling | Forced convection with (2) internal fans |

Weights and Dimensions (L x W x H)

| weignt | 65 ID (29.48 Kg) |
|------------|--------------------------------------------------|
| Dimensions | 24.76 x 19.57 x 13.90 in (62.9 x 49.7 x 35.3 cm) |



HyPR 2000 Faceplate

Case Color Options







Standard Color Optional Color

Recommended Components and Accessories







24VDC Li ESM 1300 Item # 21-0202316

