

Product Specification

Ground Renewable Expeditionary Energy Network System (GREENS) 1000W

SOLAR POWER COLLECTION

HYBRID POWER GENERATION

HIGH DENSITY ENERGY STORAGE

RAPID ROI >> FUEL, MAINTENANCE AND LOGISTICS

RELIABLE AND COMBAT PROVEN



- ▶ Man Transportable
- ▶ Requires No Fuel
- ▶ Operates Silently
- ▶ Rugged & Reliable
- ▶ No Maintenance
- ▶ Setup in < 20 minutes
- ▶ Return on Investment = Months
- ▶ No Special Handling for Shipping (UN/DOT Class 9 Tested)
- ▶ Modular and Scalable (1 to 5 KW)
- ▶ Customized as Needed



Ground Renewable Expeditionary Energy Network System 1000W Solution saves fuel, money, and reduces the need for generators. This is the first viable solution to replace traditional fuel-fired generators. The system collects solar energy and converts it into usable power. Excess solar energy is stored in the array of high energy density battery systems (HEDBS) for use when solar energy is insufficient. The system is light-weight and easily transportable. The HEDBS is safe, and has been approved as UN/DOT Class 9 for commercial air shipment.



GREENS - 1000W

One system will provide up to 1kW of power, and up to five systems can be paralleled together to provide 5kW of power. No formal operator training is required. System deployment time is quick – 20 Minutes by an untrained user. The system can be used as a completely renewable solution, or can be used in a hybrid configuration with a generator. If used as a hybrid solution, the controller will auto-start the generator if necessary to recharge the batteries, and will run the generator at peak efficiency.



Power Applications for Generated Power

Standard Configuration

| Quantity | Description | Part Number | Dimensions | Weight |
|----------------|-----------------------------|-------------|-----------------------|---------|
| 1 | Controller | 0754A08 | 21.2" x 16.0" x 8.3" | 51 lbs |
| 4 | Battery (HEDBS) | 0754A12 | 16.5" x 14.0" x 7.0" | 40 lbs |
| 1 | External Cable Kit (1 of 2) | 0754A09 | 24.8" x 19.4" x 13.9" | 77 lbs |
| | External Cable Kit (2 of 2) | 0754A09 | 24.8" x 19.4" x 13.9" | 50 lbs |
| 1 | Power Distribution Kit | 0754A11 | 24.8" x 19.4" x 13.9" | 52 lbs |
| Options | | | | |
| | Autostart | 0920A01 | 19.8" x 15.8" x 7.4" | 38 lbs |
| | Output Parallel Adapter | 0754A07 | 16.0" x 13.0" x 6.9" | 17 lbs |
| | Lead Acid Battery (LATBS) | 0754A06 | 20.9" x 12.7" x 12.8" | 110 lbs |



General Specifications

Power – 1000W Continuous
 Inputs – 4x 36-72VDC, 500W Renewable Energy
 1x 85-265 VAC, 47-63 Hz, 1200W AC
 1x 18-32 VDC, 1000W DC
 Outputs – 2x 22-30 VDC, 1000W, MIL-STD-1275
 Storage – 4x 28 VDC Nominal, 50A Input, 500W Output (Charge)
 Battery Options –
 High Energy Lithium (HEDBS) 51A-h (1300W-hr)
 Sealed Lead Acid (LATBS) 55A-hr

Efficiency – Renewable Energy (MPPT) 92-97%
 – AC Input 85-90%
 – DC Input 96-98%
 Environmental: Temp Range -4°F to 131°F (-20°C to 55°C)
 CEI/IEC 600068-2-56, Damp heat, steady state
 SAE J1211, Environmental Practices for Electronic Equipment Design
 CEI/IEC 600068-2-34/36 Random Vibration
 JIS D 1601 Vibration, Impact and Water Resistance