UEC ELECTRONICS

Ground Renewable Expeditionary Energy Network System (GREENS)

SOLAR POWER COLLECTION

HYBRID POWER GENERATION

HIGH DENSITY ENERGY STORAGE

RAPID ROI >> FUEL, MAINTENANCE AND LOGISTICS

RELIABLE AND COMBAT PROVEN

- **Combat Proven**
- **Man Transportable**
- **Requires No Fuel**
- **Operates Silently**
- **Rugged**
- **Reliable**
- **No Maintenance**
- **Deploys 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**

GREENS saves fuel, money, and reduces the frequency of resupply missions. GREENS is the first viable solution to replace traditional fuel-fired generators. GREENS was developed as a USMC Program of Record, but has applicability to both civilian and military customers. The system collects solar energy and converts it into useable 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 man portable. The GREENS HEDBS is safe, and has been approved as UN/DOT Class 9 tested for commercial shipment.

UEC Electronics, LLC | 5914 Howard Street | Hanahan, SC 29410 | 843.552.8682 | www.uec-electronics.com | Cage Code 1MCJ4

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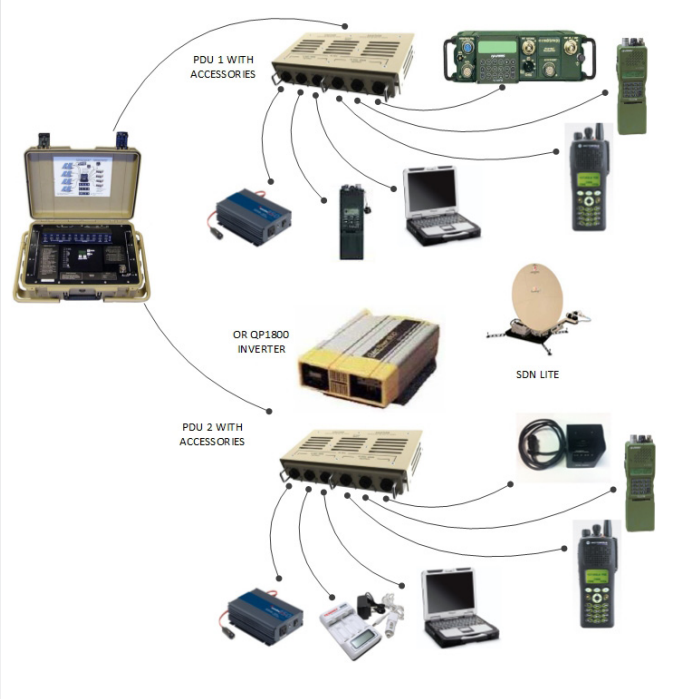
One GREENS will provide up to 1kW of power, and up to five systems can be paralleled together to provide 5 kW of power. No formal operator training is required. System deployment time is quick – 20 Minutes by an untrained user. The system can be used as a completely renewable solution, or can be used in a hybrid configuration with a generator. If used as a hybrid solution, the GREENS 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)
Corrosion Resistance, MIL-STD-810F, Method 509.4
Sand and Dust, MIL-STD-810F, Method 510.4
Shock Resistance, MIL-STD-810F, Method 516.5, Proc IV
Immersion, MIL-STD-810F, Method 512.4
Rain Resistance, MIL-STD-810F, Method 506.4

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