

# Outpost<sup>™</sup> 300 Plus **Solar Power System**

#### 1800 Watts of solar energy capacity • 300 Watts of continuous 24/7 power



#### **Solar Component**



#### Nishati Expedition<sup>™</sup> 450



## **System Power Capabilities**

| 300 Watts  | Power Available 24/7         |
|------------|------------------------------|
| 1000 Watts | Continuous Power for 4 hours |
| 1200 Watts | Peak Power Output            |

## **Typical Battery Capacities**

| Smart Phones              | 6 to 10 watt-hrs  |
|---------------------------|-------------------|
| Tablets                   | 28 to 42 watt-hrs |
| Laptops                   | 48 to 94 watt-hrs |
| Military Tactical Radios  | 25 to 75 watt-hrs |
| Toughbook computers       | 84 to 87 watt-hrs |
| Other 12 Volt Accessories | 20 to 60 watt-hrs |

Battery charging time similar to a wall plug

**Vishati** Outpost<sup>™</sup> 300 Plus

| Nishati Outpost™ 300 Plus Specification               |   |  |
|---|---|--|
| General Description / Components                      |   |  |
| Outpost 300 Plus Part Number                          | 228551G300P   |  |
| Solar   | Four Nishati Expedition 450 Portable Solar Arrays. Each includes:<br>(4) 112W Glass-free Foldable Solar Panels<br>(1) Roll-able 50 mph wind-rated stand w/canvas cover & carrying handles<br>(1) 35-foot power cable<br>(12) Empty sandbags and (10) Tent stakes<br>(1) Rugged transport case with polyurethane wheels<br>Optional: Soft case for carrying solar panels, power cable, and accessories |  |
| Power Controller                                      | <ul> <li>(4) 500W / 36-80VDC Input ports with Maximum Power Point Tracking</li> <li>(1) 85-265VAC/47-63 Hz, 1200W input port</li> <li>(1) 18-32VDC/1000W input port</li> <li>(2) 22-30 VDC, 300W (continuous) 1000W (peak) output ports</li> </ul>  |  |
| Batteries   | (4) 1.3 kWh LiFePO <sub>4</sub> High Energy Density Battery packs (40 lbs. ea.)   |  |
| Accessories   | External cable kit, Inverter, DC Power Distribution Kit; Paralleling Adapter & Generator Auto-start (Optional)  |  |
| Limited Warranty                                      | 2 Years   |  |
| System Power  |   |  |
| Rated solar capacity*                                 | 1800W   |  |
| Solar Array Open Circuit Voltage ( $V_{oc}$ )*        | 63.82V  |  |
| Solar Array Short Circuit Current (I <sub>sc</sub> )* | 9.04A   |  |
| Solar Array Output Voltage (V <sub>mp</sub> )*        | 51.39V  |  |
| Solar Array Output Current (I <sub>mp</sub> )*        | 8.77A   |  |
| Solar Array Maximum Voltage                           | 600V DC   |  |
| Charge Controller DC Power Input (per controller)     | 2000W   |  |
| Charge Controller DC Power Output (per controller)    | 300W (continuous, 24/7) / 1000 watts for 4 hours / 1200 watts (peak)  |  |
| Inverter Input  | 20-32VDC  |  |
| Inverter Output                                       | 115VAC/60 Hz/1800W (2000W surge) pure sine wave; (2) U.S. 3-prong outlets<br>PDU Kit Inverter: 120VAC/60Hz/180W (360W surge) pure sine wave; (1) U.S.<br>3-prong outlet   |  |
| Environmental Resistance                              |   |  |
| Water and dust protection                             | IP67  |  |
| Operating Temp. with Solar Loading                    | -20°C to 60°C   |  |
| Storage Temp. Limits (In Hard Case)                   | -32°C to 71°C   |  |
| Wind Load Limit From Any Direction                    | 50 mph  |  |
| 48" Drop and Loose Cargo Tests per MIL-STD 810G       | PASS  |  |
|   | $14 = 14000 \text{ m}/\text{m}^2$   |  |

\*Nominal ratings based on standard test conditions: 25°C, AM1.5, and 1000W/m<sup>2</sup>

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