

Nishati Outpost™ 100 Solar Power System

Rugged, Portable Multi-voltage Solar Power System

100 Watt Continuous (24/7) / 300 Watt Sustained / 500 Watt Peak Power



- Power command posts / small ops centers, remote communications and sensors
- Features Nishati Expedition™ 450 Portable Solar Array – 455W of rugged glass-free mc-Si solar
- 2U Rack Mountable power controller
- 12/24V DC, 5V USB, 120V AC outputs
- 1470 W-hrs of integrated Li-ion energy storage
- Deployed foot print: 4 ft. x 10 ft.
- 50 mph wind rating using sandbags
- Setup or pack-up in less than 10 minutes



- Integrated rack carrying handles along with optional soft case or back-pack for panels & accessories
- Spread load for tactical vehicle & aircraft transport
- Spread-load for man-pack:
 - Rack 14 lbs.
 - Panels + cable in soft case ~31 lbs.



Power Availability

Continuous Power	Rating	Duration (per Day)
100 Watts	Continuous	24 hrs
300 Watts	Typical daytime	8 hrs

Example Communications Power and Charging Capacities

Device	Typical Battery Capacities	Outpost 100 Power and Charging Per Day at Rated Power
Smart Phones	6 to 10 Watt-hrs	240 Complete re-charges
Tablets	28 to 42 Watt-hrs	Power 10 Tablets continuously or fully re-charge up to 60
Commercial Laptops	48 to 94 Watt-hrs	Power 3 to 4 Laptops for 24 hrs. or fully recharge 25
Panasonic Toughbook®	84 to 87 Watt-hrs	Power 8 x Toughbook® for 6 hrs. (daytime) or 2 continuously
Military Tactical Radios	16 to 86 Watt-hrs	Power 8 x PRC-148 for 24 hrs. + recharge 20 High-capacity MBITR batteries
Other 12V Accessories	20 to 60 watt-hrs	Fully charge 40 to 120 batteries

Nishati™ Outpost™ 100

Nishati Outpost 100 Specification

General Description / Components	
Outpost 100 Part Number	228651T100
Solar	Nishati Expedition 450 Portable Solar Array: (4) 112W Glass-free Foldable Solar Panels (1) Roll-able 50mph wind-rated stand w/canvas cover & carrying handles (1) 35-foot power cable (12) Sandbags and (10) Tent stakes (1) Rugged transport case with polyurethane wheels Optional: soft case for carrying solar panels, power cable, and accessories
Power Controller	MilSpec Tactical Edge Renewable Power 300W power system with integrated energy storage and input/output/state of charge display
Energy Storage	1,470 Watt-hrs LiFePO ₄
DC Power	(2) 12V / 24V ports; (1) 5V USB 2.0 A female port
AC Power**	(2) 120V / 60 Hz ports
Limited Warranty	2 Years
System Power*	
Power capability	100W 24/7, 300 watts for 4 to 8 hours, 500 watts maximum
Rated solar capacity	450W
Solar Array Open Circuit Voltage (V _{oc})	63.82V
Solar Array Short Circuit Current (I _{sc})	9.04A
Solar Array Output Voltage (V _{mp})	51.39V
Solar Array Output Current (I _{mp})	8.77A
Solar Array Maximum Voltage	600V DC
Power Controller DC Power Input	(1) 550W / 32-70V DC solar input
Power Controller DC Power Output	(2) 12V (11A) / 24V (6A) / 150W outputs (1) 5V USB 2.0 A female outputs
Power Controller AC Power Output**	(2) 120V / 60 Hz / 300W continuous / 500W peak outputs
System Dimensions	
Storage Volume (Solar array in hard transport case)	4.15 ft ³
Solar in transport case dimensions / weight	47.0" L x 17.0" W x 10.8" H / 76 lbs.
Power Controller dimensions /	23.5" x 17.25" x 3.5" / 37 lbs.
Solar Deployed Footprint @ 30° Deployed Angle	39.9 ft ²
Solar Fixed Deployment Angles	0°, 35° (other fixed angles built on request)
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	80 KPH
48" Drop and Loose Cargo Tests per MIL-STD 810G	PASS

*Solar ratings based on standard test conditions: 25°C, AM1.5, and 1000W/m²

**Option: 220V/50Hz

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