



Nishati
Power
Technologies™

Outpost™ Mini Power Manager

Portable, Rugged High-efficiency Smart Charging and Power
Charge BB-XX90 Batteries & Power Radios, Sensors, End-User Devices



Compact and Lightweight 2.73"L x 2.54"W x 1.63"H | 0.6 lbs. | Battery SOC windows visible

Simple No buttons - just connect & charge! LEDs provide system state, solar input, & fault indications

Efficient $\geq 98\%$ Solar charging and $\geq 96\%$ auxiliary power efficiency

Effective High-speed maximum power point tracking delivers maximum solar charging power
Minimizes charge time by charging two battery cell strings simultaneously
Charge while delivering up to 6A to auxiliary loads

Flexible Polarized SAE 2-pin input accepts power from solar and other DC sources
Parallel multiple chargers from one power source and parallel auxiliary power output
Data over RS485 connection for external battery monitoring and charger switching

Robust Reverse Polarity, Short Circuit, Over- / Under-Temperature Protections
Wakes up/charges depleted batteries
Charges even if battery communications fail; monitors temp. to protect battery in cold weather

Durable Designed and built to military standards for use in harsh conditions and use cases

Weatherproof Protected against dust and water immersion (up to 1 m)

Nishati Outpost™ Mini Power Manager Specifications

| General Description | | | | |
|--|--|------|-------|--|
| Part Number | 914001 | | | |
| Power Input Connection | (1) SAE 2-pin 12” pigtail | | | |
| Auxiliary Power and Data Connection | (1) M12, 4-pin, 12” pigtail | | | |
| Limited Warranty | 2 years | | | |
| Power Characteristics | Min. | Typ. | Max. | Conditions |
| DC Input Voltage (V_{in}) | 10V | 20V | 50V | |
| Battery Voltage (V_{batt}) | 10V | - | 20V | |
| Auxiliary Power Voltage (V_{aux}) ¹ | 11V | - | 16.5V | BB-2590 battery required |
| Total Batt. Charging Current (I_{batt}) | 0A | - | 6A | |
| Auxiliary Power Current (I_{aux}) ¹ | - | - | 6A | Continuous |
| | | | 10A | Absolute maximum |
| Input Power (P_i) | 0 | - | 120W | |
| Battery Charging Power (P_{batt}) | 0 | 80W | 100W | |
| Auxiliary Power (P_{aux}) ¹ | - | - | 100W | Continuous, V_{aux} = 16.5V |
| Efficiency: DC In to Battery | - | >96% | - | |
| Efficiency: Battery to Aux Power Out | - | >98% | - | |
| Ambient Operating Temp. (T_A) | -40°C | – | 60°C | Discharging |
| | -20°C | - | 50°C | Charging [software-limited to 2.5A below 0°C²] |
| Storage Temp. (T_{STG}) | -50°C | – | 85°C | |
| Internal Temp. Limiting (T_{LIM}) | - | 85°C | - | Auxiliary port turns off and battery charge power reduces to maintain temperature limit³ |
| Data | | | | |
| Battery Management System Data | RS485 2-wire Single-character query and response (115,200 bps) | | | |
| RS485 Switching | On, Off / Ship Mode, Fault / Hibernate Reset | | | |
| Charger Dimensions & Weight | | | | |
| L x W x D | 2.73” x 2.54” x 1.63” | | | |
| Weight | 0.6 lbs. | | | |
| Environmental | IP67 (Dust proof; waterproof to 1m immersion) | | | |

Notes:

- 1) BB-2590 only
- 2) Charging BB-2590 below 0°C may negatively impact battery capacity and lifetime
- 3) External case temperature can become hot in certain high load conditions, use caution when handling

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Portable • Reliable • Rugged
Military Power

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