Traffic Cabinet Components and Accessories

ZincBlue2 UPS 1000W/1500W & PIM

ZincBlue2: The Safer, Smarter, Greener UPS

ZincBlue2 is the next-generation intelligent nickel-zinc battery-based uninterruptable power supply (UPS) solution. Compared to lead-acid battery systems, ZincBlue2 nickel-zinc batteries contain no hazardous materials, are fully recyclable, lighter, and generate virtually no heat. The ZincBlue2 UPS inverter features a single, more compact design for all applications, and provides longer run times with connections to more batteries than before. It also provides more intelligence with extensive event logging and a simplified user interface, utilizing the industry's first Navigation Dial for operation and configuration. The power interface module (PIM) provides an easy-to-connect, safe interface for incoming utility AC to ZincBlue2 and cabinet. It now also has an auto bypass switch and keyed connections for safer simplified setup and maintenance.

The Benefits to Agencies

ZincBlue2's compact design leverages the unused space in a traffic cabinet. The new design is extremely easy to set up due to revised cabling and connector configurations. Self-maintaining digital battery monitoring provides for simple operation and no maintenance. In addition, the hot-swappable batteries and cold-start features allow the system to be operated indefinitely as a generator in extreme situations. The simplified user interface also supports browser-based remote system management and updates, as well as email alert messaging. As always, the nickel-zinc system supports green initiatives.

The Benefits to the Driving Public

Uninterruptable power systems help ensure signalized intersections continue to function during a utility power disruption. ZincBlue2 ensures safety for the driving public and includes emergency responders, even during the hazardous conditions of power outages. ZincBlue2 provides an environmentally-conscious alternative to traditional lead-acid Battery Backup System (BBS) for a more sustainable solution.

Why ZincBlue2?

Cabinet Optimization
- Cabinet space and thermal optimization

Transformational NiZn Batteries
- Superior performance, safety, and environmental advantages over lead-acid

Simple Installation & Self Maintaining
- Innovative form factors
- No periodic maintenance

1000W or 1500W options
- High load capacity option with UPS 1500W

Active Power Supervision
- Intelligent two stage operation
- Modern power analysis

Lower Total Cost of Ownership

ZincBlue2 New Features
- Extended run-times
- Enhanced user interface
- Innovative navigation dial
- Large, bright display
- Remote firmware upgrades
- Browser-based software

ZincBlue2 UPS

Input Power	
Input Voltage Range	120Vac nominal 85-140Vac User Programmable
Input Current	15A max
Input Frequency	60Hz nominal ±10% (54-66Hz)
UPS Output	
Output Voltage	120Vac ±3%
Output Current	1000W: 8.3A nominal | 1500W: 12.5A nominal
Output Power	1000W: 1000 Watts | 1500W: 1500 Watts
Output Frequency	60Hz ±0.5Hz
Output Waveform	Pure Sinewave
UPS Efficiency	97%
Environmental	
Operating Temperature Range	(-37°C to 74°C) (-34°F to 165°F)
Inverter Performance	
THD	1000W: < 2% | 1500W: < 3%
Overload	1000W: 2,000W Surge | 1500W: 3,000W Surge
System Switchover	
Operating Modes	Intelligent Two-Stage Operation Stage One: Line Conditioner, Waveform Monitoring and Switchover to Battery Backup Stage Two: Waveform Monitoring, Return to AC Power
Switchover Thresholds	AC Voltage: Programmable from 85-140Vac in 1V steps AC Waveform Analysis AC Frequency: 60Hz ±6Hz
Transfer Time from AC Power to Battery Backup	Typical < 33ms
Mechanical	
Size	1000W: 3.7"H X 17"W X 11.6"D | 1500W: 4.6"H X 17"W X 11.6"D
Weight	1000W: 12 lbs. | 1500W: 14 lbs.
UPS Connection System	AC cable from PIM IEC 320 C20 (male) AC cable to PIM IEC 320 C19 (female) Battery connection system - 7 pin DSUB for up to 6 battery systems
Communications	
Display	64 x 128 Pixels LCD Display with White LED Backlight
Ports	Ethernet RJ45 - 10/100Mbps, TCP/IP
Dry Relay Contacts	8 Independent Programmable Form C Relays (default state: NO) Class 2 only
Indicators & Alarms	
Alarm Functions	AC Power Failure Daily Time Trigger Delay After Power Failure Battery Capacity UPS Fault
Audible Indicators	System Startup Cold Start Inverter On/Off Inverter Output over Current AC Miswire Rotating Dial, pushing Enter or Back button on front panel UPS Fault
Certifications	
UL/CSA	Battery cells: Recognized UL-2054, CSA 22.2 No. 60950-1
Features	
Cold Start	Simple push-button activation of cold start on battery power
Battery Management System	Digital Battery Bus Compartmentalized Battery Strings Redundant Isolated Battery Strings Managed in Parallel Upon Discharge Integrated Temperature Compensated Charging Redundant Performance
Multiple Mounting Configurations	Rack, Shelf or Hanging
Notifications	All alarm functions available on (SNMP, SMTP, Relay)
Local and Remote Control	Front Panel panel navigation dial and button Embedded webserver software for remote connectivity and control
Internal Battery Backed-Up Real-Time Clock	Operates for Life of System
AC Power Event Log	Stores Previous 1000 Events with waveforms
Firmware updates	Remote over TCP/IP

*All Specifications Valid at 25°C *All Specifications Subject to Change

Internal Notes: Using HanSeo Inverter: HSDHF-1500W

ZincBlue2 Power Interface Module (PIM)

Input Power	
Input Voltage Range	120Vac nominal
Input Current	15A max
Input Frequency	60Hz nominal
Output Power	
Output Voltage	120Vac nominal
Output Current	15A max
Frequency	60Hz nominal
Environmental	
Operating Temperature Range	(-37°C to 74°C) (-34°F to 165°F)
Mechanical	
Size	6.0"H X 10.0"W X 4.0"D
Weight	3.7lbs
Mounting	Single Rail Rack Mount, Shelf Mount, Panel Mount
Electrical & Connections	
AC Power Interface	Utility and Cabinet Load: - Terminal Block for 10AWG (#8 Screw)
AC Power Connections	To UPS IEC320 C19 (female) From UPS IEC320 C20 (male) To Battery Panel/Module IEC 320 C19 (female)
Breakers	Combined UPS Test Switch and 15A input breaker UPS output 20A breaker
Test Outlet	NEMA receptacle 5-15
Switch	
Automatic Bypass Switch	Double Pole Double Throw (DPDT) Contact Rating: 120/240 Vac @ 30A continuous
Certifications	
UL/CSA	UPS System Level including PIM: Evaluated to UL1778 and CSA C22.2 No. 107.3-14 for use in USA and Canada
Indicator	
Visual	Red indicator: PIM is in Bypass mode

*All Specifications Valid at Operating Temperature Range

*All Specifications Subject to Change