

# Traffic Cabinet Components and Accessories

## **ZincBlue2** 500W Module Battery, CSA Certified

### *The Safer, Smarter, Greener UPS*

ZincBlue2 is the next-generation intelligent nickel-zinc battery-based uninterruptible power supply (UPS) solution. CSA certified for use in Canada, the ZincBlue2 nickel-zinc battery module features a more compact and lightweight nickel-zinc battery design. The built-in intelligent digital charge and discharge control, along with the updated connectors, make for a very simple-to connect, no-maintenance system with a unique hot-swappable battery replacement capability.

### *The Benefits to Agencies*

ZincBlue2's compact design leverages more of the unused space in a traffic cabinet. The battery module can easily be rack-mounted in 33x-type cabinets. In NEMA cabinets it can sit on shelves or mount under shelves with available brackets. It has a low profile to allow stacking of several batteries without any concerns of heat generated. The nickel-zinc battery technology is free from hazardous materials, requires no maintenance, is half the weight of lead acid batteries, and is fully recyclable, giving agencies peace of mind regarding the system's safety, longevity, and reliability. ZincBlue2 is fully UL/CSA-certified to ensure compatibility with most agency requirements. As such, ZincBlue2 fully supports an agency's green and Smart City 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 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?***

### ***Nickel-Zinc Battery Chemistry***

- Half the size and weight of lead-acid batteries
- Self-maintaining; no periodic maintenance
- Faster recharge time than lead-acid batteries
- Longer storage and operational life than lead-acid batteries
- No hazardous materials; no sulfation
- Recyclable and environmentally friendly

### ***Compact Form Factor***

- Shelf mount & rack mount options
- Quick connect/disconnect battery string and AC cables

### ***Innovative Electronics Design***

- Built-in chargers and controllers
- Integrated temperature compensated charging
- Digital battery bus for intelligent battery management
- Parallel battery strings; Redundant performance

### ***UL/CSA certification***

- Meets CSA guidelines for use in Canada



## Specifications

Output	
Power Output	500W Battery Module: 500 Watts
Voltage Output	48VDC Nominal with Redundancy
Battery Type & Panel Design	
Chemistry	Nickel-Zinc, Sealed
Electrolyte	Starved, KOH, Aqueous (no acid)
Configuration	Digital Battery Bus Compartmentalized Battery Strings Redundant Isolated Battery Strings Managed in Parallel Upon Discharge Integrated Temperature Compensated Charging Redundant Performance
Battery Communications	Digital Battery Bus via Single Connector
Maximum Battery Configuration	6 Modules
Cold Start	Simple push-button activation of cold start on battery power
Mechanical	
Size	500W Battery Module : 2.3"H X 17.0"W X 12.1"D
Weight	500W Battery Module: 25.0 lbs
Battery Connection System	Single Quick Connect/Disconnect 7W2 Dsub Connector IEC320 C20 Connector for AC Power
Form Factors and Mounting	Battery Module - Shelf Mount, Rack Mount
Maintenance	
Maintenance	Self-Maintaining, No Periodic Maintenance
Environmental	
Operating Temperature Range	Discharge: (-37°C <sup>1</sup> to 74°C) (-34.6°F <sup>1</sup> to 165°F) Charge: (-37°C <sup>1</sup> to 50°C <sup>2</sup> ) (-34.6°F <sup>1</sup> to 122°F <sup>2</sup> )
Charge/Discharge	
Battery Charging	Built-In Chargers and Controllers Integrated Temperature Compensated Charging Typical 4.5 Hour Charge Time from 0% to 100% State of Charge
Self-Discharge	Shelf Self-Discharge Time (From 100% to 0% State of Charge): 1. At 25C or below, >1,000 days; 2. At 60C, >240 days Capacity can be fully recovered to 100% after self-discharging
Battery Storage	Batteries Do Not Sulfate When Stored No Trickle Charge Required
Regulatory Compliance	
Battery Cells	Recognized UL-2054, CSA 22.2 No. 60950-1
UPStealth 2 Battery Module 500W	UL1778 and CSA C22.2 No. 107.3 compliant
Indicator & Alarms	
Visual	Multi-Color LED Providing Battery Panel Status and Alarms Green - Battery Discharging / UPS Battery Backup Mode Blue - Battery Charging Blinking White - Battery Fully Charged and Available
Warranty	
Warranty	2 Years on Battery Module Electronics, 5 Years on Battery Cells

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

<sup>1</sup>Charge and discharge operations below a -5°C (23°F) ambient temperature require a heating element

<sup>2</sup>Charge operations discontinued above a 50°C (122°F) ambient temperature to protect system

