

ZincBlue2°

The Safer, Smarter, Greener, UPS Battery System

Econolite's ZincBlue2® is the next-generation intelligent nickel-zinc Uninterruptable Power Supply (UPS) solution. The built-in intelligent digital charge and discharge control, along with the updated connectors, make for a simple-to-connect, no-maintenance system with unique hot-swappable battery replacement capability. 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.

The ZincBlue2 battery panel and battery module feature a compact and lightweight nickel-zinc battery design leveraging more of the unused space in a traffic cabinet. The unique battery panels can fit in normally unused space on the sides of 33x-type cabinets. The design allows for multiple slide-in installations, requiring no additional mounting, while the shelf/rackmount battery module design has a lower profile to allow more batteries to be stacked. ZincBlue2 components are safe to install in the traffic cabinet saving space and cost as they contain no hazardous materials and generate very little heat.

ZincBlue2 ensures safety of motorists and emergency responders, even during the hazardous conditions of power disruptions. The system also supports an agency's "green" and Smart City initiatives, providing an environmentally conscious alternative to traditional lead-acid Battery Backup System (BBS) for a more sustainable solution.

Key features

- Nickel-Zinc Battery Chemistry
 - Half the size and weight of lead-acid batteries
 - Self-maintaining; no periodic maintenance
 - Longer storage and operational life than lead-acid batteries
 - No hazardous materials; no sulfation
 - Recyclable and environmentally friendly
- Innovative Electronics Design
 - Built-in chargers and controllers
 - Integrated temperature compensated charging
 - Parallel battery strings; Redundant performance
- Compact Form Factor
 - Ingenious flexible battery design inserts in dead space between rack and cabinet wall
 - Quick connect/disconnect battery string and AC cables
 - Shelfmount and rackmount



Specifications	ZincBlue2 - Battery Panel & Battery Module
Battery Charging	 Built-in chargers and controllers Integrated temperature compensated charging
	Typical 4.5 hour charge time from 0% to 100% state of charge
Battery Connection System	 Single quick connect/disconnect 7W2 Dsub connector IEC320 C20 connector for AC power
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 panels or modules
	• Cold start
	- Simple push-button activation of cold start on battery power
Battery Storage	Batteries do not sulfate when storedNo trickle charging required
Form Factors and Mounting	 Battery Panels - Flexible battery panel inserted in dead space between rack and cabinet wall Battery Module - Shelfmount, Rackmount
Indicators & Alarms	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
Maintenance	Self-maintaining, no periodic maintenance
Operating Temperature Range	Discharge: (-37°C¹ to 74°C) (-34.6°F¹ to 165°F) Charge: (-37°C¹ to 50°C²) (-34.6°F¹ to 122°F²)
Power Output	500W Battery Panel: 500 Watts 500W Battery Module: 500 Watts
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
Size	500W Battery Panel: 1.1"H X 19.0"W X 24.4"D 500W Battery Module : 2.3"H X 17.0"W X 12.1"D
UL/CSA	Battery cells: Recognized UL-2054, CSA 22.2 No. 60950-1
Voltage Output	48VDC nominal with redundancy
Warranty	2 Years on Battery Panel/Module, 5 Years on battery cells
Weight	500W Battery Panel: 27.5lbs 500W Battery Module: 25.0lbs

* All specifications valid at 25°C (77°F) and may be subject to change.

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

² Charge operations discontinued above a 50°C (122°F) ambient temperature to protect system.

