

Data Sheet

UPStealth® 2 Extended Run Time (XRT) Battery 3600Wh



ZincFive

Introduction

We now live in an Always-On ITS world and Departments of Transportation throughout the U.S. and Canada have made a commitment to smarter, safer, greener Intelligent Transportation System (ITS) operation with the Nickel-Zinc battery-based UPStealth Uninterruptible Power Supply (UPS). UPStealth is an intelligent UPS designed by transportation experts for ITS requirements and utilizes transformational Nickel-Zinc (NiZn) battery chemistry to energize intersections and ITS equipment when utility power is lost.

As the fastest growing UPS for ITS, UPStealth offers transportation departments the opportunity to upgrade to an easy-to-install, self-maintained solution with superior performance, environmental and safety advantages over traditional battery backup solutions.

UPStealth 2 XRT Battery Benefits

Nickel-Zinc Battery Chemistry

- Superior electrical performance compared to lead-acid batteries
- 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
- No trickle charging required
- Physically safe operation
- Recyclable and environmentally friendly

Compact Form Factors

- Half the footprint of equivalent lead-acid systems
- Shelf mount
- Quick connect/disconnect battery string and AC cables

Intelligent Management System (IMS)

- Built-in chargers and controllers
- Integrated temperature compensated charging
- Digital battery bus
- Hot-swappable battery solution



Z5 13-80 M S

Size: LN3

Voltage: 13V

Capacity: 80Ah



UPStealth® 2 XRT Battery 3600Wh IMS

XRT Battery Specifications

Input	
Voltage / Current Input	90-135VAC, 60Hz @18Amp (MAX)
Input	
Power Output	XRT Battery 3600Wh: 3,600 Watt hours *To achieve optimum battery cycle performance, ZincFive recommends load share >200W per UPStealth® 2 XRT Battery 3600Wh
Voltage Output	48Vdc Nominal
Battery Type & Panel Design	
Chemistry	Nickel-Zinc
Electrolyte	Starved, KOH, Aqueous (no acid)
Configuration	Digital Battery Bus IMS (Intelligent Management System) Integrated Temperature Compensated Charging
Battery Communications	Digital Battery Bus via Single Connector to IMS
Maximum Battery Configuration	6 XRT Battery 3600Wh per UPS (Each XRT Battery 3600Wh consists of IMS plus (4) Z5 13-80 MS Batteries)
Cold Start	Simple push-button activation of cold start on battery power
Mechanical	
Size	XRT Battery 3600Wh IMS: 3.45"H x 16.77"W (19" w/ mounting) x 10.25"D Z5 13-80 MS Battery (Qty. 4): 7.4"H X 10.9"W X 6.9"D (each battery)
Weight	XRT Battery 3600Wh IMS: 11lbs Z5 13-80 MS Battery (Qty. 4): 33lbs (each battery)
Battery Connection System	Single Quick Connect/Disconnect 7W2 Dsub Connector IEC320 C20 Connector for AC Power Two wire DC Power Interconnect Cables (Four - 1 for each Z5 13-80 MS Battery) AC Power Switch (20A Breaker) DC Power Switch (50A Breaker)
Form Factors and Mounting	XRT Battery 3600Wh IMS: Shelf Mount, Rack Mount Z5 13-80 MS Battery - Shelf Mount
Maintenance	
Maintenance	Self-Maintaining, No Periodic Maintenance
Environmental	
Operating Temperature Range	Discharge: (-37°C ¹ to 74°C) (-34.6°F ¹ to 165°F) Charge: (-37°C ¹ to 50°C ²) (-34.6°F ¹ to 122°F ²)
Charge/Discharge	
Battery Charging	Built-In Chargers and Controllers Built-In Battery Balancing Integrated Temperature Compensated Charging Typical 7 Hour and Maximum 12 Hour Charge Time from 0% to 100% State of Charge
Certifications	
UL/CSA Battery: Z5 13-80 H S	UL-1989, CSA 22.2 No. 60896-21
UL 9540A	No thermal runaway exhibited at cell-level test
Indicators & Alarms	
Visual	Multi-Color LED Providing Individual Z5 13-80 MS Battery Status and Alarms <ul style="list-style-type: none"> • Green = Backup Mode • Blue = Charging Mode • White (Blinking) = Charged, battery at rest • Red = Battery Missing/Miswired • Red (Blinking) = System Fault. Call your representative for assistance. No charging or backup is available when a battery is unplugged.
Warranty	
Warranty	2 Years on XRT Battery 3600Wh IMS, 5 Years on Z5 13-80 MS Batteries

*All Specifications Valid at 25°C *All Specifications 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