



an EnerSys® company

# Alpha® XRT-Li extended runtime power system



- Certified as a system to industry benchmark-setting NRTL safety standards UL® 9540/9540A and ANSI®/UL® 62368-1
- Scalable system delivers anywhere from 8 hours to as much as 72 hours of backup
- Utilizes industry-leading Alpha® XM3.1-HP™ power supply for reliable integration into your network
- Battery sub-system certified to safety standards UL® 1973, UN 38.3 and ISO® 13849-1:2015
- Module State of Charge (SoC) balancing
- Remote monitoring via Continuity™ or AlphaXD™ applications

**Alpha® XRT-Li extended runtime power system , leveraging the award-winning Alpha® XM3.1-HP™ broadband UPS and PowerSafe® iON battery power module (BPM) with lithium-ion technology, scales to safely provide anywhere from 8 to 72 hours of unparalleled high-density backup power capacity that helps ensure your network's resiliency.**

Alpha® XRT-Li extended runtime power system capitalizes on over 40 years of expertise in cable broadband powering and over 100 years of experience with energy storage solutions, allowing EnerSys to deliver an optimized system supporting extended runtime applications in the Outside Plant.

- Alpha® XRT-Li power system sets the safety benchmark for outdoor lithium systems, certifying to the highest NRTL lithium-ion safety standards UL® 9540/9540A and ANSI®/UL® 62368-1.

- The PowerSafe® iON 36-1800 battery power module (BPM) utilizes high quality automotive grade lithium-ion cells to maximize energy density.
- The award-winning Alpha® XM3.1-HP™ uninterruptible power supply (UPS), delivers an intelligent integrated system designed for optimal charging performance and remote power management.
- Housed within the Alpha® PN-4 cabinet, the XRT-Li extended runtime power system integrates seamlessly into existing networks utilizing components already widely approved and deployed.
- The battery management system (BMS) provides additional levels of protection for the batteries, including overvoltage, undervoltage and overcurrent. It manages cell balancing and temperatures to help maintain overall State of Health (SoH) of the battery and is network-enabled for remote power management.

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System Specifications	
<b>Battery Power Modules</b>	Up to 22 per BCM**, 50 total
<b>Battery Management Systems (BMS)</b>	1 to 3
<b>Max Rated Energy Capacity (1 BMS and 22 BPMs)</b>	36.3 kWh @ 40.7V
<b>Max Rated System Load</b>	12A @ 89Vac
<b>Operating Temperature</b>	-15°C to +45°C
Mechanical	
<b>Cabinet Dimensions (W x D x H)</b>	26 x 24 x 52 in (660 x 610 x 321 mm)
<b>Weight</b>	231 lb (105 kg)
Agency Compliance	
<b>Certifications</b>	<b>UL® 9540:</b> Energy Storage System (ESS) Requirements
	<b>UL® 9540a:</b> Test reporting
	<b>ANSI/UL® 62368-1:</b> Audio/video, information and communication technology equipment; Telecommunication products: network infrastructure equipment
Alpha® XM3.1-HP™ Broadband UPS *	
<b>AC Input Voltage</b>	120 Vac (nominal); Range: 90 Vac to 138 Vac
<b>Input Frequency</b>	60Hz nominal, ±3% tolerance
<b>Output Voltage; Max Current; Max Power</b>	63/89 Vac; 12A, 1068VA
Mechanical	
<b>Dimensions (W x D x H)</b>	16.43 x 10.57 x 7.76 in (417 x 268 x 197 mm)
<b>Weight</b>	61 lb (27.6 kg)
*For full specifications see Alpha® XM3.1-HP™ power supply datasheet	
**Battery Control Module	

PowerSafe® iON 36-1800** Battery Power Module (BPM)				
<b>Battery Voltage</b>	36 Vdc (Nominal); Range: 30.0 Vdc to 40.7 Vdc			
<b>Capacity</b>	50 Ah			
<b>Energy</b>	1.81 kWh (1.65 kWh rated) (@ 40.7 V max. - based on 1C discharge rate at 25°C)			
Runtimes (Standby Time)				
<b>Batteries</b>	Load			
	12A	8A	6A	4A
<b>8</b>	12hrs	14hrs	23hrs	33hrs
<b>16</b>	24hrs	29hrs	45hrs	66hrs
<b>22</b>	32hrs	38hrs	63hrs	92hrs
Mechanical				
<b>Dimensions (W x D x H)</b>	6.57 x 13.54 x 5.27 in (167 x 317 x 134 mm)			
<b>Weight</b>	32.8 lb (14.9 kg)			
Agency Compliance				
<b>Certifications</b>	<b>UN 38.3, UL® 1973</b>			
**For full specifications see PowerSafe® iON 36-1800 battery power module datasheet				
Battery Management System (BMS)				
<b>DC Input Voltage</b>	36.2 Vdc (Nominal); Range: 30.0 Vdc to 40.7 Vdc			
<b>Max Rated Charge/Discharge</b>	39A @ 40.7V			
Mechanical				
<b>Dimensions (W x D x H)</b>	13.15 x 6.39 x 10.38 in (334 x 162 x 264 mm)			
<b>Weight</b>	16.5 lb (7.5 kg)			
Agency Compliance				
<b>Certifications</b>	<b>UL® 1973</b>			
	<b>ISO® 13849-1:2015:</b> Functional safety; Safety-related Parts of Control Systems			



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PowerSafe® iON 36-1800 battery power module



PSI-36-BMS battery management system



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