XTREME POWER CONVERSION **Li90** vs Eaton **9355 20K** COMPARISON

The Xtreme Power Li90 and Eaton 9355 are both high-performance, online double-conversion UPS systems designed to protect critical loads. The comparison below highlights key differences that demonstrate the Li90's performance, efficiency, and lifecycle advantages.

20kVA 208/120V 3 Phase UPS Comparison

Feature	Xtreme Power Li90-20k2	Eaton 9355 20kVA KB2013100000010	Li90 Advantage
Capacities	20kVA / 20kW	20kVA / 18kW	Li90 delivers full-rated (unity PF) output for maximum usable capacity.
Battery Technology	Lithium Iron Phosphate ($LiFePO_4$)	Valve-Regulated Lead Acid (VRLA)	$LiFePO_4$ lasts up to 5× longer, supports higher temperatures, and is ~60% smaller and lighter than VRLA.
Efficiency / Heat Disapation	94.5 % (online) / 3,970 BTUH	91 % (online) / 6762 BTUH	Higher efficiency reduces energy consumption and significantly lowers cooling requirements.
Maintenance Bypass	Standard (integrated)	Standard (integrated)	Both include integrated maintenance bypass for seamless servic-ing.
Size (W x D x H) / Weight with Base Battery	12.6 x 35.2 x 49.2 in (387 lb)	20 x 34 x 66 in / 1160 lb	Li90 occupies roughly half the footprint and weighs about two-thirds less, simplifying installation and reducing floor-load require-ments.
Internal Battery Runtime	15 minutes @ 20 kW (Li90-20k2) 30 minutes @ 20kW (Li90-20k3)	18 minutes @ 18kW	Longer runtime options in a much smaller and lighter system.
Battery Life	Up to 15 years or 3000 to 5000 cycles ($LiFePO_4$)"	3-5 years or ~300 cycles (VRLA)	Dramatically longer battery life reduces replacement frequency and lifecycle costs.
Operating Tempera-ture	Up to 50°C (122°F) with derating above 40C (104°F)	Up to 45°C (113°F) with derating above 40C (104°F)	Better suited for hot electrical rooms, edge locations, and limited-cooling environments.
Battery Warranty	5 years ($LiFePO_4$)	2 years (VRLA)	Longer battery warranty lowers ownership risk.
Start-up and War-ranty	Start-up included; 2-year warranty (USA & Canada)	1-year Parts and 90 days warranty	Li90 includes factory start-up and longer standard system cover-age.