

XTREME POWER CONVERSION **Li90-20k** // Vertiv **EXS-V 15 kVA** COMPARISON

Facilities replacing legacy 15 kVA three-phase UPS infrastructure often evaluate higher-capacity lithium platforms to improve lifecycle performance, increase operational margin, and simplify long-term maintenance planning. The Li90-20k provides online double-conversion protection with integrated lithium technology designed to support infrastructure modernization and capacity right-sizing.



20 kVA vs 15 kVA Three-Phase UPS Comparison

Feature	Xtreme Power Li90-20k	Vertiv EXS-V 15 kVA	Li90 Advantage
UPS Architecture	Lithium-integrated compact standalone UPS	Compact standalone UPS with external VRLA battery strategy	Integrated lithium modernization platform
Capacity	20 kVA / 20 kW (Unity PF)	15 kVA / 15 kW (Unity PF)	Additional capacity headroom
System Loading at 15 kW	75 %	100 %	Greater operational margin
Topology	Online double conversion	Online double conversion	Equivalent protection architecture
Battery Technology	Lithium Iron Phosphate (LiFePO ₄)	VRLA (Lead-Acid)	Extended lifecycle performance
Battery Design Life	Up to 15 years	Typically, 3–5 years	Reduced replacement frequency
Internal Runtime (15 kW load)	20 min (2 modules) / 30 min (3 modules)	18 min	Greater runtime flexibility
Runtime Expansion	Integrated modular lithium architecture	External battery cabinets typically required	Simplified infrastructure planning
Online Efficiency	94.5 %	93.4 %	Higher operating efficiency
Cabinet Width	12.6 in	23.6 in	Higher power density
Installed Weight	387 lb (with 2 battery modules)	>1200 lb depending on configuration	Reduced installation burden
Installation Model	Designed for retrofit modernization and capacity right-sizing	Conventional facility UPS replacement	Simplified upgrade execution