XTREME POWER CONVERSION AI90 HUC

Three-phase Online UPS // 415/240VAC, 400/230V, 380/220V Three-Phase

For more information, visit www.xpcc.com/ai90huc



AI90 HUC UPS: Delivering the Industry's Highest Power Density for AI Workloads

The Xtreme Power AI90 80kW UPS—the ultimate breakthrough in power management for highperformance AI server racks. At just 14U, it's the most compact UPS in the industry, powered by advanced Hybrid Ultracapacitors (HUC) that offer over 50,000 full discharge cycles.

With a power density of more than 5.7kW per rack unit (RU), the AI90 delivers reliable power protection while significantly minimizing the required space. Integrated features like maintenance bypass and output distribution make it an ideal solution for ensuring continuous power in today's most demanding data center environments.

PRODUCT SNAPSHOT

> Modular complete 80kW 14U UPS

- > Hybrid Ultracapacitor provides 15-year life
- > Integral Maintenance Bypass
- Output Breakers & IEC 309 Connectors
- > 96% online or 99% ECO mode Efficiency
- > 5 Year System Warranty for USA and Canada

FEATURES

Unmatched Power Density -80kW of protection, bypass, and backup power in just 14U of space

Hybrid Ultracapacitors - high power density energy storage for efficient performance

Ultra-Fast 4-Minute Re-

charge - Hybrid Ultracapacitors fully recharge in just four minutes, ready to power through the next outage

Maintenance Bypass -

Enables manual transfer of loads from UPS to utility power for seamless maintenance **5" Touch LCD Display** - Intuitive interface providing critical information, status, and alarms

Easy Integration - Built-in maintenance bypass and IEC output connectors simplify deployment

Cell Durability - Designed for longevity; 15-year life and up to 50,000 full discharge cycles

Active Power Factor Correction - Optimizes input power factor to near unity (1.0 pf)

Superior Overload Capacity - Delivers up to 120kW for 60 seconds





MODEL SELECTION GUIDE

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	MODEL NUMBER	AI90 UPS – Hybrid Ultracapacitor (HUC)			
CAPACITY	Power rating	80kVA/80kW			
INPUT	Nominal Voltage	380/400/415 VAC (3Ph+N)			
	Voltage Range (100% load)	+15%/-20%			
	Nominal Frequency	50/60Hz			
OUTPUT	Nominal Voltage	380/400/415 VAC (3Ph+N)			
	Nominal Frequency	50/60Hz			
	Overload Capacity	\leq 110% for 1 hour, 111% ~ 125% for 10 mins, 126%~150% for 1 min and >150% for 200ms			
	Efficiency AC-AC	Up to 96% online mode or up to 99% ECO mode			
OUTPUT DISTRIBUTION MODULES	Configurations	Module A: (3) 60A breakers each with IEC 309 5W on 0.5m SO cord	Module B: (2) 2 each with 5W pigt	SO Cord with	Module C: (2) 150A breakers each with output terminals
UPS SYSTEM	Dimensions (W x D x H)	17.2 x 36.2 x 10.4 in (6U) / 438 x 920 x 265 mm			
PHYSICAL	Module Weights	UPS Module 97 lbs (44 kg) / STS Module 31 lbs (14 kg)			
CAPACITOR SYSTEM	Dimensions (W x D x H)	17.2 x 36.2 x 14 in (8U) / 438 x 920 x 355 mm			
PHYSICAL	Module Weights	HUC10 Modules 55 lbs (25kg) each / HUC12 Modules 65 lbs (30kg)			
CHARGER	Charger Voltage	+/-225V (HUC-10) or +/-273V (HUC-12)			
	Recharge Time (approx)	4 minutes			
	Charger Current (Max)	18A			
ENVIRONMENT	Operating temperature	0–40°C (32–104°F)			
	Altitude	11,500 ft above sea level			
	Humidity	0–95% non-condensing			
	Storage temperature	UPS -25–55°C / Capacitor Modules -40°C-50°C / noncondensing			
ENERGY STORAGE	HUC Models	HUC10			HUC12
	Product Life	Up to 15 years*			Up to 15 years*
	Durability (full cycles)	>50,000*			>50,000*
	Runtime (full load)	Up to 40 Seconds	S	ι	Jp to 60 Seconds
APPROVALS		CE, RoHS, 810A (capacitor cells) and additional certifications pending			
WARRANTY		5 years depot warranty for USA and Canada			
COMMUNICATIONS INTERFACE		RS232, USB, EPO, intelligent slot for optional cards (Web/SNMP, Modbus)			

*Cell Life and Durability is based on 10C discharge rate and ambient temperature of 30°C

AI90 UPS with Hybrid Ultracapacitor Modules



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