

XTREME POWER CONVERSION Ai90 480V 4W

Three-phase Online UPS // 480/277VAC

For more information, visit www.xpcc.com/Ai90



Ensure continuous, reliable operation for your edge and AI deployments

The Ai90 is a breakthrough solution engineered for today's power-dense AI server racks. At just 13U, this compact design delivers industry-leading 50kW or 70kW performance without consuming excessive rack space.

Fully equipped with modular batteries, integrated maintenance bypass, and output distribution, the Ai90 ensures seamless power protection and operational efficiency. Ai90 480/277V 4W UPS combines space-saving design with versatile energy storage and advanced features—making it the ultimate high-power rack UPS solution.

PRODUCT SNAPSHOT

- › Capacity: 50kW or 70kW
- › 96.5% online or 99% ECO mode
- › Integral Maintenance Bypass
- › Output Breakers & IEC 309 Receptacles
- › 2 Year System Warranty for USA and Canada

FEATURES

High Power Density - Up to 70kW of protection, bypass, and backup power in just 13U of space

Touch LCD Display - Intuitive interface providing critical information, status, and alarms

Pure Lead Battery – Optimized for reliable high-power discharge performance

Modular Battery System – each string equipped with its own breaker for enhanced safety, and easy maintenance

Unity Output Power Factor - deliver full real capacity for high-density loads

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

Maintenance Bypass - Enables manual transfer of loads from UPS to utility power for seamless maintenance

Extended battery runtimes – Optional 4U matching battery packs with breaker available for extended runtimes

MODEL SELECTION GUIDE

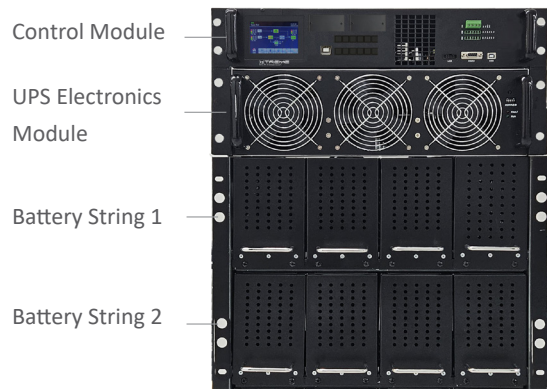
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MODEL NUMBER		Ai90 480/277V UPS		
CAPACITY	Power rating	50kW		70kW
INPUT	Nominal Voltage	480/277VAC (3Ph+N)		
	Voltage Range (100% load)	+15%/-20%		
	Nominal Frequency	50/60Hz		
OUTPUT	Nominal Voltage	480/277 VAC (3Ph+N)		
	Nominal Frequency	50/60Hz		
	Overload Capacity	≤ 110% for 1 hour, 111% ~ 125% for 10 mins, 126%~150% for 1 min and >150% for 200ms		
	Efficiency AC-AC	Up to 96.5% online mode or up to 99% ECO mode		
OUTPUT DISTRIBUTION MODULES	Configurations	Module A: (4) 60A breakers each with IEC 309 5W on 0.5m SO cord	Module B: (2) 100A breakers each with 5W SO Cord with pigtail	Module C: (2) 125A breakers each with output terminals
UPS PHYSICAL	Dimensions (W x D x H)	17.2 x 36.2 x 8.75 in / 438 x 920 x 222 mm (5U)		
	Weights	UPS Module 104 lbs (47 kg) / Control Module 31 lbs (14 kg)		
MAIN BATTERY SYSTEM PHYSICAL	Dimensions (W x D x H)	17.2 x 36.2 x 14 in / 438 x 920 x 356 mm (8U)		
	Quantity & Weights	(8) Battery Modules 73 lbs (33kg) each		
EXTENDED BATTERY PHYSICAL	Dimensions (W x D x H)	17.2 x 36.2 x 7 in (4U) / 438 x 920 x 178 mm		
	Weights	(4) Battery Modules 73 lbs (33kg) each		
CHARGER	Charger Voltage	+/-221V to +/-276V (+/-276V default)		
	Charger Current (Max)	18A (6A default)		
ENVIRONMENT	Operating temperature	0-40°C (32-104°F)		
	Altitude	2000 m (6500 ft)		
APPROVALS		UL, CE, RoHS, additional certifications (pending)		
WARRANTY		2 years depot warranty for USA and Canada		

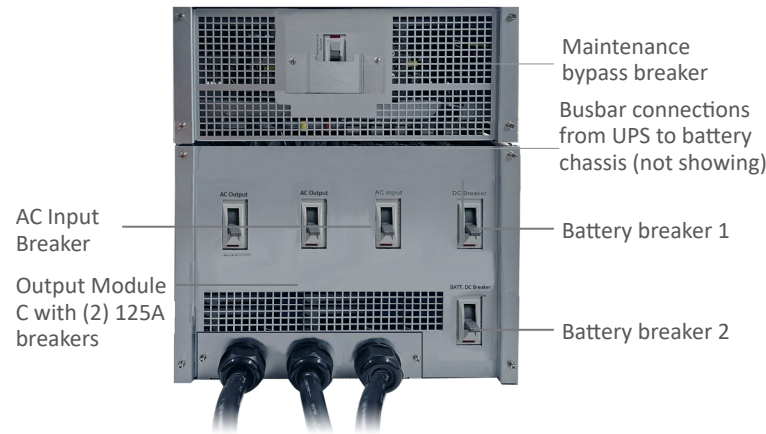
BATTERY RUNTIMES

	Internal batteries	External Battery Packs						
	2 strings	1	2	3	4	5	6	7
50kW	3.5	7	11	15	18	22	26	30
60kW	2.5	6	9	12	15	18	21	24
70kW	<2	4	7	10	12	15	17	20

Runtimes are approximate and will vary based on battery age and site conditions



Front View: Ai90 UPS & Battery



Rear View: Ai90 UPS & Battery

X-TREME
Power Conversion®

Protect your business.

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