

# XTREME POWER CONVERSION M90S 4 Slot

Modular Online UPS // 208/120VAC Single-Phase

For more information, visit [www.xpcc.com/m90s4s](http://www.xpcc.com/m90s4s)



## Scalable, Modular, Flexible for Continuous Power Availability

Xtreme Power M90S UPS is a scalable, modular, flexible solution that combines continuous power availability and the highest efficiency for mission critical applications.

M90S provides unity power factor output (kVA = kW) providing maximum usable power and avoids any need to oversize the UPS. Maintenance bypass and output distribution within the UPS frame eliminate the need for external component connections, reducing installation costs.

Capacity, redundancy, battery runtime, and output receptacles can all be customized to meet your specific needs. Hot swappable power and battery modules provide rapid maintenance and repair.

For a 2 slot or 6 slot enclosure reference at [www.xpcc.com/m90s2s](http://www.xpcc.com/m90s2s) or [www.xpcc.com/m90s6s](http://www.xpcc.com/m90s6s)

### PRODUCT SNAPSHOT

- › Two capacities: 6kVA/6kW, 12kVA/12kW
- › Modular for capacity or redundancy
- › Unity output power factor (kVA =kW)
- › Hot swappable power and battery modules
- › Up to 98% ECO mode or 93% online efficiency
- › 3 years electronics, 3 years battery warranty (USA and Canada)

### FEATURES

**Scalable**—when power or runtime requirements change, modules can be added to increase capacity

**Maintenance bypass**—manually transfer critical loads from UPS power to utility power, enabling M90S maintenance

**Large LCD display**—5.7" display provides graphic display including status and alarms

**Optional receptacle panels**—fully configurable output receptacle panels

**Power module LCD**—each power module includes LCD display, providing module detailed information and redundancy

**Highest availability**—system can be configured with redundant power and battery modules

**Reduce energy cost**—best-in-class energy efficiency provides lowest energy consumption and heat output

**XTREME**  
Power Conversion®

Protect your business.

# MODEL SELECTION GUIDE

MODEL NUMBER		M90S-4S6K	M90S-4S12K
CAPACITY	Power Rating	6kVA/6kW	12kVA/12kW
INPUT	Voltage / frequency nominal	120/208V or 120/240V & 50/60Hz auto-sensing (2PH+N+G)	
	Voltage / frequency range	152-269VAC* (L-L) / 40-70Hz	
OUTPUT	Voltage & Frequency	120/208V or 120/240V & 50/60Hz ± 0.1Hz; (2PH+N)	
	Efficiency / THD (full load)	Up to 98% ECO mode, 93% online mode / ≤2% (Linear Load); ≤3% (None-linear Load)	
	Overload capacity	100% - 110% for 30 min; 110% - 130% for 5min; 130% - 150% for 10s; > 150% for 200ms	
BATTERY SYSTEM	Nominal voltage	+/-96V	
	Max charging (adjustable)	4A	8A
MODULE DIMENSION & WEIGHT	Power module	16.3"W x 24"D x 5.2"H / 38 lbs	
	Battery module	16.3"W x 24"D x 5.2"H / 107 lbs	
SYSTEM ENCLOSURE	Dimensions & Weight	UPS 17.4"W x 33.7"D x 33"H & 150lbs / BC7 17.4"W x 33.7"D x 45.5"H & 162lbs	
	Maximum Capacity	12kVA	
	Enclosure Capacity	4 slots including 2 universal slots + 2 battery only slots	
	Optional Battery Enclosure	7 slots for additional battery modules	
	Output Connections	Terminal blocks and/or up to 2 receptacle panels	
ENVIRONMENT	Temperature	0-40°C (32-104°F)**	
	Altitude	5,200 ft above sea level**	
	Audible noise	< 58dBA at 1m	
APPROVALS	UL-1778 (TUV), cUL, FCC A, RoHS		
WARRANTY	3 year electronics, 3 year battery (USA and Canada)		
COMMUNICATIONS INTERFACE	RS-232, USB, Dry Contacts, EPO, (2) intelligent slot for optional cards (Web/SNMP, Relay, Modbus)		
INCLUDED IN BOX	User manual, USB cable, RS-232 cable, ViewPower Software, anchor brackets		
AVAILABLE OPTIONS	L14-30P line cord (6kVA), receptacle panels (2 max), extended battery cabinet, 5 year extended warranty		

\*Depending on load level \*\*Battery Life is reduced above 30°C, UPS Capacity derates above 30°C and 5,200 ft above sea level.

## BATTERY RUNTIMES

Battery Modules	4S UPS				4S UPS + 1 BC7						4S UPS + 2 BC7				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
6kW	9	22	35	50	66	82	99	113	124*	133*	148*	163*	179*	194*	209*
12kW	2.5	9	15	22	28	35	43	50	58	66	74	82	90	99	106

Runtimes are shown in minutes and will vary based on battery age and site conditions. Maximum of 8 battery modules per UPS power module.

\*Additional power module required for battery recharge.

Receptacle Panels	
A	(8) 5-20R
B	(2) C19 + (4) 5-20R
C	L6-30R + (2) C19
D	L14-30R + (2) C19
E	(2) L6-20R + (4) 5-20R
F	L6-20R + L6-30R + (4) 5-20R
G	L6-30R + (2) L6-20R
H	(3) L6-30R

Maximum of 2 receptacle panels per enclosure

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**Maintenance Bypass**  
full wrap around maintenance bypass (located behind hinged LCD display)

**AC Terminal Blocks & breakers**

**Up to 2 receptacle panels**

**DC Terminal Blocks**

**LCD Display**  
5.7" display provides graphic display including status and alarms

**6kVA/6kW Power Module**  
includes PFC rectifier, battery charger, inverter and control circuits

**Battery Module**  
includes 16 pieces of 12V 580W batteries



M90S-4S front view



M90S-BC7 front view



M90S-4S rear view

**X-TREME**  
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