

# 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 4 slot enclosure reference at www.xpcc.com/m90s2s or www.xpcc.com/m90s4s

# PRODUCT SNAPSHOT

- > Four capacities: 6kVA/6kW, 12kVA/12kW, 18kVA/18kW, 24kVA/24kW
- 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

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

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

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

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



# **MODEL SELECTION GUIDE**

	MODEL NUMBER	M90S-6S6K	M90S-6S12K	M90S-6S18K	M90S-6S24K				
CAPACITY	Power Rating	6kVA/6kW	12kVA/12kW	18kVA/18kW	24kVA/24kW				
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	12A	16A				
MODULE DIMENSION	Power Module	16.3"W x 24"D x 5.2"H / 38 lbs							
& WEIGHT	Battery Module	16.3"W x 24"D x 5.2"H / 107 lbs							
SYSTEM ENCLOSURE	Dimensions & Weight	17.4"W x 33.7"D x 45.5"H (UPS & BC7) // UPS=180lbs / BC7=162lbs							
	Maximum Capacity	24kVA							
	Enclosure Capacity	6 slots including 4 universal slots + 2 battery only slots							
	Optional Battery Enclosure	7 slots for additional battery modules							
	Output Connections	Terminal blocks and/or up to 4 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 slots for optional cards (Web/SNMP, Relay, Modbus)							
INCLUDED IN BOX		User manual, USB cable, RS-232, ViewPower software, anchor brackets							
AVAILABLE OPTIONS		L14-30P line cord (6kVA), receptacle panels (4 max), extended battery cabinet, 5 year extended warranty							

<sup>\*</sup>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**

	6S UPS			6S UPS + 1 BC7					6S UPS + 2 BC7						
Battery Modules	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
18kW	-	5	9	13	17	22	26	31	35	40	45	50	55	61	66
24kW	-	2.5	6	9	12	15	19	22	25	28	32	35	39	43	46

Runtimes are shown in minutes and will vary based on battery age and site conditions. Maximum 8 battery modules per UPS power module. \*Additional power module required for battery recharge.

Receptacle Panels				
Α	(8) 5-20R			
В	(2) C19 + (4) 5-20R			
С	L6-30R + (2) C19			
D	L14-30R + (2) C19			
Ε	(2) L6-20R + (4) 5-20R			
F	L6-20R + L6-30R + (4) 5-20R			
G	L6-30R + (2) L6-20R			
Н	(3) L6-30R			
ΛΛανί	Maximum of A recentacle nanels			

Maximum of 4 receptacle panels per enclosure

### **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



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### **Maintenance Bypass**

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



M90S-6S front view M90S-BC7 front view

# Receptacle

**AC Terminal Blocks** 

& breakers

**Panels** install up to 4

**DC Terminal** Blocks

M90S-6S rear view