XTREME POWER CONVERSION **M90S-12S**

For more information, visit www.xpcc.com/M90S-12S

12 Slot Modular Online UPS // 208/120VAC or 240/120VAC Single-Phase

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. Integral maintenance bypass enables manual transfer of critical loads from UPS power to utility power, enabling UPS repair without power interruption to the load.

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

For capacities up to 24kW, reference the M90S-6S at www.xpcc.com/m90s-6s

PRODUCT SNAPSHOT

- Eight capacities: 6kW, 12kW, 18kW, 24kW, 30kW, 36kW, 42kW, 48kW
- Modular for capacity or redundancy
- Hot swappable power and battery modules
- Up to 98% ECO mode or 93% online efficiency
- UL-1778 (TUV), cUL, FCC A, RoHS, TAA compliant
- 3 year electronics, 3 year battery (USA and Canada); 1 year outside the 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

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

Universal slots —UPS slots accept power modules or battery modules providing maximum capacity and run-time flexibility

System Touch LCD display — 10” display provides graphic system level display including status and alarms

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

$50,000 load protection policy — offers protection against damaged connected equipment

XTREME Power Conversion®
Protect your business.

TAA

MODEL SELECTION GUIDE

For more information, visit www.xpcc.com/M90S-12S

MODEL NUMBER		M90S-12S6K	M90S-12S12K	M90S-12S18K	M90S-12S24K	M90S-12S30K	M90S-12S36K	M90S-12S42K	M90S-12S48K
CAPACITY	Power Rating	6kW	12kW	18kW	24kW	30kW	36kW	42kW	48kW
INPUT	Voltage/Frequency Nominal	120/208V or 120/240V // 50/60Hz auto-sensing							120/240V
	Connections	2PH+N+G							
OUTPUT	Voltage & Frequency	120/208V or 120/240V // 50/60Hz auto-sensing							120/240V
	Connections	2PH+N							
	Efficiency / THD (full load)	Up to 98% ECO mode, 93% online mode / ≤2% (Linear load);≤3% (Non linear load)							
	Overload Capacity	100% - 110% for 30 min; 110% - 130% for 5min; 130% - 150% for 10s; > 150% for 200ms							
BATTERY SYSTEM	Nominal Voltage	+/-96VDC (default) or +/-120VDC							
	Max charging (adjustable)	4A per Power Module							
MODULE DIMENSIONS & WEIGHT	Power Module	16.3"W x 24"D x 5.2"H / 38 lbs							
	Battery Module (M90S-BMXRV2)	16.3"W x 24"D x 5.2"H / 107 lbs							
	Battery Module (M90-BCBAT)	7.3"W x 38.5"D x 3.2"H / 85 lbs							
ENCLOSURE DIMENSIONS & WEIGHTS	M90S-12S UPS	23.6"W x 36.0" D x 79.1"H // 586 lbs without modules							
	M90-BC External Battery Cabinet	23.6"W x 43.8" D x 79.1"H // 416 lbs without modules							
ENVIRONMENT	Temperature	0–40°C (32–104°F)							
	Altitude	5,200 ft above sea level							
APPROVALS		UL-1778 (TUV), cUL, FCC A, RoHS, TAA compliant							
WARRANTY		3 year electronics, 3 year battery (USA and Canada); 1 year outside the 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, standard anchor brackets							

BATTERY RUNTIMES

Battery Modules	M90S-12S UPS with internal battery modules (+/-96VDC)									
	1	2	3	4	5	6	7	8	9	10
6KW	9	23	37	53	69	86	103	117	127*	139*
12KW	-	9	16	23	30	37	45	53	61	69
18KW	-	-	9	14	18	23	27	32	37	-
24KW	-	-	6	9	13	16	19	23	-	-
30KW	-	-	-	7	9	12	15	-	-	-
36KW	-	-	-	-	7	9	-	-	-	-
42KW	-	-	-	-	6	-	-	-	-	-
48KW	-	-	-	-	-	-	-	-	-	-

*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.*

Battery Modules	Change to M90S-12S UPS with M90-BC (+/-120VDC)							
	4	8	12	16	20	24	28	32
6KW	32	77	127	175	228*	285*	337*	391*
12KW	14	32	53	77	103	127	150	175
18KW	7	19	32	46	61	77	94	112
24KW	-	14	22	32	42	53	65	77
30KW	-	10	17	24	32	40	49	58
36KW	-	7	14	19	25	32	39	46
42KW	-	5	11	16	21	26	32	38
48KW	-	-	9	14	17	22	27	32

*No Internal batteries in M90S-12S UPS enclosure. Maximum 16 battery modules per UPS power module (1A per string). *Additional power module required for battery recharge.*

Top Feed Cable Entry provides easy installation access

Control Module provides dry contacts, EPO, RS232, USB communications and two slots for SNMP or Modbus

6kW Power Module includes rectifier, inverter and static switch

Maintenance Bypass

12 Module Slots (8) Universal, (4) Battery Only

Battery Module M90S-BMXRV2

M90S-12S 42kW with 6 minute battery (door removed)

Battery Modules each string protected with 100A breaker

M90-BC front view

XTREME Power Conversion®

Protect your business.

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