

# XTREME POWER CONVERSION M90

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

For more information, visit [www.xpcc.com/m90](http://www.xpcc.com/m90)



## Mission Critical Availability while reducing costs with Scalable, Modular M90 for 15kVA to 60kVA applications

The M90 is a scalable modular online double conversion UPS that protects critical data and equipment from power problems while supplying clean and reliable network grade power.

M90 can be configured with a fully redundant power module and battery modules. Should one module fail, the remaining modules smoothly take over the load. Because the power modules are independent, they can be hot swapped without risk to the critical load.

As power requirements change, M90 modularity makes it easy to add modules and increase capacity.

### PRODUCT SNAPSHOT

- › Six capacities: 15kVA, 20kVA, 30kVA, 40kVA, 45kVA, 60kVA
- › Modular for capacity or redundancy
- › Hot swappable power modules
- › Certified 94.1% online mode, or 98% ECO mode
- › UL-1778 (TUV), cUL, FCC A, RoHS, TAA (select models)
- › 2 year electronics, 2 year battery warranty (USA and Canada)

### FEATURES

**Scalable**—when power and runtime requirements change M90 modularity makes it easy to add modules and increase capacity

**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

**Dual or single utility input**—provides maximum installation flexibility

**Maintenance bypass**—manually transfer critical loads from UPS power to utility power, enabling M90 maintenance

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

**Mounting**—Standard Floor Mount Brackets included. Seismic Hold Down Anchorage available

# MODEL SELECTION GUIDE

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MODEL NUMBER		M90-15	M90-30	M90-45	M90-20	M90-40	M90-60
CAPACITY	Power rating	15kVA/13.5kW	30kVA/27kW	45kVA/40.5kW	20kVA/18kW	40kVA/36kW	60kVA/54kW
	Enclosure capacity: power modules	Up to 45kVA (3 x 15kVA)			Up to 60kVA (3 x 20kVA)		
	Enclosure capacity: battery modules	Up to 12 internal battery modules					
INPUT	Voltage / frequency nominal	208Y/120V three-phase, 50/60Hz auto-sensing					
	Voltage / frequency range	121–253VAC* (L-L), 40–70Hz					
OUTPUT	Voltage / Frequency	208Y/120V three-phase, 50/60Hz ± 0.5Hz					
	THD (full load)	< 2%					
	Efficiency	Certified 94.1% online mode, or 98% ECO mode					
	Overload capacity	105%-110% for 60min; 110%-125% for 10min; 126%-150% for 1min; >150% for 200ms					
BATTERY SYSTEM	Nominal voltage	± 120V					
	Charge Current (programable)	8A	16A	24A	8A	16A	24A
DIMENSIONS & WEIGHT	Enclosure	20.3"W x 39.4"D x 54"H / 484 lbs					
	Power module	19.0"W x 28.0"D x 5.1"H / 74 lbs (20kVA) / 72 lbs (15kVA)					
	Battery module	4.1"W x 28.3"D x 6.0"H / 68 lbs					
ENVIRONMENT	Temperature	0–40°C (32–104°F)**					
	Altitude	5,200 ft above sea level**					
	Audible noise	< 65dBA at 1m					
APPROVALS	UL-1778 (TUV), cUL, FCC A, RoHS, TAA (select models)						
WARRANTY	2 years (USA and Canada)						
COMMUNICATIONS INTERFACE	RS-232, EPO, intelligent slot for optional cards (Web/SNMP, Relay, Modbus)						
INCLUDED IN BOX	User manual, RS-232 cable, Ramp for unloading UPS enclosure, Floor Mount Brackets						
AVAILABLE OPTIONS	External maintenance bypass, 480V input transformer, battery temperature sensor, Seismic Hold Down Anchorage						

\*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

System Load (kVA)	5	10	15	20	25	30	35	40	45	50	55	60
2 battery modules	16	6	-	-	-	-	-	-	-	-	-	-
4 battery modules	37	16	9	6	-	-	-	-	-	-	-	-
6 battery modules	60	26	16	11	8	6	-	-	-	-	-	-
8 battery modules	84	37	22	16	12	9	7	6	5	-	-	-
10 battery modules	109	48	29	21	16	12	10	8	7	6	5	-
12 battery modules	126	60	37	26	20	16	13	11	9	8	7	6

Runtimes are shown in minutes and will vary based on battery age and site conditions.

### LCD Display

5.7" display provides graphic display including status and alarms

### UPS Power Module

20kVA/18kW or 15kVA/13.5kW

### Battery Module

removable battery pack trays



M90 front view (panel removed)

### Maintenance Bypass

full wrap around maintenance bypass with static switch interface

### STS & Control

includes control, power and communication circuits, static transfer switch and fuses

### Cable Entry

cable entry for M90 is on rear, side or bottom

### Cabinet Skirt

optional cabinet skirt covers wheels and leveling feet



M90 rear view

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