

XTREME POWER CONVERSION M90U-80

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

For more information, visit www.xpcc.com/m90u-80



Scalable, modular UPS for mission critical availability

The M90U-80 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.

M90U-80 can be configured with a fully redundant power module and battery modules. Should one module fail, the remaining modules smoothly take over the load. The power modules are independent and can be hot swapped without risk to the critical load.

For capacities up to 140kVA N+1 reference
www.xpcc.com/m90u-140

PRODUCT SNAPSHOT

- › Capacities: 15kVA/15kW, 20kVA/20kW, 30kVA/30kW, 40kVA/40kW, 45kVA/45kW, 60kVA/60kW, 80kVA/80kW
- › Hot swappable power and battery modules
- › UL-1778, cUL, FCC A, RoHS, TAA compliant
- › 2 year electronics, 2 year battery warranty (USA and Canada)

FEATURES

Unity output power factor—
M90U-80 systems provide more real capacity for high density loads

Scalable—when power or runtime requirements change M90U-80 modularity makes it easy to add modules and increase capacity

Power module ratings—
15kVA/15kW or 20kVA/20kW modules available

Modular static switch—
for easier maintenance

Maintenance bypass—
front mounted MBP switch transfers critical loads from UPS power to utility power, enabling maintenance

Large Touchscreen LCD display—10" display provides graphic display including status and alarms

Dual or single utility input—
provides maximum installation flexibility

MODEL SELECTION GUIDE

MODEL NUMBER		M90U80-20k	M90U80-40k	M90U80-60k	M90U80-80k
CAPACITY	Power rating	20kVA/20kW	40kVA/40kW	60kVA/60kW	80kVA/80kW
	Enclosure capacity: power modules	Up to 80KVA (4 x 20KVA) or up to 60kVA (4 x 15KVA)			
	Enclosure capacity: battery modules	4, 8, 12, or 16 internal battery modules			
INPUT	Voltage / frequency nominal	208/120V, 50/60Hz auto-sensing			
	Voltage / frequency range	121-253VAC* (L-L), 40-70Hz			
OUTPUT	Voltage	208/120V			
	Frequency	50/60Hz $\pm$ 0.5Hz			
	THD (full load)	< 2%			
	Efficiency	Up to 94% 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	$\pm$ 120V			
	Charge Current (programmable)	8A	16A	24A	32A
DIMENSIONS & WEIGHT	Enclosure	23.6"W x 43.3"D x 79.1"H / 657 lbs			
	Power module	19.3"W x 29.0"D x 5.2"H / 74 lbs (20kVA) / 72 lbs (15kVA)			
	Battery module	4.3"W x 28.5"D x 6.5"H / 70 lbs			
ENVIRONMENT	Temperature	0-40°C (32-104°F)**			
	Altitude	5,200 ft above sea level**			
	Audible noise (typical)	< 69dBA at 1m			
APPROVALS		UL-1778, cUL, FCC A, RoHS, TAA compliant			
WARRANTY		2 years (USA and Canada)			
COMMUNICATIONS INTERFACE		RS-232, EPO, intelligent slot for optional cards (Web/SNMP, Modbus), optional relay card			
INCLUDED IN BOX		User manual, RS-232 cable, unloading ramp, ViewPower Software			
AVAILABLE OPTIONS		External maintenance bypass, 480V input transformer, output distribution, battery temperature sensor			

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

INTERNAL BATTERY RUNTIMES

System Load (kVA)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
4 battery modules	34	15	8.5	5.4	-	-	-	-	-	-	-	-	-	-	-	-
8 battery modules	78	34	21	15	11	8.5	6.9	5.4	-	-	-	-	-	-	-	-
12 battery modules	115	55	34	24	18	15	12	9.9	8.5	7.3	6.4	5.4	-	-	-	-
16 battery modules	154	78	48	34	26	21	17	15	13	11	9.5	8.5	7.6	6.9	6.0	5.4

Runtimes are shown in minutes and will vary based on battery age and site conditions. Runtimes are based on fully formed batteries. For extended runtimes, reference www.xpcc.com/selector or contact sales@xpcc.com.

Maintenance Bypass
front mounted MBP switch transfers critical loads from UPS power to utility power, enabling maintenance

20kVA or 15kVA Power Module
up to 4 modules for up to 80kVA capacity or 60kVA N+1

Top Feed Cable Entry
provides easy installation access

STS Module
static switch with redundant power supplies

Battery Module
up to 16 hot swappable battery modules

10" LCD Display



M90U-80 front view
(door removed)



M90U-80 front view
(door closed)

X-TREME
Power Conversion®

Protect your business.

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