

XTREME POWER CONVERSION M90U-140

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

For more information, visit www.xpcc.com/m90u-140



Scalable, modular UPS for mission critical availability

The M90U-140 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-140 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 modular configurations up to 80kVA also reference www.xpcc.com/m90u-80

PRODUCT SNAPSHOT

- › Capacities: 15kVA, 20kVA, 30kVA, 40kVA, 45kVA, 60kVA, 75kVA, 80kVA, 90kVA, 100kVA, 105kVA, 120kVA, 140kVA
- › Hot swappable power and battery modules
- › UL-1778, cUL, FCC A, RoHS, TAA (select models)
- › 2 year electronics, 2 year battery warranty (USA and Canada)

FEATURES

Unity output power factor— M90-140U systems provide more real capacity for high density loads

Scalable—when power and runtime requirements change M90U-140 modularity makes it easy to add modules and increase capacity

Power module ratings— 15kW or 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		M90U140-20k	M90U140-40k	M90U140-60k	M90U140-80k	M90U140-100k	M90U140-120k	M90U140-140k
CAPACITY	Power rating	20kVA/20kW	40kVA/40kW	60kVA/60kW	80kVA/80kW	100kVA/100kW	120kVA/120kW	140kVA/140kW
	Power modules	Up to 140KVA N+1 (8 x 20KVA) or up to 105kVA N+1 (8 x 15KVA)						
INPUT	Voltage nominal	208/120V						
	Frequency nominal	50/60Hz auto-sensing						
	Voltage range	121–253VAC* (L-L)						
	Frequency range	40–70Hz						
OUTPUT	Voltage	208/120V						
	Frequency	50/60Hz ± 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						
UPS PHYSICAL	Dimensions & weight	23.6"W x 43.3"D x 79.1"H / 657 lbs + 74 lbs per module						
ENVIRONMENT	Temperature	0–40°C (32–104°F)**						
	Altitude	5,200 ft above sea level**						
	Audible noise (typical)	< 69dBA at 1m						
BATTERY ENCLOSURE	Charge current (max)	8A	16A	24A	32A	40A	48A	56A
	Dimensions & weight	23.6"W x 43.3"D x 79.1"H / 860 lbs + 85 lbs per module						
	Hot Swappable battery modules (4 per string)	Up to 8 strings with individual breakers						
APPROVALS		UL-1778, 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, Modbus), optional relay card						
INCLUDED IN BOX		User manual, RS-232 cable, unloading ramp, ViewPower Software						
AVAILABLE OPTIONS		External maintenance bypass, 480V input transformer						

*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)	10	20	30	40	50	60	70	80	90	100	110	120	130	140
4 battery modules	15	5	-	-	-	-	-	-	-	-	-	-	-	-
8 battery modules	36	15	9	5	-	-	-	-	-	-	-	-	-	-
12 battery modules	61	25	15	10	7	5	-	-	-	-	-	-	-	-
16 battery modules	88	36	22	15	12	9	7	5	-	-	-	-	-	-
20 battery modules	115	48	29	20	15	12	10	8	6	5	-	-	-	-
24 battery modules	140	61	36	25	19	15	13	10	9	7	6.1	5	-	-
28 battery modules	168	74	44	31	23	18	15	13	11	9	8	6.9	5.9	5
32 battery modules	196	88	52	36	27	22	18	15	13	12	10	8.7	7.6	6.7

Runtimes are shown in minutes and will vary based on battery age and site conditions. For longer runtimes please contact sales@xpcc.com

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

Up to 8 Battery Strings
Strings each protected with 100A breaker

Battery Module
hot swappable module

Top Feed Cable Entry
provides easy installation access

10" Touch LCD Display

STS Module
static switch with redundant power supplies

20kW or 15kW Power Module
up to 8 modules for up to 140kVA capacity or 120kVA N+1



X-TREME
Power Conversion®

Protect your business.

XPC USA / Denver, CO / sales@xpcc.com

www.xpcc.com

©2026 Xtreme Power Conversion Corporation. All Rights Reserved. M90-140.01U (4/14/26)

M90-140 front view