

# XTREME POWER CONVERSION M90U-140

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

For more information, visit [www.xpcc.com/m90u-140](http://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](http://www.xpcc.com/m90u-80)

**XTREME**  
Power Conversion®  
Protect your business.

### 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 / 735 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	16	5	-	-	-	-	-	-	-	-	-	-	-	-
8 battery modules	40	16	10	5	-	-	-	-	-	-	-	-	-	-
12 battery modules	67	28	16	12	8	5	-	-	-	-	-	-	-	-
16 battery modules	97	40	24	16	13	10	7	5	-	-	-	-	-	-
20 battery modules	126	53	32	22	16	13	11	9	7	5	-	-	-	-
24 battery modules	154	67	40	28	21	16	14	12	10	8	6.7	5	-	-
28 battery modules	185	82	49	34	25	20	16	14	12	10	9	7.6	6.5	5
32 battery modules	216	97	58	40	30	24	20	16	15	13	11	9.6	8.4	7.3

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 125A breaker

**Battery Module**  
hot swappable module



M90-140 front view

**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



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