

# 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)

### 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

**XTREME**  
Power Conversion®

Protect your business.

# 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](mailto: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



**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

M90-140 front view



Protect your business.

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