

Scalable, Modular, Compact 480V UPS

The X90-2S 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.

The fully integrated X90-2S UPS includes maintenance bypass and batteries (up to 100kW) in single cabinet providing the most compact footprint and simplifying installation.

For 208/120VAC 3 phase UPS, reference the M90-80 www.xpcc.com/m90-80 & M90-140 www.xpcc.com/m90-140





PRODUCT SNAPSHOT

- › Capacities: 50kW, 70kW, 100kW, 140kW
- > 65kAIC rating
- > Hot swappable power and battery modules
- > UL-1778, cUL, FCC A, RoHS, TAA, Energy Star
- > 2 year warranty (USA and Canada)

FEATURES

Highest availability—
system can be configured
with redundant power and
battery modules

Reduce energy cost— online efficiency up to 96.5% and ECO mode up to 99%

Power module ratings— 50kW or 70kW modules available

Internal Batteries internal batteries provide up to 6 minutes at 100kW load

Full front access no rear clearance required for maintenance

Maintenance bypass integral front bypass enables

maintenance and repair

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

Dual or single utility input— provides maximum installation flexibility

Cable Access —top cable access is standard. Optional 6" side car kit is available for bottom entry

MODEL SELECTION GUIDE

| | MODEL NUMBER | X90-2S50k | X90-2S70k | X90-2S100k | X90-2S140k | | | | |
|--------------------------|------------------------------------|---|------------|--------------|--------------|--|--|--|--|
| CAPACITY | Power rating | 50kVA/50kW | 70kVA/70kW | 100kVA/100kW | 140kVA/140kW | | | | |
| CABINET | X90-2S UPS: power modules | Up to 140kW (2 x 70kW) or up to 100kVA (2 x 50kW) | | | | | | | |
| CAPACITY | X90-2S UPS: battery modules | 4, 8, 12, 16 or 20 battery modules | | | | | | | |
| | X90-BC: battery modules | Up to 36 additional battery modules | | | | | | | |
| INPUT | Voltage/frequency nominal | 480VAC (3W), 50/60Hz auto-sensing | | | | | | | |
| | Voltage/frequency range | 480VAC or +20/-20% VAC three-phase, 40-70Hz | | | | | | | |
| OUTPUT | Voltage/frequency range | 480VAC (3W), 50/60Hz auto-sensing | | | | | | | |
| | Efficiency | Up to 96.5% online mode or 99% ECO mode | | | | | | | |
| | Overload capacity | 105%-110% for 60min; 110%-125% for 10min; 126%-150% for 1min; >150% for 200ms | | | | | | | |
| BATTERY SYSTEM | Nominal voltage | +/-240VDC | | | | | | | |
| | Charge Current (programable) | 18A | 18A | 36A | 36A | | | | |
| DIMENSIONS & | UPS & battery cabinet (W x D x H) | 23.6 x 42 x 79 in / 357 lbs (UPS) / 23.6 x 42 x 79 in 878 lbs (BC) | | | | | | | |
| WEIGHTS | Power & battery module (W x D x H) | 4.2 x 28 x 6 in / 104 lbs (PM) 17.2 x 29.5 x 5.25 in / 70 lbs (BM) | | | | | | | |
| 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, Energy Star | | | | | | | |
| WARRANTY | | 2 years (USA and Canada) | | | | | | | |
| COMMUNICATIONS INTERFACE | | RS-232, EPO, Relays, Intelligent slot for optional cards (Web/SNMP, Modbus) | | | | | | | |
| INCLUDED IN BOX | | User manual, RS-232 cable, unloading ramp, ViewPower Software | | | | | | | |
| AVAILABLE OPTIONS | | External maintenance bypass, battery temperature sensor, side car kit for bottom cable access (increases width by 6") | | | | | | | |

BATTERY RUNTIMES

| | X90-2S UPS | | | | X90-2S UPS + X90-BC | | | | | | | | |
|-----------------|------------|----|----|----|---------------------|----|----|----|----|----|----|----|----|
| Battery Modules | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 | 52 | 56 |
| 30kW | 9 | 15 | 21 | 27 | 34 | 41 | 48 | 56 | 63 | 71 | 79 | 87 | 95 |
| 50kW | - | 7 | 11 | 15 | 18 | 22 | 26 | 30 | 34 | 38 | 43 | 47 | 52 |
| 70kW | - | - | 7 | 10 | 12 | 15 | 17 | 20 | 23 | 26 | 28 | 31 | 35 |
| 80kW | - | - | 6 | 8 | 10 | 13 | 15 | 17 | 19 | 22 | 24 | 27 | 29 |
| 100kW | - | - | - | 6 | 7 | 9 | 11 | 13 | 15 | 17 | 18 | 20 | 22 |
| 140kW | - | - | - | - | - | 6 | 7 | 8 | 10 | 11 | 12 | 14 | 15 |

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



Touch LCD Display

65kAIC Breakers
Input, output & maintenance bypass

Battery Module includes 10 pieces of

12V 580W batteries



Battery Switch

Power Module 50kW or 70kW each



Battery Breaker

Battery Enclosure Includes slots for up 36 battery modules



X90-2S 100kW UPS (door removed)

X90-BC Battery Cabinet