

## SmartOnline 80kVA Modular 3-Phase UPS System, On-line Double-Conversion International UPS with Battery

MODEL NUMBER: **SU80KX/40C**



### Description

Tripp Lite's SU80KX (80kVA) SmartOnline Modular 3-Phase Intelligent, True On-Line UPS System provides 100% system availability with N+1 modular architecture and 1+1 parallel capability. In N+1 configuration, the SU80KX provides four self-contained, redundant 20kVA power modules that can be hot-swapped (load remaining powered) if maintenance is required. In 1+1 configuration, two SU80KX models connected in parallel can provide fail-safe redundancy (two 80kVA models supporting a 80kVA load) or increased capacity (two 80kVA models supporting a 160kVA load).

The SU80KX provides mission-critical equipment with the highest level of power protection available. Large capacity 80,000VA/64,000W UPS continually converts incoming AC power into filtered DC power, and then resynthesizes it back into AC power with a pure sine wave. Perfectly regulated, continuous sine wave output with zero transfer time assures compatibility with all equipment types. High input power factor, advanced IGBT inverter technology and Digital Signal Processor (DSP) technology produce less than 3% input total harmonic distortion (THDi). With low THDi, generators run cooler and last longer, allowing managers to save installation costs by installing a generator with a capacity equal to the equipment load (1:1 ratio). Extremely efficient operation (up to 97%) saves money by lowering electricity consumption. Hardwire input and output connections. The SU80KX features 220/380V, 230/400V or 240/415V AC, 3-phase, 4-wire + ground, wye input and output. It also features a wide input voltage correction range: 173-300V/276-477V AC. Frequency is 50 or 60 Hz (auto-selectable). SU80KX power modules are housed in a single small-footprint tower compartment. Included battery module (Models BP480V40C) are housed in a separate stand-alone hardwired external battery compartment (required for UPS operation/backup battery support; order separately). Battery runtime can be extended with additional stand-alone hardwired external battery modules. A manual bypass breaker and an automatic bypass function ensure 100% availability of connected equipment by safely passing through AC power if the UPS requires maintenance. A built-in RS-232 communication port works with PowerAlert Software, available via free download, to provide shutdown commands and condition reporting. An accessory slot accepts an

### Highlights

- 80,000 VA (80kVA) 3-phase tower UPS w/external battery pack
- N+1 redundant modular architecture helps assure 100% availability
- 1+1 parallel capability allows for system redundancy or increased capacity
- Low THDi reduces installation costs by permitting 1:1 generator sizing
- 3-phase hardwire (220/380V, 230/400V or 240/415V AC, 3-phase, 4-wire + ground, wye) input/output
- IGBT technology and zero transfer time, on-line, double-conversion operation
- Runtime is expandable via additional external battery cabinet options

### Package Includes

- SU80KX UPS System
- BP480V40C external battery pack
- Serial cable
- Instruction manual
- Warranty information

optional internal SNMP card (Model SNMPWEBCARD) for remote shutdowns, reboots and more. Front panel combination LCD/LED display alerts users to a variety of UPS operational modes and conditions. The LCD display includes a real-time event log screen with up to 500 events listed. A dynamic battery management screen optimizes battery function to lengthen service life and allow cold restart of the UPS during a prolonged blackout to utilize its batteries for periodic system access or data retrieval. An Emergency Power Off button turns the UPS output OFF and disables Bypass output. A built-in Emergency Power Off (EPO) dry-contact interface supports remote emergency shutdown in large facilities.

## Features

- N+1 configuration: If maintenance is required, four self-contained, redundant 20kVA power modules can be hot-swapped with the load remaining powered
- 1+1 configuration: Two SU80KX can be connected in parallel to provide either fail-safe redundancy or increased capacity
- High input power factor, advanced IGBT inverter technology and Digital Signal Processor (DSP) technology produce low input total harmonic distortion (THDi)
- Low THDi (less than 3%) reduces installation costs by allowing 1:1 generator sizing
- Extremely efficient operation (up to 97%) saves money by reducing electricity consumption
- True on-line, double-conversion UPS with IGBT technology provides pure sine wave AC output at all times
- Maintains continuous operation with zero transfer time through blackouts, voltage fluctuations and surges
- Removes harmonic distortion, electrical impulses, frequency variations and other hard-to-solve power problems
- 80,000VA/64,000W power capacity with 3-phase, hardwire input/output connections
- Wide input voltage correction range: 173-300V/276-477V AC
- Precision +/-1% output voltage regulation
- Included battery module (Model BP480V40C) are housed in a separate, stand-alone hardwired external battery compartment (required for UPS operation/backup battery support; order separately)
- Battery runtime can be extended with additional stand-alone hardwired external battery modules (Models BP480V26B and BP480V40C; order separately)
- Front panel combination LCD/LED display includes a real-time event log screen with up to 500 events listed
- Dynamic battery management screen optimizes battery function to lengthen service life and allow cold restart of the UPS
- Serial port enables data-saving unattended shutdown when used with Tripp Lite's PowerAlert software, available via FREE download from [www.tripplite.com/poweralert](http://www.tripplite.com/poweralert)
- Accessory slot accepts an optional internal SNMP card (Model SNMPWEBCARD) for remote shutdowns, reboots and more
- Emergency Power Off button turns UPS output OFF and disables Bypass output
- Built-in Emergency Power Off (EPO) dry-contact interface supports remote emergency shutdown in



large facilities

## Specifications

OVERVIEW	
UPC Code	037332141422
UPS Type	On-Line
INPUT	
Nominal Input Voltage(s) Supported	220/380V 3-PH Wye; 230/400V 3-PH Wye; 240/415V 3-PH Wye
UPS Input Connection Type	Hardwire
Recommended Electrical Service	3-Phase Wye, 4 wire (L1, L2, L3, N, G)
Maximum Input Amps Details	97A/101A/105A
Input Connection Type	Hardwire
Input Phase	3-Phase
OUTPUT	
Output Volt Amp Capacity (VA)	80000
Output kVA Capacity (kVA)	80
Output Watt Capacity (Watts)	64000
Output kW Capacity (kW)	64
Frequency Compatibility	50 / 60 Hz
Output AC Waveform (Battery Mode)	Pure Sine wave
Nominal Output Voltage(s) Supported	220/380V 3-PH Wye; 230/400V 3-PH Wye; 240/415V 3-PH Wye
Output Receptacles	Hardwire
Output Nominal Voltage	220/380V, 230/400V or 240/415V AC, 3-phase, 4-wire + ground, wye
Output Voltage Regulation	Maintains pure sine wave output at all times, regulated within 1% of nominal output voltage, with less than 3% total harmonic distortion (using IGBT Inverter)
Output Frequency Regulation	Regulates line frequency at 50 or 60 Hz, +/- .05 Hz
Individually Controllable Load Banks	No
BATTERY	
Full Load Runtime (min.)	3.5 minutes (64,000w) with included battery pack
Half Load Runtime (min.)	9.6 minutes (32,000w) with included battery pack



Expandable Battery Runtime	Supports extended runtime with additional stand-alone external battery modules: Models <a href="http://www.tripplite.com/External-Battery-Pack-for-select-Tripp-Lite-3-Phase-UPS-Systems~BP480V26B">BP480V26B</a> and <a href="http://www.tripplite.com/External-Battery-Pack-for-select-Tripp-Lite-3-Phase-UPS-Systems~BP480V40C">BP480V40C</a> ;
Expandable Runtime	Yes
DC System Voltage (VDC)	+/- 240VDC
Battery Pack Accessory (Optional)	External battery modules: Models <a href="http://www.tripplite.com/External-Battery-Pack-for-select-Tripp-Lite-3-Phase-UPS-Systems~BP480V26B">BP480V26B</a> and <a href="http://www.tripplite.com/External-Battery-Pack-for-select-Tripp-Lite-3-Phase-UPS-Systems~BP480V40C">BP480V40C</a> ;
Typical Battery Lifespan	3-6 years, depending on usage
<b>VOLTAGE REGULATION</b>	
Voltage Regulation Description	On-line, double-conversion process enables UPS to maintain output voltage within +/-1% of nominal voltage at all times
Overvoltage Correction	Maintains continuous operation without using battery power during overvoltages to 276-477V AC (3-phase, 4-wire, wye), reducing output within 1% of nominal
Brownout Correction	Maintains continuous operation without using battery power during brownout/undervoltage conditions to 173-300V AC (3-phase, 4-wire, wye)
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	
Front Panel LEDs	Selectable LCD Display: Displays Real-Time Event Log with up to 500 events listed. Also displays a wide range of UPS operational and fault/warning conditions including operational mode, alarm/shutdown conditions, input/output voltage/frequency, battery voltage, load percentage and more. 4-LED Display: Displays normal AC input, on battery power, bypass input and fault conditions
Switches	ON button turns UPS inverter on. OFF button turns UPS inverter off. LCD Display Control Buttons browse through and select items displayed on LCD screen. EPO (Emergency Power Off) button turns UPS output off and disables Bypass output
Audible Alarm	Alarms signal a variety of operational conditions: low battery, overload, shutdown, bypass and more
<b>SURGE / NOISE SUPPRESSION</b>	
EMI / RFI AC Noise Suppression	Yes
AC Suppression Joule Rating	5950
AC Suppression Response Time	Instantaneous
<b>PHYSICAL</b>	
Cooling Method	Built-in cooling fans
Form Factors Supported	Tower
Installation Form Factors Supported with Included Accessories	Tower
Material of Construction	Steel
Primary Form Factor	Tower
Shipping Dimensions (hwd / cm)	193.04 x 72.39 x 114.30
Shipping Dimensions (hwd / in.)	76.00 x 28.50 x 45.00



**Tripp Lite**  
 1111 W. 35th Street  
 Chicago, IL 60609 USA  
 Telephone: 773.869.1234  
[www.tripplite.com](http://www.tripplite.com)

Shipping Weight (kg)	807.39
Shipping Weight (lbs.)	1780.00
Unit Dimensions (hwd / cm)	116.8 x 52.1 x 85.6
Unit Dimensions (hwd / in.)	46 x 20.5 x 33.7 (UPS) 67 x 20.5 x 33.7 (external battery cabinet)
Unit Weight (kg)	971.14
Unit Weight (lbs.)	2141
<b>ENVIRONMENTAL</b>	
Storage Temperature Range	+5 to +122 degrees Fahrenheit, -15 to +50 degrees Celsius
Relative Humidity	<90%, non-condensing
AC Mode BTU / Hr. (Full Load)	14016
Battery Mode BTU / Hr. (Full Load)	13951
Operating Temperature	+32 to +104 degrees Fahrenheit, 0 to +40 degrees Celsius
<b>COMMUNICATIONS</b>	
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert Local software at <a href="http://www.tripplite.com/poweralert">http://www.tripplite.com/poweralert</a>
Network Monitoring Port	Built-in RS-232 communication port
EPO Port	EPO (emergency power off) interface
SNMP Compatibility	Built-in accessory slot accommodates internal SNMP card (Model <a href="http://www.tripplite.com/SNMP-Web-Management-Accessory-Card-SmartPro-SmartOnline-UPS-Systems~SNMPWEBCARD">SNMPWEBCARD</a> ) and other network accessories
Communications Interface	DB9 Serial; Slot for SNMP/Web interface
<b>LINE / BATTERY TRANSFER</b>	
Transfer Time (Line Power to Battery Mode)	Zero transfer time: True on-line UPS continuously converts incoming AC to DC, then back to AC. When line power is interrupted, UPS maintains continuous output from battery reserves with absolutely no disruption in output AC power
Low Voltage Transfer to Battery Power	Maintains continuous operation without using battery power during brownout/undervoltage conditions to 173-300V AC (3-phase, 4-wire, wye). Below this point, output is maintained utilizing reserve battery power
High Voltage Transfer to Battery Power	Maintains continuous operation without using battery power during overvoltages to 276-477V AC (3-phase, 4-wire, wye), reducing output within 1% of nominal. Above this point, output is maintained utilizing reserve battery power
<b>SPECIAL FEATURES</b>	
High Availability UPS Features	Auto Probe Monitoring (requires WEBCARDLX); Zero transfer time; On-Line/Double-Conversion
Cold Start	Inverter can be cold-started via the control panel to enable temporary AC output during a power failure
<b>STANDARDS &amp; COMPLIANCE</b>	
Certifications	CE (EN62040-1-1)
UPS Certifications	CE
<b>WARRANTY</b>	



**Tripp Lite**  
1111 W. 35th Street  
Chicago, IL 60609 USA  
Telephone: 773.869.1234  
[www.tripplite.com](http://www.tripplite.com)

Product Warranty Period (International)	2-year limited warranty
Product Warranty Period (Mexico)	1-year limited warranty
Product Warranty Period (Puerto Rico)	2-year limited warranty
Optional Coverage	Extended warranties and on-site service contracts available for select opportunities; contact Tripp Lite for details
3-Phase Warranty Statement	<a href="#">Tripp Lite 3-Phase UPS Factory Warranty</a>

© 2021 Tripp Lite. All rights reserved. All product and company names are trademarks or registered trademarks of their respective holders. Use of them does not imply any affiliation with or endorsement by them. Tripp Lite has a policy of continuous improvement. Specifications are subject to change without notice. Tripp Lite uses primary and third-party agencies to test its products for compliance with standards. See a list of Tripp Lite's testing agencies: <https://www.tripplite.com/products/product-certification-agencies>