

## SmartOnline 80kVA Modular 3-Phase UPS System, On-line Double-Conversion International UPS (not expandable to 120kVA)

MODEL NUMBER: SU80KX



### 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). 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. Frequency is 50 or 60 Hz (auto-selectable). SU80KX power modules are housed in a single small-footprint tower compartment. Battery module (Model BP480V40C) is 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.

### 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

### Highlights

- 80,000 VA (80kVA) 3-phase tower UPS
- 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 external battery cabinet options

### Package Includes

- SU80KX UPS System
- Serial cable
- Instruction manual
- Warranty information



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
- Battery modules (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 (Model 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)
- Compatible Tripp Lite UPS management card options TLNETCARD, WEBCARDLX and SNMPWEBCARD support a wide variety of UPS control and monitoring capabilities
- 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

| OUTPUT                        |       |
|-------------------------------|-------|
| Output Volt Amp Capacity (VA) | 80000 |
| Output kVA Capacity (kVA)     | 80    |
| Output Watt Capacity (Watts)  | 64000 |
| Output kW Capacity (kW)       | 64    |
| Power Factor                  | 0.8   |



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|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Crest Factor                                 | 3:1                                                                                                                                                                                                                                       |
| Nominal Output Voltage(s) Supported          | 220/380V 3-PH Wye; 230/400V 3-PH Wye; 240/415V 3-PH Wye                                                                                                                                                                                   |
| Frequency Compatibility                      | 50 / 60 Hz                                                                                                                                                                                                                                |
| Output Voltage Regulation (Line Mode)        | +/-1%                                                                                                                                                                                                                                     |
| Output Voltage Regulation (Battery Mode)     | +/-1%                                                                                                                                                                                                                                     |
| Output Receptacles                           | Hardwire                                                                                                                                                                                                                                  |
| Output AC Waveform (AC Mode)                 | Sine wave                                                                                                                                                                                                                                 |
| Output AC Waveform (Battery Mode)            | Pure Sine wave                                                                                                                                                                                                                            |
| <b>INPUT</b>                                 |                                                                                                                                                                                                                                           |
| Rated input current (Maximum Load)           | 121A / 116A / 111A                                                                                                                                                                                                                        |
| Nominal Input Voltage(s) Supported           | 220/380V 3-PH Wye; 230/400V 3-PH Wye; 240/415V 3-PH Wye                                                                                                                                                                                   |
| Nominal Input Voltage Description            | 3-Phase Wye, 4 wire (L1, L2, L3, N, G)                                                                                                                                                                                                    |
| UPS Input Connection Type                    | Hardwire                                                                                                                                                                                                                                  |
| Input Phase                                  | 3-Phase                                                                                                                                                                                                                                   |
| <b>BATTERY</b>                               |                                                                                                                                                                                                                                           |
| Expandable Battery Runtime                   | Battery set sold separate                                                                                                                                                                                                                 |
| External Battery Pack Compatibility          | BP480V200; BP480V300; BP480V400; BP480V40C; &nbsp;<a class="productLink" href="http://www.tripplite.com/External-Battery-Pack-3-Phase-UPS-Systems-BP480V500~BP480V500">BP480V500</a>&nbsp;                                                |
| Expandable Runtime Description               | External battery pack wiring is contractor supplied                                                                                                                                                                                       |
| DC System Voltage (VDC)                      | +/- 240VDC                                                                                                                                                                                                                                |
| Battery Replacement Description              | Hot-swappable, replaceable batteries                                                                                                                                                                                                      |
| Expandable Runtime                           | Yes                                                                                                                                                                                                                                       |
| <b>VOLTAGE REGULATION</b>                    |                                                                                                                                                                                                                                           |
| Voltage Regulation Description               | Online, double-conversion power conditioning                                                                                                                                                                                              |
| Overvoltage Correction                       | Maintains continuous operation without using battery power during overvoltages to 276-477 (3-phase, 4-wire, wye), reducing output within 1% of nominal                                                                                    |
| Undervoltage Correction                      | Maintains continuous operation without using battery power during brownout/undervoltage conditions to 173-300 (3-phase, 4-wire, wye)                                                                                                      |
| <b>USER INTERFACE, ALERTS &amp; CONTROLS</b> |                                                                                                                                                                                                                                           |
| 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 |
| Alarm Cancel Operation                       | Power-fail alarm can be silenced using alarm-cancel switch                                                                                                                                                                                |



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|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Audible Alarm                                                 | Alarms signal a variety of operational conditions: low-battery, overload, shutdown, bypass and more |
| LED Indicators                                                | 4-LED Display: Displays normal AC input, on battery power, bypass input and fault conditions        |
| <b>SURGE / NOISE SUPPRESSION</b>                              |                                                                                                     |
| EMI / RFI AC Noise Suppression                                | Yes                                                                                                 |
| AC Suppression Joule Rating                                   | 5950                                                                                                |
| AC Suppression Response Time                                  | Instantaneous                                                                                       |
| <b>PHYSICAL</b>                                               |                                                                                                     |
| Installation Form Factors Supported with Included Accessories | Tower                                                                                               |
| Primary Form Factor                                           | Tower                                                                                               |
| UPS Power Module Dimensions (hwd, in.)                        | 46 x 20.5 x 33.7                                                                                    |
| UPS Power Module Dimensions (hwd, cm)                         | 116.84 x 52.07 x 85.60                                                                              |
| UPS Power Module Weight (lbs.)                                | 538                                                                                                 |
| UPS Power Module Weight (kg)                                  | 244.03                                                                                              |
| Shipping Dimensions (hwd / in.)                               | 55.000 x 28.500 x 42.500                                                                            |
| Shipping Dimensions (hwd / cm)                                | 139.70 x 72.39 x 107.95                                                                             |
| Shipping Weight (lbs.)                                        | 687.8000                                                                                            |
| Shipping Weight (kg)                                          | 311.98                                                                                              |
| Cooling Method                                                | Fans                                                                                                |
| UPS Housing Material                                          | Steel                                                                                               |
| Primary UPS Height (mm)                                       | 11,684                                                                                              |
| Primary UPS Width (mm)                                        | 5,207                                                                                               |
| Primary UPS Depth (mm)                                        | 8,560                                                                                               |
| <b>ENVIRONMENTAL</b>                                          |                                                                                                     |
| Operating Temperature Range                                   | +32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius                                           |
| Storage Temperature Range                                     | +5 to +122 degrees Fahrenheit / -15 to +50 degrees Celsius                                          |
| Relative Humidity                                             | 0 to 95%, non-condensing                                                                            |
| AC Mode BTU / Hr. (Full Load)                                 | 14016                                                                                               |
| Battery Mode BTU / Hr. (Full Load)                            | 13951                                                                                               |
| <b>COMMUNICATIONS</b>                                         |                                                                                                     |
| Communications Interface                                      | DB9 Serial; Slot for SNMP/Web interface                                                             |
| Network Management Cards                                      | SNMPWEBCARD; TLNETCARD; WEBCARDLX                                                                   |



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|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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>                                       |
| Communications Cable                                        | DB9 cabling included                                                                                                                                                                                                               |
| <b>LINE / BATTERY TRANSFER</b>                              |                                                                                                                                                                                                                                    |
| Transfer Time                                               | No transfer time (0 ms.) in online, double-conversion mode                                                                                                                                                                         |
| Low Voltage Transfer to Battery Power (Setpoint)            | 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 (Setpoint)           | 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>                                     |                                                                                                                                                                                                                                    |
| Cold Start (Startup in Battery Mode During a Power Failure) | Cold-start operation supported                                                                                                                                                                                                     |
| High Availability UPS Features                              | Automatic inverter bypass; Hot swappable batteries                                                                                                                                                                                 |
| Green Energy-Saving Features                                | High efficiency economy mode operation; Schedulable daily hours of economy mode operation                                                                                                                                          |
| <b>CERTIFICATIONS</b>                                       |                                                                                                                                                                                                                                    |
| UPS Certifications                                          | CE                                                                                                                                                                                                                                 |
| <b>WARRANTY</b>                                             |                                                                                                                                                                                                                                    |
| 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                                                                                                                                                                                                            |

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