Tripp Lite
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SmartOnline 100kVA Modular 3-Phase UPS System, On-line Double-Conversion International UPS

MODEL NUMBER: **SU100KX2**





Highlights

- 100kVA / 100,000VA / 80,000W on-line double-conversion 3 phase UPS
- 3 phase 220/380V, 230/400V, 240/415V 4-wire + ground wye input & output
- Scalable design grows as your datacenter grows
- Modular N+1 redundant architecture helps assure 100% availability
- Parallel up to 4 UPS systems for redundancy or increased capacity
- IGBT & DSP technology produce <4% input harmonic distiortion (THDi)
- Hot swappable power modules, Expandable runtime

Package Includes

- SU100KX2 UPS System
- PowerAlert Software
- Parallel communication cable
- Instruction manual
- Warranty information

Description

Tripp Lite SU100KX2 100kVA SmartOnline Modular 3-Phase Intelligent, True On-Line Double-Conversion UPS System provides 100% system availability with N+1 modular architecture and parallel capability. In N+1 configurations, SU100KX2 provides 5 self-contained, redundant 20kVA power modules that support hot-swappable maintenance as connected equipment remains powered. One open slot for up to one additional 20kVA power module offers increased capacity upgrades to 120kVA. In parallel applications, configured and installed by a Tripp Lite authorized technician, up to 4 SU100KX2 models can be connected to provide fail-safe redundancy (two 100kVA models supporting up to 100kVA total load) or increased capacity (two 100kVA models supporting up to 200kVA total load). Large capacity 100,000VA / 80,000W UPS continually converts incoming AC power into filtered DC and resynthesizes output into perfectly regulated continuous sine wave AC output with less than 3% THD. Zero transfer time assures compatibility with all equipment types. High input power factor, advanced IGBT inverter and Digital Signal Processor (DSP) technology produce less than 4% 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). Up to 97% efficiency in optional economy mode reduces operating costs and BTU output. Hardwire input and output connections support a variety of permanent or PDU power connections. Frequency is 50 or 60 Hz (auto-selectable). SU100KX2 power modules are housed in a single small-footprint tower compartment. Compatible battery pack models BP480V55, BP480V78, BP480V103 and BP480V140 (sold separately) are housed in a separate stand-alone hardwired external battery compartment. 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

- True On-Line Double-Conversion 100kVA / 100,000VA / 80kW / 80,000 watt SmartOnline Modular 3-Phase Intelligent UPS provides 100% system availability
- Scalable, modular N+1 configurations support hot-swap replacement of any of the six self-contained 20kVA power modules while connected equipment remains powered
- One open slot accommodates up to one additional 20kVA power module for increased capacity up to 120kVA
- Parallel applications enable the connection of 2, 3 or 4 SU100KX2 models in parallel to enable advanced configurations for fail-safe redundancy,

increased capacity and combinations of the two (all parallel installations must be performed by a Tripp Lite authorized technician)

- Full-time sine wave output with less than 3% output THD
- High input power factor, advanced IGBT inverter technology and Digital Signal Processor (DSP) technology produce low input THD (THDi)
- Less than 4% input THD (THDi) reduces installation costs by allowing 1:1 generator sizing
- Extremely efficient operation (up to 97%) saves energy and reduces BTU output
- 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
- Wide input voltage correction range: 173-300V / 276-477V AC
- Precision +/-1% output voltage regulation
- 4 available battery modules (BP480V55, BP480V78, BP480V103 and BP480V140) are housed in a separate, stand-alone hardwired external battery compartment (Battery modules sold 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
- Built-in RS-232 communication port works with included PowerAlert Software to provide shutdown commands and reporting on a single server
- Accessory slot accepts an optional internal SNMPWEBCARD and MODBUSCARD accessory options
- 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 Capacity Details	One open power module slot enables installation of up to one additional 20kVA power module for increased capacity to 120kVA (authorized technician required)
Output Volt Amp Capacity (VA)	100000
Output kVA Capacity (kVA)	100
Output Watt Capacity (Watts)	80000
Output kW Capacity (kW)	80
Power Factor	0.8
Crest Factor	3:1
Nominal Output Voltage(s) Supported	220/380V; 230/400V; 240/415V; 3-Phase Wye
Nominal Voltage Details	Less than 3% output THD
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)	Pure Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave

INPUT	
Rated input current (Maximum Load)	129A (220/380), 123A (230/400), 116A (240/415)
Nominal Input Voltage(s) Supported	220/380V (3ph wye); 230/400V (3ph wye); 240/415V (3ph wye)
Nominal Input Voltage Description	3-Phase Wye, 4 wire (L1, L2, L3, N, G); Less than 4% input harmonic distortion (THDi)
UPS Input Connection Type	Hardwire
Input Phase	3-Phase
BATTERY	
Expandable Battery Runtime	Battery set sold separate
External Battery Pack Compatibility	BP480V103 ; BP480V140 ; BP480V55 ; BP480V78 ; BP480V200 ; BP480V300 ; BP480V400 ; BP480V500
Expandable Runtime Description	External battery pack wiring is contractor supplied
DC System Voltage (VDC)	+/- 240VDC
Battery Replacement Description	Hot-swappable, replaceable batteries
VOLTAGE REGULATION	
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)
USER INTERFACE, ALERTS & CONTROLS	
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
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
SURGE / NOISE SUPPRESSION	
UPS AC Suppression Joule Rating	5960
UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
PHYSICAL	
Installation Form Factors Supported with Included Accessories	Tower
Primary Form Factor	Tower

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UPS Power Module Dimensions (hwd, in.)	66.8 x 20.5 x 38.4
UPS Power Module Dimensions (hwd, cm)	169.7 x 52.1 x 97.5
UPS Power Module Weight (lbs.)	766.4
UPS Power Module Weight (kg)	347.5
UPS Shipping Dimensions (hwd / in.)	76.1 x 28.5 x 48.2
UPS Shipping Dimensions (hwd / cm)	193.3 x 193.3 x 122.4
Shipping Weight (lbs.)	766.4
Shipping Weight (kg)	347.5
Cooling Method	Fans
UPS Housing Material	Steel
ENVIRONMENTAL	
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)	17400
COMMUNICATIONS	
Communications Interface	DB9 Serial; Slot for SNMP/Web interface
PowerAlert Software	Included
Communications Cable	DB9 cabling included
LINE / BATTERY TRANSFER	
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
SPECIAL FEATURES	
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
CERTIFICATIONS	

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UPS Certifications	CE; ROHS (Restriction of Hazardous Substances)
WARRANTY	
Product Warranty Period (International)	2-year limited warranty
Product Warranty Period (Mexico)	2-year limited warranty
Product Warranty Period (Puerto Rico)	2-year limited warranty

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