SmartOnline 120kVA Modular 3-Phase UPS System, On-line Double-Conversion International UPS

MODEL NUMBER: **SU120KX2**

Highlights

- 120kVA / 120,000VA / 96,000W on-line double-conversion 3 phase UPS
- 3 phase 220/380V, 230/400V, 240/415V 4-wire + ground wye input & output
- Scalable, 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

- SU120KX2 UPS System
- Parallel communication cable
- Instruction manual
- Warranty information

Description

Tripp Lite SU120KX2 120kVA 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, SU120KX2 provides 6 self-contained, redundant 20kVA power modules that support hot-swappable maintenance while connected equipment remains powered. In parallel applications configured and installed by a Tripp Lite authorized technician, up to 4 SU120KX2 models can be connected to provide fail-safe redundancy (two 120kVA models supporting up to 120kVA) or increased capacity (two 120kVA models supporting up to 240kVA). Large capacity 120,000VA / 96,000W 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 option 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). SU120KX2 power modules are housed in a single small-footprint tower 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 120kVA / 120,000VA / 96kW / 96,000 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
- Parallel applications enable the connection of 2, 3 or 4 SU120KX2 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 (BP480V400) 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
- Serial port enables data-saving unattended shutdown when used with Tripp Lite's PowerAlert software, available via FREE download from tripplite.eaton.com/products/power-alert
- Compatible with Tripp Lite UPS management card options TLNETCARD, WEBCARDLX, SNMPWEBCARD and MODBUSCARD
- 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	037332168108
UPS Type	On-Line
INPUT	
Input Phase	3-Phase
Rated input current (Maximum Load)	155A (220/380), 148A (230/400), 142A (240/415)
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); Less than 4% input harmonic distortion (THDi)
UPS Input Connection Type	Hardwire
OUTPUT	
Output Capacity (VA)	120000
Output Capacity (kVA)	120
Output Capacity (Watts)	96000
Output Capacity (kW)	96

Power Factor	0.8
Crest Factor	3:1
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 AC Waveform (AC Mode)	Pure Sine wave
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
Individually Controllable Load Banks	No
BATTERY	
Expandable Runtime	Yes
Expandable Runtime Description	External battery pack wiring is contractor supplied
External Battery Pack Compatibility	BP480V200; BP480V300; BP480V400; BP480V500
DC System Voltage (VDC)	+/- 240VDC
Battery Replacement Description	By authorized service technician
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	
Primary Form Factor	Tower
Cooling Method	Fans
Installation Form Factors Supported with Included Accessories	Tower
Primary UPS Depth (mm)	975
Primary UPS Height (mm)	1,697
Primary UPS Width (mm)	521
Shipping Dimensions (hwd / in.)	75.00 x 29.00 x 48.00
Shipping Dimensions (hwd / cm)	190.50 x 73.66 x 121.92
Shipping Weight (lbs.)	1055.00
Shipping Weight (kg)	478.54
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	169.67 x 52.07 x 97.54
UPS Power Module Dimensions (hwd, in.)	66.8 x 20.5 x 38.4
UPS Power Module Weight (kg)	378.89
UPS Power Module Weight (lbs.)	835.3
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)	19659
AC Economy Mode BTU / Hr. (Full Load)	10130
AC Economy Mode Efficiency Rating (100% Load)	97%
Battery Mode Heat Dissipation (BTU/Hr) @ Full Load	24676
COMMUNICATIONS	
Network Management Cards	SNMPWEBCARD; TLNETCARD ; WEBCARDLX; MODBUSCARD
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert software at https://tripplite.eaton.com/products/power-alert
Communications Cable	DB9 cabling included
Communications Interface	DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface

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
FEATURES & SPECIFICATIONS	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
High Availability UPS Features	Automatic inverter bypass; Auto Probe Monitoring (requires WEBCARDLX); Zero transfer time; On-Line/Double-Conversion
Green Energy-Saving Features	High efficiency economy mode operation; Schedulable daily hours of economy mode operation
APPLICATIONS	
UPS Applications	Mission Critical Applications
WARRANTY & SUPPORT	
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
3-Phase Warranty Statement	Tripp Lite 3-Phase UPS Factory Warranty

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