

# SMARTONLINE®

## 3-PHASE UPS SYSTEMS

The Most Reliable and Cost-Effective Power Solutions for Your Data Center

SUPPORT  
UP TO  
160 KVA IN  
PARALLEL

### SMARTONLINE MODULAR 3-PHASE (40 – 80 KVA)

**IDEAL OUTPUT POWER**  
PROTECTS CRITICAL SYSTEMS

**MODULAR ARCHITECTURE**  
ELIMINATES DOWNTIME

**1:1 GENERATOR SIZING**  
LOWERS INSTALLATION COSTS

**EXTREME EFFICIENCY**  
LOWERS OPERATING COSTS

### SMARTONLINE 3-PHASE (20 – 30 KVA)

**RELIABLE OPERATION**  
KEEPS EQUIPMENT POWERED

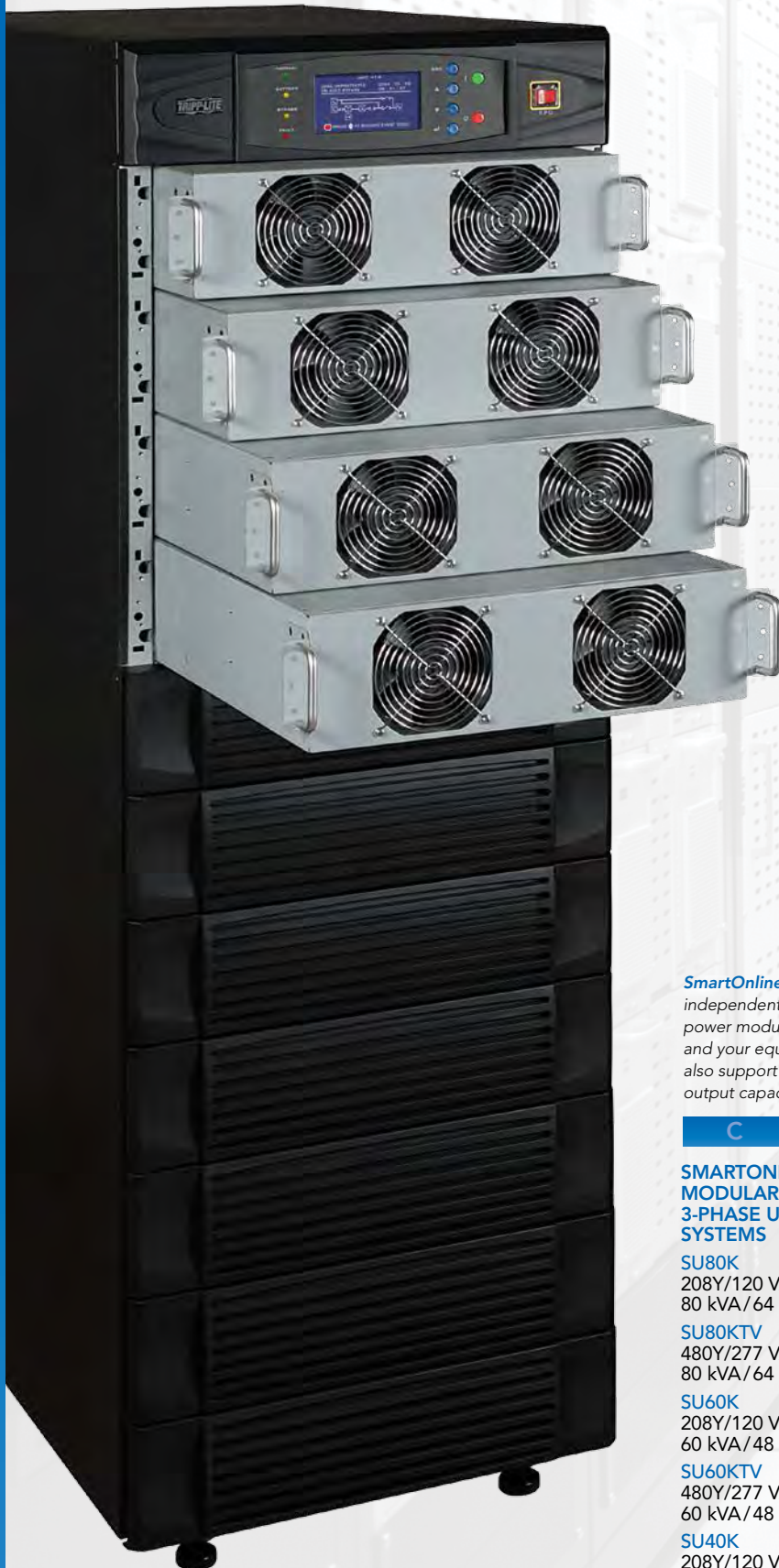
**COMPACT FOOTPRINT**  
SAVES FACILITY FLOOR SPACE

**VERSATILE BATTERY SYSTEM**  
EXPANDS RUNTIME OPTIONS

**TRIPP·LITE**  
DATA CENTER SOLUTIONS

# SMARTONLINE MODULAR 3-PHASE UPS SYSTEMS

Extremely efficient protection for your most important equipment



## IDEAL OUTPUT POWER PROTECTS CRITICAL SYSTEMS

On-line, double conversion operation continuously delivers precision-regulated, pure sine wave output, isolating your critical systems from damaging and disruptive power problems.

## MODULAR ARCHITECTURE ELIMINATES DOWNTIME

Internal N+1 power module redundancy, 1+1 parallel capability and fault-tolerant bypass features keep your critical systems highly available and productive around the clock.

## 1:1 GENERATOR SIZING LOWERS INSTALLATION COSTS

An advanced IGBT rectifier produces best-in-class <4% THDi (input current Total Harmonic Distortion), eliminating costly over-sizing requirements for generators, breakers and cables.

## EXTREME EFFICIENCY LOWERS OPERATING COSTS

Efficiency up to 96% significantly lowers power and cooling costs compared to multiple smaller units or legacy high-capacity units.

*SmartOnline Modular 3-Phase UPS Systems* contain up to four intelligent, independent 20 kVA power modules that support internal N+1 redundancy. If any power module goes offline, the load is distributed among the remaining modules and your equipment continues to operate without interruption. The UPS systems also support a 1+1 parallel configuration to increase fault tolerance or double output capacity (up to 160 kVA).

### C O N T E N T S

<b>SMARTONLINE MODULAR 3-PHASE UPS SYSTEMS</b>	
<b>SU80K</b> 208Y/120 VAC 80 kVA/64 kW	
<b>SU80KTV</b> 480Y/277 VAC 80 kVA/64 kW	
<b>SU60K</b> 208Y/120 VAC 60 kVA/48 kW	
<b>SU60KTV</b> 480Y/277 VAC 60 kVA/48 kW	
<b>SU40K</b> 208Y/120 VAC 40 kVA/32 kW	
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# SMARTONLINE 3-PHASE UPS SYSTEMS

Reliable protection for small and mid-range installations

## RELIABLE OPERATION KEEPS EQUIPMENT POWERED

On-line operation and fault-tolerant bypass features keep your equipment powered at all times—even if the UPS system requires maintenance, repair or replacement.

## COMPACT FOOTPRINT SAVES FACILITY FLOOR SPACE

The all-in-one design packs enough power for multiple racks of equipment into a compact footprint that saves precious floor space for critical systems and cooling.

## VERSATILE BATTERY SYSTEM EXPANDS RUNTIME OPTIONS

A hot-swappable battery system with convenient front-panel access allows you to customize battery backup runtime through internal and/or external expansion.

*SmartOnline 3-Phase UPS Systems are available in standard and extended-runtime configurations. The power module and expandable internal battery system are combined in a single compact footprint. Runtime can also be increased by connecting one or more external battery cabinets.*

## C O N T E N T S

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208Y/120 VAC		
30 kVA/24 kW		
<b>SU20K3/3</b>		
208Y/120 VAC		
20 kVA/16 kW		
<b>SU20K3/3XR5</b>		
208Y/120 VAC		
20 kVA/16 kW		

# SMARTONLINE MODULAR 3-PHASE UPS SYSTEMS

## IDEAL OUTPUT POWER

SmartOnline Modular 3-Phase UPS Systems isolate your critical equipment from power problems, including surges, line noise, harmonic distortion, electrical impulses, frequency variations, brownouts, overvoltages and blackouts. True on-line operation continually transforms AC input power into filtered DC power, then resynthesizes it into precision-regulated AC output with a pure sine wave. Strong overload capacity supports up to 150% output for up to 60 seconds. Reliable backup power with zero transfer time to battery keeps equipment operating safely through shorter power failures and allows time to shut down or switch to generator power during longer outages. Rapid recharging restores battery charge levels in as little as two hours.

## MODULAR ARCHITECTURE

Intelligent, independent 20 kVA power modules provide internal redundancy. When the UPS is configured for N+1 redundancy, convenient hot-swap power modules can be replaced without powering down the connected load. In the event of a power module fault, the load is automatically distributed among the remaining modules. Because load redistribution happens without interrupting critical systems, mean time to recovery is zero—far superior to legacy UPS systems. In addition, redundant control circuits eliminate a single point of failure commonly found in less reliable UPS designs.

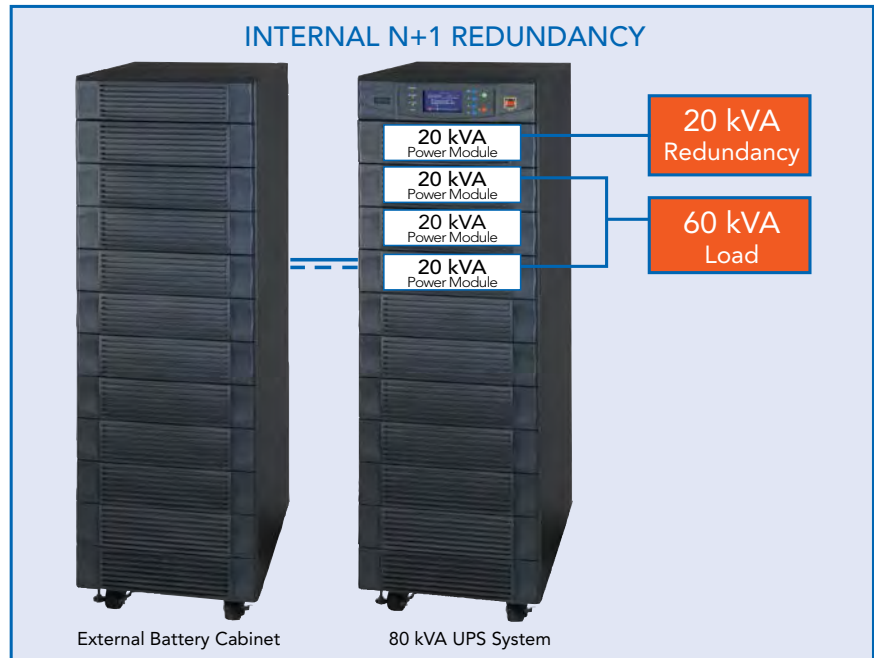
If service or repair requires UPS shutdown, a manual bypass breaker and automatic bypass function maintain system availability by passing through AC power until the UPS system returns to service.

## PARALLEL FEATURES

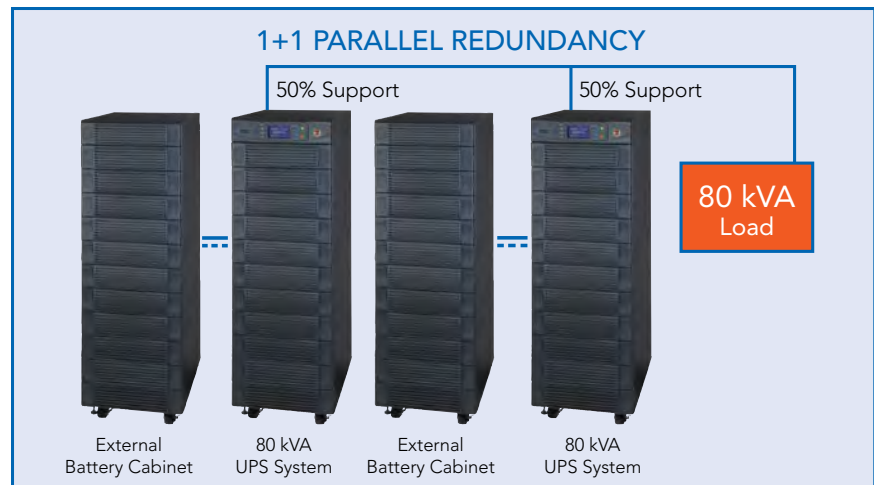
Increase fault tolerance or double output capacity by connecting two SmartOnline Modular 3-Phase UPS Systems in a 1+1 parallel configuration. If one UPS is taken offline for maintenance, the other UPS automatically compensates to support the equipment load—without requiring additional programming.\*

UPS systems ship ready for parallel operation and patented dual-DSP technology provides optimal synchronization of power sources.

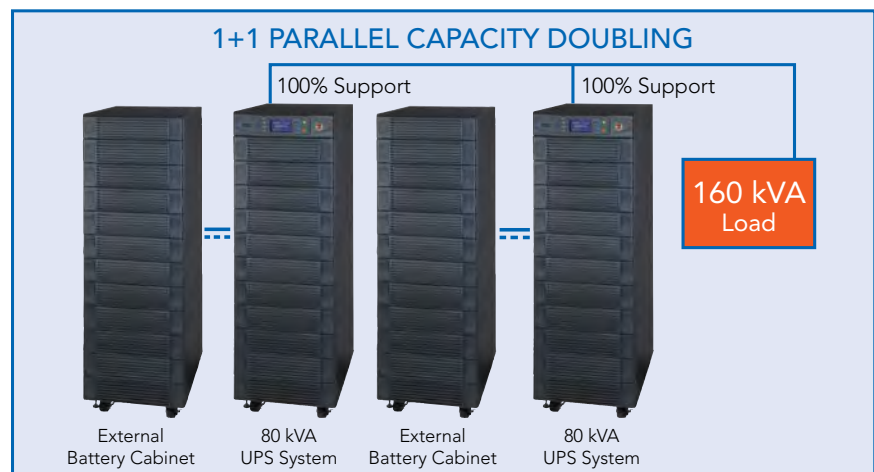
\* Each UPS system must be configured to support ≤ 50% of the total load to provide redundancy in a 1+1 parallel configuration.



*In an N+1 configuration, the supported load is at least 20 kVA less than the maximum output capacity of the UPS system. For example, an 80 kVA UPS is configured for N+1 redundancy when the connected load is 60 kVA or less.*



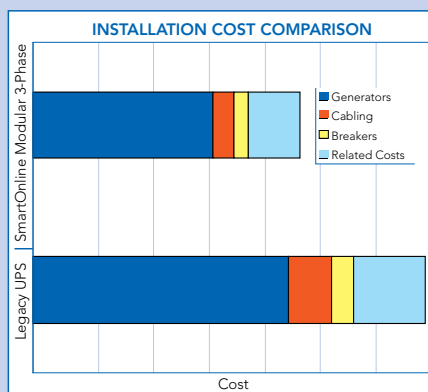
*Two 80 kVA SmartOnline Modular 3-Phase UPS Systems can provide redundant backup power for an 80 kVA load.*



*Two 80 kVA SmartOnline Modular 3-Phase UPS Systems can provide non-redundant backup power for a 160 kVA load.*

## 1:1 GENERATOR SIZING

SmartOnline Modular 3-Phase UPS Systems have a generator-friendly design that decreases installation costs. A high input power factor and IGBT rectifier with DSP control create less than 4% input current Total Harmonic Distortion (THDi). Low THDi enables cost-saving 1:1 sizing of UPS systems to generators, allows generators to run cooler and extends the operational lifespan of all input components. Low THDi also reduces sizing requirements for cables and breakers and improves reliability by eliminating nuisance breaker tripping and overheated transformers.

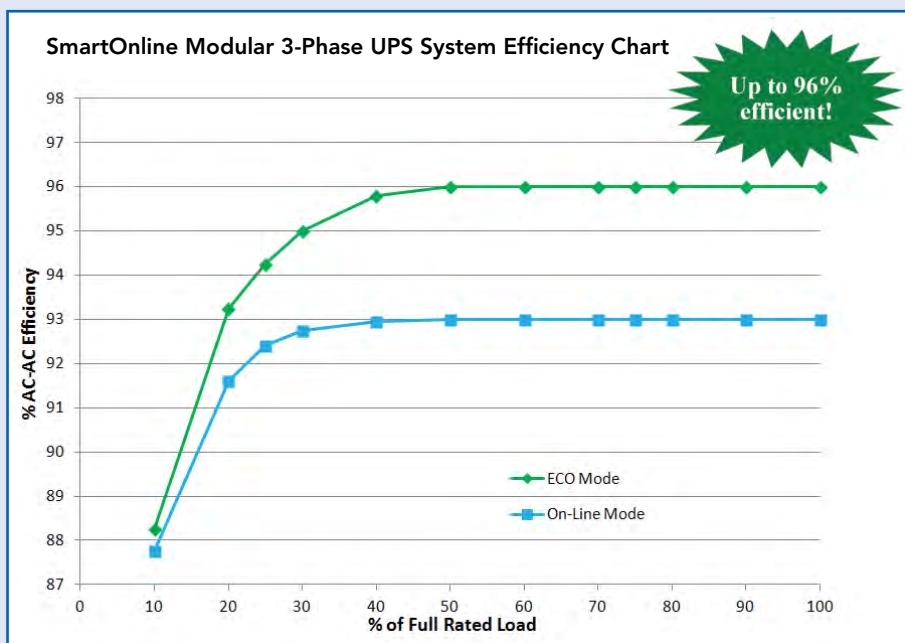


SmartOnline Modular 3-Phase UPS Systems reduce installation costs up to 30% versus legacy UPS systems.

## EXTREME EFFICIENCY

Advanced high-utilization IGBT inverter technology and high-speed DSP control provide superior operating efficiency at all load levels (up to 96% in economy mode). Increasing efficiency lowers UPS system operating costs by reducing electricity consumption, heat emissions and cooling costs. Replacing 160 kVA of legacy UPS capacity with SmartOnline Modular 3-Phase UPS Systems can save more than \$20,000 per year.

In addition, SmartOnline Modular 3-Phase UPS Systems automatically correct the widest range of incoming voltages in their class. The wide voltage window and temperature-compensated charging combine to significantly decrease battery wear, extending service life and reducing replacement costs.



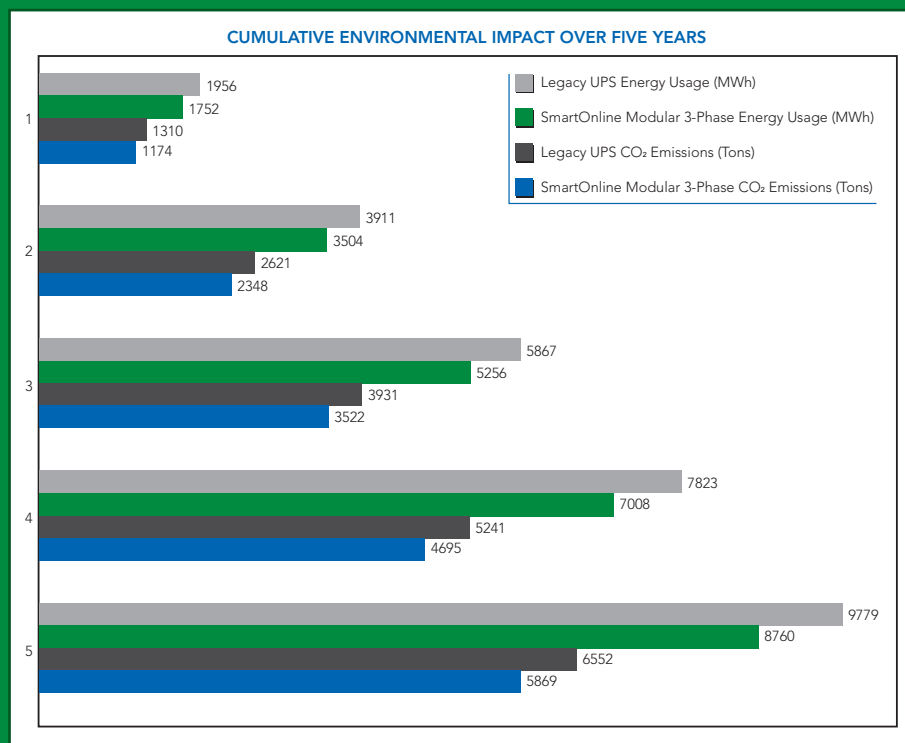
## GREEN POWER

Eco-friendly SmartOnline Modular 3-Phase UPS Systems save energy and reduce your carbon footprint. Replacing 160 kVA of legacy UPS capacity can reduce CO<sub>2</sub> emissions by 136 tons and save more than 200 megawatt-hours of electricity per year—enough to power 16 typical U.S. single-family homes.



SmartOnline Modular 3-Phase UPS Systems are also RoHS compliant, which means they adhere to strict standards in the reduction

of six hazardous substances: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ether (PBDE). Tripp Lite is an industry leader in RoHS compliance.



Replacing 160 kVA of legacy UPS capacity with SmartOnline can save 200 megawatt-hours (enough to power 16 U.S. homes) and reduce CO<sub>2</sub> emissions by 136 tons (enough to offset 2,000+ flights from New York to Washington) per year.



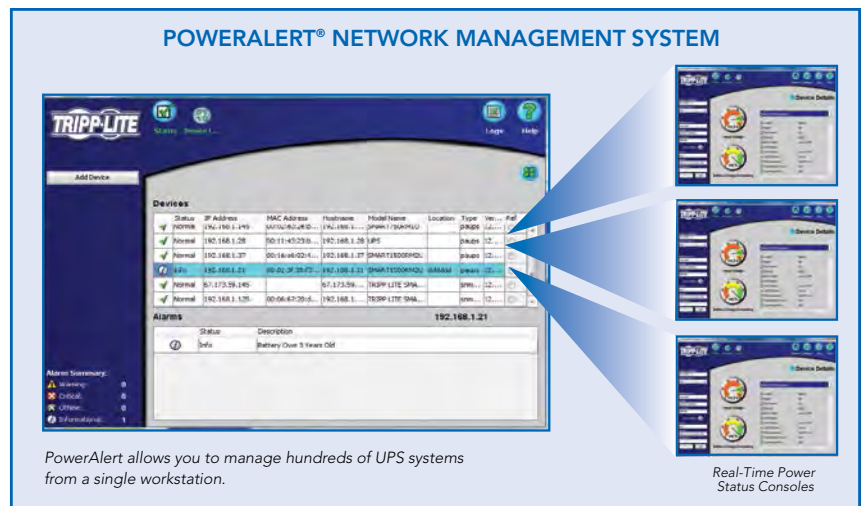
## MONITORING AND CONTROL

Convenient communication and management features allow you to monitor power conditions, receive automatic alerts and control SmartOnline 3-Phase UPS Systems with drift-proof digital precision from any distance.

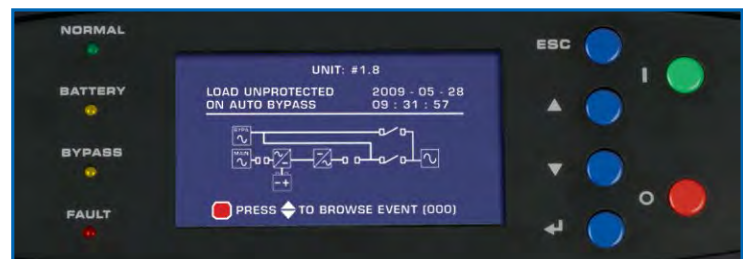
- **DRY CONTACT CLOSURE INTERFACE**  
Connects to an Emergency Power Off (EPO) circuit for emergency UPS system shutdown. Also allows the UPS system to monitor external battery cabinets and communicate operational messages.

- **RS-232 SERIAL PORT**  
Connects to a server for shutdown commands and reporting through PowerAlert software (included).
- **ACCESSORY CARD SLOT**  
Optional network card (SNMPWEBCARD) provides remote monitoring and control. Optional environmental sensor (ENVIROSENSE) monitors temperature, humidity and more.

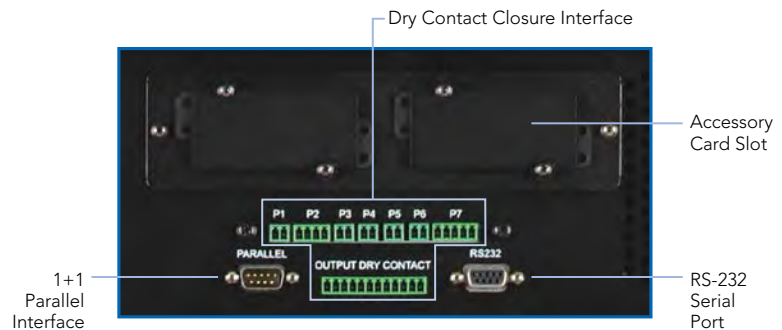
- **NETWORK POWER MANAGEMENT**  
Through PowerAlert software or SNMPWEBCARD, you can manage hundreds of UPS systems with PowerAlert Network Management System (included) or a third-party network management system.
- **LED/LCD CONTROL PANEL**  
Offers convenient push button control and communicates operational modes, conditions and warnings.



SmartOnline 3-Phase UPS Systems support remote management through PowerAlert software or the SNMPWEBCARD accessory.



The LED/LCD control panel provides detailed UPS status information.



The rear panel includes several communication interfaces.

## BATTERY CABINETS

All SmartOnline Modular 3-Phase UPS Systems can be connected to one or more external battery cabinets:

- Model SU40K has internal batteries and does not require an external battery cabinet. External battery cabinets can be connected for expanded runtime.
- Other models do not have internal batteries and require an external battery cabinet. Additional battery cabinets can be connected for expanded runtime.

External battery cabinets are available in a variety of capacities. Models BP480V26B and BP480V40C support temperature-compensated charging for optimal charge levels and increased battery lifespan. They also match the appearance and footprint of the UPS system cabinets. Larger models have heavy-gauge steel cabinets with 10-year design life batteries.



## COMPACT FOOTPRINT

Each SmartOnline Modular 3-Phase UPS System packs enough power for multiple racks of equipment into a compact footprint, saving valuable data center floor space for critical systems and cooling. Wall-mounted distribution and bypass panels do not require additional floor space.



## ORDERING INFORMATION

MODEL	OUTPUT CAPACITY	NOMINAL INPUT/OUTPUT VOLTAGE	BATTERY CONFIGURATION
SU40K	40 kVA / 32 kW	208Y/120 VAC (3Ø, 4-wire + ground, wye)	Internal batteries; external battery cabinet optional.
SU60K	60 kVA / 48 kW	208Y/120 VAC (3Ø, 4-wire + ground, wye)	No internal batteries; external battery cabinet required.
SU80K	80 kVA / 64 kW	208Y/120 VAC (3Ø, 4-wire + ground, wye)	No internal batteries; external battery cabinet required.
SU60KTV	60 kVA / 48 kW	480Y/277 VAC (3Ø, 4-wire + ground, wye)	No internal batteries; external battery cabinet required.
SU80KTV	80 kVA / 64 kW	480Y/277 VAC (3Ø, 4-wire + ground, wye)	No internal batteries; external battery cabinet required.

**EXTERNAL BATTERY CABINETS** (Hardwire connection. Multiple cabinets can be connected in parallel for extended runtime. See [www.tripplite.com](http://www.tripplite.com) for runtime and load data.)

BP480V26B	+/- 240 VDC external battery cabinet. Supports temperature-compensated battery charging for optimal charge levels and increased battery lifespan. Cabinet matches appearance and footprint of UPS system cabinet.
BP480V40C	+/- 240 VDC external battery cabinet. Supports temperature-compensated battery charging for optimal charge levels and increased battery lifespan. Cabinet matches appearance and footprint of UPS system cabinet.
BP480V200	+/- 240 VDC external battery cabinet. Heavy-gauge steel cabinet with 10-year design life batteries.
BP480V300	+/- 240 VDC external battery cabinet. Heavy-gauge steel cabinet with 10-year design life batteries.
BP480V400	+/- 240 VDC external battery cabinet. Heavy-gauge steel cabinet with 10-year design life batteries.
BP480V500	+/- 240 VDC external battery cabinet. Heavy-gauge steel cabinet with 10-year design life batteries.

### WALL-MOUNTED EXTERNAL MAINTENANCE BYPASS PANELS WITH KIRK-KEYED SAFETY INTERLOCK SYSTEM

SU40KMBPK	Maintenance bypass panel for SU40K only. Kirk-keyed safety interlock system prevents sequence of operation errors.
SU60KMBPK	Maintenance bypass panel for SU60K only. Kirk-keyed safety interlock system prevents sequence of operation errors.
SU80KMBPK	Maintenance bypass panel for SU80K only. Kirk-keyed safety interlock system prevents sequence of operation errors.
SU60KMBPKX	Maintenance bypass panel for SU60KTV only. Kirk-keyed safety interlock system prevents sequence of operation errors.
SU80KMBPKX	Maintenance bypass panel for SU80KTV only. Kirk-keyed safety interlock system prevents sequence of operation errors.

### WALL-MOUNTED PARALLEL DISTRIBUTION PANELS (Required for 1+1 parallel connection of UPS systems.)

SUPC2MBP40K	Parallel distribution with bypass panel for 1+1 parallel connection of SU40K models only.
SUPC2MBP60K	Parallel distribution with bypass panel for 1+1 parallel connection of SU60K models only.
SUPC2MBP80K	Parallel distribution with bypass panel for 1+1 parallel connection of SU80K models only.
SUPC2MBP60KX	Parallel distribution with bypass panel for 1+1 parallel connection of SU60KTV models only.
SUPC2MBP80KX	Parallel distribution with bypass panel for 1+1 parallel connection of SU80KTV models only.

### POWER MANAGEMENT ACCESSORIES

SNMPWEBCARD	Adds Ethernet network interface to UPS system for remote monitoring and control via SNMP, Web or telnet.
ENVIROSENSE	Monitors temperature and humidity. Monitors up to 4 additional sensors via dry contact closure interface. Requires SNMPWEBCARD.

### WARRANTIES AND SERVICES

Site survey services, start-up services, preventive maintenance services, extended warranties and on-site warranties are available. Visit [www.tripplite.com](http://www.tripplite.com) or contact your Tripp Lite sales representative for more information.

# TECHNICAL SPECIFICATIONS

MODEL		SU40K	SU60K	SU80K	SU60KTV	SU80KTV	
INPUT	NOMINAL VOLTAGE		208Y/120 VAC (3Ø, 4-wire + ground, wye)			480Y/277 VAC (3Ø, 4-wire + ground, wye)	
	VOLTAGE RANGE		163Y/94V to 260Y/150V (Full Load) (-22%/+25%) 113Y/65V to 260Y/150V (≤ 70% Load) (-46%/+25%)			378Y/218V to 603Y/348V (Full Load) (-22% to +25%) 262Y/151V to 603Y/348V (≤ 70% Load) (-45%/+25%)	
	CURRENT THDi (Full Load)		< 4%				
	POWER FACTOR (On-line, Full Load)		> 0.99				
	FREQUENCY (Auto-Selectable)		50/60 Hz				
	FREQUENCY TOLERANCE		± 5%				
	NOMINAL CURRENT		97 A (112 A max. with charger)	145 A (168 A max. with charger)	193 A (225 A max. with charger)	63 A (73 A max. with charger)	84 A (97 A max. with charger)
OUTPUT	CAPACITY (kVA/kW)		40 kVA/32 kW	60 kVA/48 kW	80 kVA/64 kW	60 kVA/48 kW	80 kVA/64 kW
	POWER FACTOR		0.8 Per Phase				
	NOMINAL VOLTAGE		208Y/120 VAC			480Y/277 VAC	
	FREQUENCY		50/60 Hz ± 0.05 Hz				
	NOMINAL CURRENT		111 A	167 A	222 A	72 A	96 A
	WAVEFORM (On-line or Battery)		Pure Sine Wave				
	VOLTAGE THD (Linear Load)		≤ 3%				
	VOLTAGE REGULATION (Static)		± 1%				
	VOLTAGE REGULATION (Dynamic)		Maximum 7% Deviation				
	OVERLOAD CAPACITY		≤ 125% for 10 minutes; ≤ 150% for 60 seconds; > 150% for 1 second				
BREAKERS	RECTIFIER (3-Pole, 600 VAC)		75 A	125 A	150 A	125 A	150 A
	BYPASS (3-Pole, 600 VAC)		150 A	225 A	300 A	100 A	125 A
	RESERVE (3-Pole, 600 VAC)		150 A	225 A	300 A	100 A	125 A
	OUTPUT (3-Pole, 600 VAC)		150 A	225 A	300 A	100 A	125 A
	BATTERY (Negative Pole, 600 VDC)		100 A	150 A	150 A	100 A	150 A
	RECOMMENDED MINIMUM OCPD RATING		150 A	225 A	300 A	100 A	125 A
GENERAL	STANDARD INTERFACE		LED/LCD Control Panel with Event Log, RS-232, Dry Contact Closure, EPO (Local and Remote)				
	OPTIONAL INTERFACE		SNMPWEBCARD, ENVIROSENSE				
	UPS TOPOLOGY		On-line, Double Conversion				
	AGENCY APPROVALS		UL 1778, CSA, FCC Class A, NOM, RoHS				
	EFFICIENCY		Up to 96%				
	TRANSFER TIME (On-line Mode)		0 ms				
	AMBIENT OPERATING TEMPERATURE		32° F to 104° F (0° C to 40° C)				
	ELEVATION		0 to 10,000 ft (0 to 3,000 m)				
	HUMIDITY (Non-Condensing)		≤ 90%				
	NOISE (@ 1 m)		< 65 dBA				
	TYPICAL RUNTIME* (Half/Full Load)		13/5.5+ min (Internal Batteries)	14/5.5+ min (BP480V26B)	17/6.7+ min (BP480V40C)	14/5.5+ min (BP480V26B)	17/6.7+ min (BP480V40C)
	DIMENSIONS (Power Module)	Height	66.9 in (1,699 mm)	66.9 in (1,699 mm)	66.9 in (1,699 mm)	66.9 in (1,699 mm)	66.9 in (1,699 mm)
		Width	20.5 in (521 mm)	20.5 in (521 mm)	20.5 in (521 mm)	20.5 in (521 mm)	20.5 in (521 mm)
		Depth	33.7 in (856 mm)	37.7 in (958 mm)	38.8 in (986 mm)	33.7 in (856 mm)	33.7 in (856 mm)
UNIT WEIGHT** (Power Module)		1,513 lb (688 kg)	1,178 lb (535 kg)	1,444 lb (656 kg)	995 lb (452 kg)	1,105 lb (502 kg)	
SHIPPING WEIGHT** (Power Module)		1,690 lb (768 kg)	1,356 lb (616 kg)	1,643 lb (747 kg)	1,175 lb (534 kg)	1,286 lb (585 kg)	

\* Runtime varies with load, battery condition and other factors. Runtime can be extended by adding additional external battery cabinets, sold separately.

\*\* The weight of model SU40K includes internal batteries.





# SMARTONLINE 3-PHASE UPS SYSTEMS

## RELIABLE OPERATION

SmartOnline 3-Phase UPS Systems protect your equipment from power problems, including surges, line noise, harmonic distortion, electrical impulses, frequency variations, brownouts, overvoltages and blackouts. On-line operation continually transforms AC input power into filtered DC power, then resynthesizes it into precision-regulated AC output with a pure sine wave. Reliable backup power with zero transfer time to battery keeps equipment operating safely through shorter power failures and allows time to shut down or switch to generator power during longer outages. Fault-tolerant bypass features keep your equipment powered at all times—even if the UPS system requires maintenance, repair or replacement.

## COMPACT FOOTPRINT

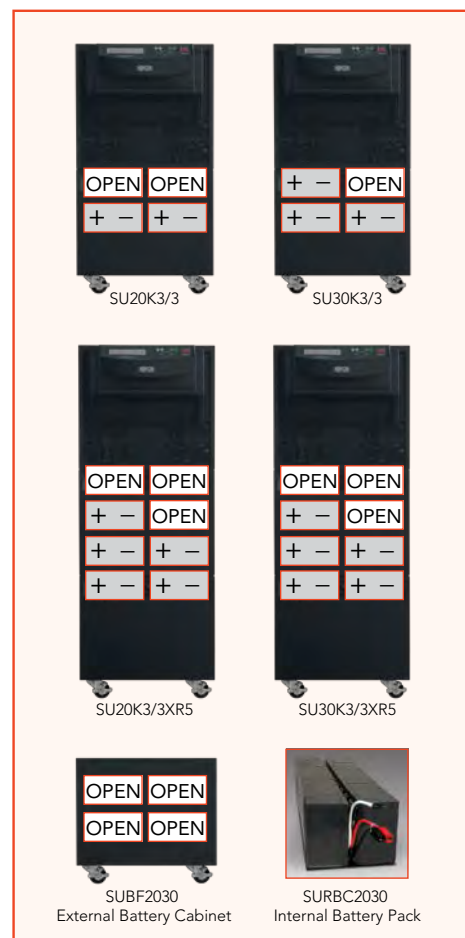
SmartOnline 3-Phase UPS Systems have an all-in-one form factor that combines the power module and battery system. They pack enough power for multiple racks of equipment into a compact footprint that saves valuable data center floor space for critical systems and cooling. Wall-mounted distribution and bypass panels do not require additional floor space.

## VERSATILE BATTERY SYSTEM

All SmartOnline 3-Phase UPS Systems scale to fit your runtime requirements through an expandable, hot-swappable battery system with convenient front-panel access:

- Model SU20K3/3 includes 2 internal battery packs and has room to add 2 additional battery packs.\*
- Model SU30K3/3 includes 3 internal battery packs and has room to add 1 additional battery pack.\*
- Extended-runtime models (SU20K3/3XR5 and SU30K3/3XR5) each include 5 internal battery packs and have room to add 3 additional battery packs.\*
- All models can also be connected to one or more compact external battery cabinets (SUBF2030). Each external battery cabinet holds up to 4 battery packs, sold separately.\*
- Larger-capacity external battery cabinets with 10-year design life batteries are also available.

\* Battery pack model SURBC2030.



SmartOnline 3-Phase UPS Systems combine the power module and battery system in a single compact footprint. You can increase battery backup runtime by installing additional internal battery packs and/or external battery cabinets. External battery cabinets support parallel connection.

## MONITORING AND CONTROL

Convenient communication and management features allow you to monitor power conditions, receive automatic alerts and control SmartOnline 3-Phase UPS Systems from any distance.

- COMMUNICATION PORTS**

RS-232, AS/400 and dry contact closure ports connect to servers for shutdown commands and reporting through PowerAlert software (included). An Emergency Power Off (EPO) jack connects to your facility's EPO circuit for emergency UPS system shutdown.

- ACCESSORY CARD SLOT**

Optional network card (SNMPWEBCARD) provides remote monitoring and control. Optional dry contact closure accessory card (RELAYIOCARD) provides 6 outputs and 1 input.

- NETWORK POWER MANAGEMENT**

Through PowerAlert software or SNMPWEBCARD, you can manage hundreds of UPS systems with PowerAlert Network Management System (included) or a third-party network management system.

- LED/LCD CONTROL PANEL**

Offers convenient push button control and communicates operational modes, conditions and warnings.

### POWERALERT NETWORK MANAGEMENT SYSTEM



PowerAlert allows you to manage hundreds of UPS systems from a single workstation.

Real-Time Power Status Consoles

SmartOnline 3-Phase UPS Systems support remote management through PowerAlert software or the SNMPWEBCARD accessory.



The LCD/LED control panel indicates more than 45 separate faults, warnings and operational conditions.

## ORDERING INFORMATION

MODEL	OUTPUT CAPACITY	BATTERY CONFIGURATION
SU20K3/3	20 kVA / 16 kW	Includes 2 internal battery packs; room for 2 additional SURBC2030 battery packs.
SU20K3/3XR5	20 kVA / 16 kW	Includes 5 internal battery packs; room for 3 additional SURBC2030 battery packs.
SU30K3/3	30 kVA / 24 kW	Includes 3 internal battery packs; room for 1 additional SURBC2030 battery pack.
SU30K3/3XR5	30 kVA / 24 kW	Includes 5 internal battery packs; room for 3 additional SURBC2030 battery packs.

**BATTERY EXPANSION** (Multiple battery cabinets can be connected in parallel. See [www.tripplite.com](http://www.tripplite.com) for runtime and load data.)

<b>SURBC2030</b>	240 VDC internal battery pack for SmartOnline 3-Phase UPS Systems and SUBF2030 external battery cabinets.
<b>SUBF2030</b>	External battery cabinet. Requires SURBC2030 battery packs (up to 4 per cabinet), sold separately.
<b>BP240V350</b>	240 VDC external battery cabinet with 10-year design life batteries.
<b>BP240V400</b>	240 VDC external battery cabinet with 10-year design life batteries.
<b>BP240V400C</b>	240 VDC external battery cabinet with 10-year design life batteries. Built-in battery charger.
<b>BP240V500</b>	240 VDC external battery cabinet with 10-year design life batteries.
<b>BP240V500C</b>	240 VDC external battery cabinet with 10-year design life batteries. Built-in battery charger.

### WALL-MOUNTED EXTERNAL MAINTENANCE BYPASS PANEL WITH MECHANICAL INTERLOCK SYSTEM

<b>SU2030KMBP</b>	Maintenance bypass panel for 20 kVA and 30 kVA models. Mechanical interlock system prevents sequence of operation errors.
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### POWER MANAGEMENT ACCESSORIES

<b>SNMPWEBCARD</b>	Adds Ethernet network interface to UPS system for remote monitoring and control via SNMP, Web or telnet.
<b>ENVIROSENSE</b>	Monitors temperature and humidity. Monitors up to 4 additional sensors via dry contact closure interface. Requires SNMPWEBCARD.
<b>RELAYIOCARD</b>	Programmable dry contact closure accessory card with 6 output contacts and 1 input contact.

### WARRANTIES AND SERVICES

Site survey services, start-up services, preventive maintenance services, extended warranties and on-site warranties are available. Visit [www.tripplite.com](http://www.tripplite.com) or contact your Tripp Lite sales representative for more information.

# TECHNICAL SPECIFICATIONS

	MODEL	SU20K3/3	SU20K3/3XR5	SU30K3/3	SU30K3/3XR5
INPUT	NOMINAL VOLTAGE	208Y/120 VAC (3Ø, 4-wire + ground, wye)			
	VOLTAGE RANGE	166Y/96V to 250Y/144V (Full Load) (-20%/+20%)			
	FREQUENCY (Auto-Selectable)	50/60 Hz ± 3 Hz			
	POWER FACTOR (On-line, Full Load)	> 0.95			
	NOMINAL CURRENT	60 A		90 A	
OUTPUT	CAPACITY (kVA/kW)	20 kVA/16 kW		30 kVA/24 kW	
	POWER FACTOR	0.8 Per Phase			
	NOMINAL VOLTAGE	208Y/120 VAC			
	FREQUENCY	50/60 Hz ± 0.1 Hz			
	NOMINAL CURRENT	56 A		83 A	
	WAVEFORM (On-line or Battery)	Pure Sine Wave			
	THD (Linear Load)	≤ 3%			
	VOLTAGE REGULATION (Static)	± 2%			
	OVERLOAD CAPACITY	≤ 125% for 60 seconds; ≤ 150% for 30 seconds; > 150% for 2 seconds			
GENERAL	MAIN INPUT PROTECTION	200 A/ 150 VAC Fuse x 3			
	STANDARD INTERFACE	LED/LCD Control Panel, RS-232, AS/400, Dry Contact Closure, EPO (Local and Remote)			
	OPTIONAL INTERFACE	SNMPWEBCARD, ENVIROSENSE, RELAYIOCARD			
	UPS TOPOLOGY	On-line, Double Conversion			
	AGENCY APPROVALS	UL 1778, CSA, FCC Class A, NOM			
	EFFICIENCY	Up to 93%			
	TYPICAL RUNTIME* (Half/Full Load)	13/5+ min (Internal Batteries)	42/17+ min (Internal Batteries)	13/5+ min (Internal Batteries)	25/11+ min (Internal Batteries)
	INCLUDED INTERNAL BATTERY PACKS	2	5	3	5
	INTERNAL BATTERY PACK CAPACITY**	4 (Can Add 2)	8 (Can Add 3)	4 (Can Add 1)	8 (Can Add 3)
	TRANSFER TIME	0 ms			
	AMBIENT OPERATING TEMPERATURE	32° F to 104° F (0° C to 40° C)			
	ELEVATION	0 to 10,000 ft (0 to 3,000 m)			
	HUMIDITY (Non-Condensing)	≤ 95%			
	NOISE (@ 1 m)	< 65 dBA			
	UNIT HEIGHT	35.9 in (912 mm)	50.9 in (1,293 mm)	35.9 in (912 mm)	50.9 in (1,293 mm)
	UNIT WIDTH	19.5 in (495 mm)	19.5 in (495 mm)	19.5 in (495 mm)	19.5 in (495 mm)
	UNIT DEPTH	36.8 in (935 mm)	36.8 in (935 mm)	36.8 in (935 mm)	36.8 in (935 mm)
	UNIT WEIGHT (Standard Configuration)	519 lb (236 kg)	979 lb (444 kg)	660 lb (299 kg)	999 lb (453 kg)
	SHIPPING WEIGHT (Standard Configuration)	607 lb (275 kg)	1,133 lb (514 kg)	748 lb (339 kg)	1,153 lb (523 kg)

\* Runtime shown for standard internal battery configuration. Runtime varies with load, battery condition and other factors. Runtime can be extended by adding internal battery packs and/or external battery cabinets, sold separately. \*\* Add internal battery pack model SURBC2030, sold separately.





## WARRANTIES AND SERVICES



SmartOnline 3-Phase UPS Systems include a 1-year limited warranty backed by Tripp Lite's experienced service and support team. Tripp Lite also offers a variety of on-site warranties, extended warranties, start-up services and service contracts for UPS systems and battery cabinets. Tripp Lite's expert service technicians can assist in every phase of your implementation, from site planning and start-up to preventive maintenance and rapid repair. Contact Tripp Lite for more information.



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## ABOUT TRIPP LITE

Since 1922, Tripp Lite has established a global reputation for quality by providing customers with reliable, cost-effective products and responsive service. After introducing the first desktop UPS system and the popular Isobar® surge suppressor in the early eighties, Tripp Lite became the gold standard for power protection in the growing information technology sector. More than 9 million UPS systems and 20 million Isobars later, loyal customers worldwide choose Tripp Lite to power, protect and connect equipment ranging from home electronics to servers and network equipment in enterprise data centers.

Tripp Lite manufactures more than 2,500 products, including UPS systems, replacement batteries, PDUs, power management tools, rack systems, surge suppressors, KVM switches, cables, power strips, inverters, inverter/chargers, line conditioners and specialty products for healthcare and audio/video applications. Tripp Lite's heritage of invention is reflected today in practical innovations that address customer needs without ignoring fiscal realities:

- SmartOnline Hot-Swappable UPS Systems keep critical servers, storage and network equipment running 24x7, even during UPS maintenance, repair or replacement.
- SmartPro® CRM UPS Systems deliver best-in-class wattage and battery capacity in shallow-depth cabinets optimized for network/telecom wiring closets.
- Green power solutions save money and protect the environment. Economy mode operation and high-efficiency UPS designs conserve energy while cutting electricity bills and carbon emissions. Eco-friendly manufacturing across every product line enables industry-leading RoHS (Restriction of Hazardous Substances) compliance for a cleaner, greener planet.



# TRIPP·LITE

## DATA CENTER SOLUTIONS

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