3-PHASE UPS SYSTEMS



Powering and Connecting Your World

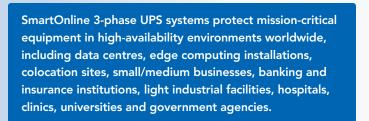
TRIPPLITE

SmartOnline[®] 3-Phase UPS

Continuous power for critical applications.

10–210 kVA, 380/400/415V Ph-Ph 20–140 kVA, 208/220V Ph-Ph

- Efficient and reliable operation
- Parallel capability up to 400 kVA
- Powerful network management
- Battery cabinets for scalable runtimes
- Comprehensive service program



tt the

響

Overview	2-3
3-Phase UPS Families	4-5
SVTX Series (400V, 10–30 kVA)	6-7
SUTX Series (400V, 20-40 kVA)	8-9
S3MX Series (400V, 30–200 kVA)	10-12
SVX Series (400V, 30–210 kVA)	13–15
SUT Series (208V, 20–60 kVA)	16–17
SV Series (208V, 20–140 kVA)	18-20
Network Management	21
External Battery Cabinets	22-23
Service Program	24

TRIPP-LITE OVERVIEW

Tripp Lite SmartOnline 3-Phase UPS Systems: Protecting Mission-Critical Environments Worldwide

Since 1922, Tripp Lite has built a reputation for outstanding reliability and exceptional service. From desktop to critical infrastructure, Tripp Lite products and solutions power and connect the computers, networking equipment and electronic devices that form the foundation of our digital world.

With capacities ranging from 10 kVA to 210 kVA (400 kVA in parallel), Tripp Lite's field-proven 3-phase UPS systems are used today in mission-critical production environments worldwide, including data centres, edge computing installations, colocation sites, small/medium businesses, banking and insurance institutions, light industrial facilities, hospitals, clinics, universities and government agencies. Featuring voltage- and frequency-independent (VFI) double-conversion operation, they provide the highest level of power protection.



Review this brochure for an introduction to Tripp Lite 3-phase UPS systems and the benefits they can provide to your organisation. When you are ready to learn more, Tripp Lite's dedicated 3-phase application engineers will help you configure the best solution for your requirements, providing actionable recommendations and bills of material to ensure your solution provides the availability and affordability you need to meet your goals.



400V UPS Families – See page 4 for more information.

Scalable Runtime with External Battery Cabinets

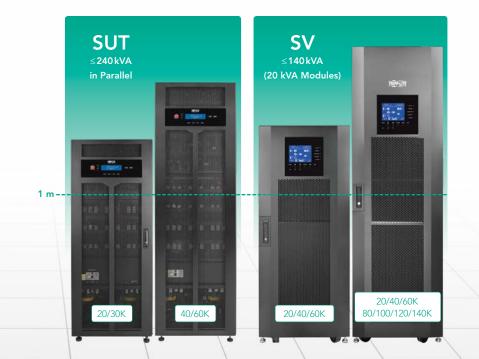
Tripp Lite provides a variety of external battery cabinet options, allowing you to customise and expand battery backup runtime.

Scalable Capacity to Keep Pace with Your Business

As loads increase, you can expand UPS capacity with hot-swappable power modules (SV/SVX series) or parallel capability (SVTX, SUT/SUTX and S3MX series).

Optimised Footprints for Edge Computing

A variety of models with internal batteries offer the compact footprint required for IoT, edge computing, back office and other space-constrained applications, including containerised micro data centres.



Powerful and Convenient Remote Management

WEBCARDLX enables remote management through HTML5 and SNMP interfaces, as well as support for integration with DCIM platforms.

Customisable Redundancy for High Availability

Select the best configuration for your application's availability requirements, including N+1 and N+N redundancy.

Comprehensive Service for Reliability and Uptime

Tripp Lite's 3-phase UPS service program ensures your UPS is ready to protect you from downtime over its entire lifecycle, from initial startup to annual service agreements and preventive maintenance.

Low Cost of Ownership to Maximise Profitability

High efficiency in double-conversion mode and ECO mode reduces your organisation's operational expenditures for power and cooling, while low THDi and active input power factor correction eliminate costly over-sizing requirements for generators and other equipment. Small UPS footprints leave more space for revenue-generating equipment and permit installation in smaller spaces without the expense and delay of retrofitting.

208V UPS Families – See page 5 for more information.

TRIPP-LITE 3-PHASE UPS FAMILIES







				0 1 1 0 0
400V	SVTX Series	SUTX Series	S3MX Series	SVX Series
Capacity	10/20/30 kVA (Parallel to 90 kVA)	20/40 kVA (Parallel to 160 kVA)	30–200 kVA (Parallel to 400 kVA)	30–210 kVA (30 kVA modules)
Voltage		380/400/415V (Ph-Ph)	, 220/230/240V (Ph-N)	
Distinct Series Benefits	Cost-effective power protection for small applications that require a small footprint	Advanced, high-efficiency protection for installations that may require N+N redundancy	Best-value, high- performance power protection with best-in- class footprint and unique battery-sharing capability	Best value for growing businesses; scalable via 30 kVA modules with N+1; high efficiency; low mean time to repair (MTTR)
Applications and I	ndustries			
Typical Applications	Small business installations, server rooms and network closets	Small and medium installations, dedicated IT space and mixed-use buildings with IT load ≤ 80 kW	Small and medium data centres, light industrial settings and large corporate networks with IT load ≤400 kW or 50 server racks at 8 kW/rack	Small and medium data centres, light industrial settings and large corporate networks with IT load ≤210 kW or 26 server racks at 8 kW/rack
Industries	Data centres, edge computed a com	ting, colocation, business, lig	ht manufacturing, finance, h	ealthcare,
Key Features				
Format	Small tower	Compact tower	Best-in-class footprint	Rack-based (30U or 42U)
UPS Footprint	10/20K: 0,20 m² (2,2 ft.²) 30K: 0,24 m² (2,6 ft.²)	20/40K: 0,41 m² (4,4 ft.²)	30/40K: 0,24 m ² (2,6 ft. ²) 60/80K: 0,28 m ² (3,0 ft. ²) 100/120K: 0,54 m ² (5,8 ft. ²) 160/200K: 0,56 m ² (6,0 ft. ²)	30–210K: 0,66 m² (7,1 ft.²)
UPS Height	10/20K: 0,86 m (33,9 in.) 30K: 1,04 m (40,7 in.)	20/40K: 1,40 m (55,1 in.)	30/40K: 1,00 m (39,4 in.) 60/80K: 1,01 m (39,8 in.) 100/120K: 1,02 m (40,0 in.) 160/200K: 1,45 m (57,3 in.)	30–90K: 1,48 m (58,1 in.) 30–210K: 2,01 m (79,1 in.)
Local/Remote Management	LCD + optional network card	LCD + optional network card	LCD or extra-large LCD + optional network card	Large LCD + included network card
Output Power Factor	0,9 power factor	Unity (1,0) power factor	0,9 power factor	Unity (1,0) power factor
Efficiency	≤92% (≤99% ECO)	≤95% (≤99% ECO)	≤94% (≤98% ECO)	≤95% (≤99% ECO)
Parallel Capability	3x capacity for 20/30K only	4x capacity or redundancy	2–3x capacity for 30–100K; 2x capacity or redundancy for 120–200K	Internal/modular N+1
Battery Options	Internal and/or external batteries	Internal and/or external batteries	Internal (30–40K) or external (30–200K) batteries; 2 units can share 1 battery cabinet	Internal or external batteries
Series Details	SVTX: Pages 6-7	SUTX: Pages 8–9	S3MX: Pages 10–12	SVX: Pages 13-15

TRIPP-LITE 3-PHASE UPS FAMILIES



208V	SUT Series	SV Series
Capacity	20/30/40/60 kVA (Parallel to 240 kVA)	20–140 kVA (20 kVA modules)
Voltage	208/220V (Ph-Ph)	, 120/127V (Ph-N)
Distinct Series Benefits	Advanced protection for installations that may require N+N redundancy	Best value for growing businesses; scalable via 20 kVA modules with N+1; low mean time to repair (MTTR)
Applications and I	ndustries	
Typical Applications	Small and medium installations, dedicated IT space and mixed-use buildings with IT load ≤ 80 kW	Small and medium data centres, light industrial settings and large corporate networks with IT load ≤126 kW or 15 server racks at 8 kW/rack
Industries	Data centres, edge computin manufacturing, finance, healt	g, colocation, business, light ncare, education, government
Key Features		
Format	Compact tower	Rack-based (30U or 42U)
UPS Footprint	20–60K: 0,42 m² (4,5 ft.²)	20–140K: 0,66 m² (7,1 ft.²)
UPS Height	20/30K: 1,38 m (54,3 in.) 40/60K: 1,76 m (69,3 in.)	20–60K: 1,48 m (58,1 in.) 20–140K: 2,01 m (79,1 in.)
Local/Remote Management	LCD + optional network card	Large LCD + included network card
Output Power Factor	Unity (1,0) power factor	0,9 power factor
Efficiency	≤93% (≤98% ECO)	≤92% (≤99% ECO)
Parallel Capability	4x capacity or redundancy	Internal/modular N+1
Battery and Runtime Options	Internal and/or external batteries	Internal or external batteries
Series Details	SUT: Pages 16–17	SV: Pages 18–20



Remote Management

Tripp Lite 3-phase UPS systems support powerful and convenient remote management capabilities through **WEBCARDLX**, which is included with SV and SVX models and optional for other models. For more information, see page 21.



Scalable Runtime

Tripp Lite provides a variety of external battery cabinets that allow you to customise and expand your 3-phase UPS system's battery backup runtime to support a wide range of applications. For more information, see pages 22–23.



3-Phase UPS Service

Tripp Lite's 3-phase UPS service program maintains the reliability and efficiency of your UPS over its entire lifecycle, ensuring it is always ready to protect you from downtime. For more information, see page 24.

TRIPP-LITE SVTX SERIES



SmartOnline SVTX Series

10/20/30 kVA, 380/400/415V Ph-Ph

- Best-in-class footprint
- VFI operation and IGBT inverter
- High output power factor (0,9)
- Optional network management card
- Built-in static and maintenance bypass
- Parallel capability up to 90 kVA
- ≤4 min. at full load with internal batteries
- ≤92 min. at full load with external batteries

Key Features and Benefits

BEST-IN-CLASS FOOTPRINT

• Compact footprint saves valuable space for revenuegenerating equipment and allows installation in smaller spaces without the expense and delay of retrofitting

SCALABLE, FAULT-TOLERANT ARCHITECTURE

- Parallel capability provides up to 90 kVA
- Space-saving internal batteries enable short-runtime applications with a small footprint
- Optional external battery cabinets outlast extended outages to enable long-runtime applications
- Built-in static and maintenance bypass transfer load to utility power during faults, overloads and service

POWERFUL UPS MANAGEMENT

- User-friendly LCD control panel permits full-featured local management through a user-friendly interface
- Optional WEBCARDLX network card enables remote management through embedded HTML5 web, SSH/telnet and SNMP interfaces, as well as integration with Network Management Systems and DCIM platforms (See page 21 for more information.)
- Standard Emergency Power Off (EPO) allows immediate shutdown during emergencies

HIGH-PERFORMANCE OPERATION

- Voltage- and frequency-independent (VFI) operation and transformerless IGBT rectifier technology provide reliable output power quality with pure sine wave
- Low THDi (<6%) improves generator compatibility and eliminates costly over-sizing requirements
- Low THDv (<2%) and active power factor correction improve output performance
- High output power factor (0,9) allows the UPS to support more equipment without overloading
- High charging capacity allows the UPS to ride through multiple power failures in rapid succession

COMPREHENSIVE SERVICE PROGRAM

- Tripp Lite Care ensures your UPS is ready to protect you from downtime over its entire lifecycle, from initial startup to annual service agreements and preventive maintenance
- Regular service improves UPS reliability, longevity and cost control (See page 24 for more information.)

Typical Applications: Small business installations, server rooms and network closets

SmartOnline SVTX Series Technical Specifications

OVERVIEW Model	SVT10KX	SVT20KX	SVT30KX
Capacity	10 kVA/9 kW	20 kVA / 18 kW	30 kVA/27 kW
Topology		ncy-Independent (VFI) True On-Line	
INPUT	voltage and reque		
Voltage	380/	/400/415V (Ph-Ph); 220/230/240V (Pł	n-N)
Voltage Range		305–478V (100% Load)	
Phase		3-Phase, Neutral and Ground	
Operating Frequency		50/60 Hz (Selectable)	
Frequency Range	46-54 H	Iz (50 Hz System); 56–64 Hz (60 Hz	System)
Power Factor		>0,99%	
THDi		<6%	
Inverter Bridge		IGBT Technology	
OUTPUT			
Voltage	380/	/400/415V (Ph-Ph); 220/230/240V (Pł	n-N)
AC Voltage Regulation		±1%	·
Frequency (Range)		50/60 Hz, Selectable (±0,1 Hz)	
Efficiency (ECO/Line Mode, 100% Load)	99%/90%	97%/91%	97%/92%
Overload (AC and Battery Mode)	100%-110%	6 (10 min.); 111%–130% (1 min.); >1	30% (1 sec.)
Crest Factor		3:1	
Harmonic Distortion	<2%	لا (Linear Load); < 5% (Non-Linear Lo	bad)
Transfer Time	0 ms (l	_ine ↔ Battery); 0 ms (Inverter ↔ B	ypass)
Output Waveform		Pure Sine Wave	
BYPASS			
Static and Maintenance Bypass		Standard	
Transfer Time		<1 ms	
Default Bypass Voltage Tolerance		190V–457V (Ph-Ph, Adjustable)	
Overload	<	< 130% (Continuous); > 130% (1 min.)
BATTERY			
Battery Type	Maintenance	-Free Sealed Valve-Regulated Lead	I-Acid (VRLA)
Battery Capacity		12V 9 Ah	
Quantity	20	20 x 2	20 x 3
Battery Charging Capacity	2A	4/	4
Float Voltage		273V DC ± 1%	
Battery Storage Time		6 months (Without Recharge, 25° C)	
BATTERY RUNTIME (50%/100% Load)			
Internal Batteries Only	11/4 min.	11/4 min.	11/4 min.
+1 BP240V135 External Battery Cabinet	68/29 min.	38/16 min.	32/13 min.
+2 BP240V135 External Battery Cabinets	135/59 min.	68/30 min.	53/22 min.
+3 BP240V135 External Battery Cabinets	206/92 min.	101/45 min.	76/31 min.
ENVIRONMENT			
Operating Temperature / Humidity		imal Battery Life $<25^{\circ}$ C)/0-95% (N	
Operating Altitude	< 1000	m (1% Derating per 100 m Above 1	000 m)
		<65 dBA @ 1 m	
		(2 mm Multifue atian LCD	
Control Panel		62 mm Multifunction LCD Standard	
RS-232 Serial (DB9) Network Management Card (SNMP)		Standard BCARDLX (See page 21 for more i	nformation)
Relay Interface Card		Optional (RELAYCARDSV)	
Frequency Converter Mode Parallel Capability for Capacity	No	Programmable Up to 3	llnite
EPO (Emergency Power Off)	INU	Standard	Onits
STANDARDS		Stanuaru	
Safety		IEC/EN 62040-1	
EMC		2040-2; IEC/EN 61000-4-2; IEC/EN 6	61000-4-3
Surge	ilc/EN 0.	IEC/EN 61000-4-5 Level 4	J 1000-T-J
Conduction Immunity		IEC/EN 61000-4-6	
Approvals		TUV	
Additional		RoHS, IP20 Ingress Protection Rating	r
PHYSICAL			j
Jnit Dimensions (HxWxD)		x 813 mm	1035 x 300 x 813 mm
Jnit Weight	118 kg	178 kg	235 kg
Shipping Dimensions (HxWxD)		176 kg)x 920 mm	235 kg 1240x430x920 mm
Shipping Weight Cabinet Colour	135 kg	195 kg RAL 9005 (Black)	255 kg
NDDITIONAL ACCESSORIES (Cold Concertain)			
ADDITIONAL ACCESSORIES (Sold Separately) Maintenance Bypass Panels	Contact Tripp Lite	Contact Tripp Lite	SU40KMBPKX

TRIPP-LITE SUTX SERIES



SmartOnline SUTX Series

20/40 kVA, 380/400/415V Ph-Ph

- VFI operation and IGBT with DSP control
- Up to 95% double-conversion efficiency
- Unity output power factor (1,0)
- Optional network management card
- Built-in static and maintenance bypass
- Parallel capability up to 160 kVA
- Dual redundant AC inputs
- ≤14 min. at full load with internal batteries
- Up to several hours of runtime at full load with external batteries

Key Features and Benefits

SCALABLE, FAULT-TOLERANT ARCHITECTURE

- Parallel capability provides up to 160 kVA and supports N+N redundancy
- Space-saving internal batteries enable short-runtime applications with an optimised footprint
- Optional external battery cabinets outlast extended outages to enable long-runtime applications
- Built-in static and maintenance bypass transfer load to utility power during faults, overloads and service
- Dual AC inputs can connect to independent sources for additional power redundancy and increased availability

POWERFUL UPS MANAGEMENT

- User-friendly LCD control panel permits full-featured local management through a user-friendly interface
- Optional WEBCARDLX network card enables remote management through embedded HTML5 web, SSH/telnet and SNMP interfaces, as well as integration with Network Management Systems and DCIM platforms (See page 21 for more information.)
- Standard Emergency Power Off (EPO) allows immediate shutdown during emergencies

EFFICIENT, HIGH-PERFORMANCE OPERATION

- Voltage- and frequency-independent (VFI) operation and transformerless IGBT rectifier technology with DSP control provide reliable output power quality with pure sine wave
- 95% double-conversion efficiency and 99% ECO-mode efficiency reduce power and cooling costs
- Low THDi (4–5%) improves generator compatibility and eliminates costly over-sizing requirements
- Low THDv (1%) and active power factor correction improve output performance
- Unity output power factor (1,0) allows the UPS to support more equipment without overloading
- High charging capacity allows the UPS to ride through multiple power failures in rapid succession

COMPREHENSIVE SERVICE PROGRAM

• Tripp Lite Care improves UPS reliability, longevity and cost control (See page 24 for more information.)

Typical Applications: Small and medium installations, dedicated IT space and mixed-use buildings with IT load \leq 80 kW

SmartOnline SUTX Series Technical Specifications

OVERVIEW Model	SUTX20K	SUTX40K					
Capacity	20 kVA/20 kW	40 kVA/40 kW					
Topology		t (VFI) True On-Line Double Conversion					
INPUT							
Voltage	380/400/415V (Ph-Ph); 220/230/240V (Ph-N)					
Voltage Range		(100% Load)					
Phase	3-Phase, Neu	tral and Ground					
Operating Frequency (Range)	50/60 Hz, Selectable (40–70 Hz)						
Power Factor		,99%					
THDi	5%	4%					
Inverter Bridge	IGBT Te	chnology					
OUTPUT	200/400/4451//01-01	2000/0000/0000// (DL NI)					
Voltage); 220/230/240V (Ph-N)					
AC Voltage Regulation		1% ctable (±0,05 Hz)					
Frequency (Range) Efficiency		; 99% ECO Mode (100% Load)					
Overload (AC and Battery Mode)		in.); 126–150% (1 min.); > 150% (1 sec.)					
Crest Factor		3:1					
Harmonic Distortion	1% (Linear Load), 3% (Non-Linear Load)	1% (Linear Load), 2% (Non-Linear Load)					
Transfer Time		0 ms (Inverter ↔ Bypass)					
Output Waveform		ne Wave					
BYPASS							
Static and Maintenance Bypass	Sta	ndard					
Transfer Time		ms					
Default Bypass Voltage Tolerance	±	15%					
Overload	105% (Continuous); 106–125% (10 m	in.); 126–150% (1 min.); >150% (1 sec.)					
BATTERY							
Battery Type		ve-Regulated Lead-Acid (VRLA)					
Battery Capacity		(9Ah					
Quantity		Strings					
Battery Charging Capacity	1,5A–5A (Default: 1,5A)	1,5A–5A (Default: 2A)					
Float Voltage		DC ± 2%					
Boost Voltage		DC ± 2%					
End of Discharge Voltage Battery Storage Time		DC ± 2% ut Recharge, 25° C)					
Battery Runtime (50% / 100% Load)	33/14 min.	14/5 min.					
ENVIRONMENT	557 14 11111.	14/ 5 11111.					
Operating Temperature/Humidity	0–40° C (Eor Optimal Battery Life:	17–25° C)/0–95% (Non-Condensing)					
Operating Altitude		er 100 m above 1000 m.)					
Audible Noise	< 55 dBA @ 1 m	<60 dBA @ 1 m					
MANAGEMENT							
Control Panel	130 mm Mul	tifunction LCD					
RS-232 Serial (DB9)	Sta	ndard					
Contact Closure		ndard					
Network Management Card (SNMP)		page 21 for more information.)					
MODBUS		ODBUSCARD					
Frequency Converter Mode		mmable					
Parallel Connection Capability		pacity or Redundancy					
EPO (Emergency Power Off)	Sta	ndard					
STANDARDS							
Safety		1 62040-1					
EMC		0000-4-2; IEC/EN 61000-4-3 00-4-5 Level 4					
Surge Conduction Immunity		61000-4-6					
Approvals		01000-4-0 UV					
Additional		ss Protection Rating					
PHYSICAL							
Unit/Shipping Dimensions (HxWxD)	1400 x 490 x 840 mm	/1642x725x1010 mm					
Unit/Shipping Weight	363 kg/400 kg	383 kg/420 kg					
Cabinet Colour		05 (Black)					
ADDITIONAL ACCESSORIES (Sold Separat							
External Battery Cabinets		7500 (Non-matching battery cabinets with batteries					
-	included for a range of long-runtime applications	. See www.tripplite.com for more information.)					
	Connect up to 4 externa	l battery cabinets per UPS.					
		·····					

S3MX SERIES



in-class footprint and unique battery-sharing capability

Key Features and Benefits

BEST-IN-CLASS FOOTPRINT AND POWER DENSITY

- Compact footprint for up to 200 kVA saves valuable space for revenue-generating equipment and allows installation in smaller spaces without the expense and delay of retrofitting
- Parallel capability provides up to 400 kVA

EFFICIENT, HIGH-PERFORMANCE OPERATION

- Highly efficient transformerless double-conversion technology delivers operating cost savings
- 94% double-conversion efficiency and 98% ECO-mode efficiency reduce power and cooling costs
- Low THDi (<3%) improves generator compatibility and eliminates costly over-sizing requirements
- Low THDv (≤2%) and active power factor correction improve output performance
- Voltage- and frequency-independent (VFI) operation and advanced IGBT rectifier technology with DSP control provide reliable output power quality
- Built-in static and maintenance bypass transfer UPS load to utility power during faults, overloads and service to avoid costly system downtime
- Unified platform and firmware design reduces the number of unique boards, improving mean time to repair (MTTR)

SmartOnline S3MX Series

30-200 kVA, 380/400/415V Ph-Ph

- Best-in-class footprint and power density
- Unique battery-sharing capability
- Up to 94% double-conversion efficiency
- VFI operation and IGBT with DSP control
- Built-in static and maintenance bypass
- Extra-large colour touchscreen display
- Optional network management card
- Parallel capability up to 400 kVA
- ≤5,5 min. at full load with internal batteries
- ≤276 min. at full load with external batteries

UNIQUE BATTERY-SHARING CAPABILITY

• Two S3MX UPS systems can share a single battery cabinet, providing substantial cost and space savings

POWERFUL UPS MANAGEMENT

- Extra-large (25,4 cm / 10 in.) colour touchscreen display permits comprehensive local management through an advanced and user-friendly interface (100-200 kVA models)
- Optional WEBCARDLX network card enables remote management through embedded HTML5 web, SSH/telnet and SNMP interfaces, as well as integration with Network Management Systems and DCIM platforms (See page 21 for more information.)
- Standard Remote Emergency Power Off (REPO) allows shutdown from a safe distance during emergencies

COMPREHENSIVE SERVICE PROGRAM

• Tripp Lite Care ensures your UPS is ready to protect you from downtime over its entire lifecycle, from initial startup to annual service agreements and preventive maintenance (See page 24 for more information.)

Typical Applications: Small and medium data centres, light industrial settings and large corporate networks with IT load \leq 400 kW or 50 server racks at 8 kW/rack

SmartOnline S3MX Series Technical Specifications

Model	53M30KX	S3M40KX	S3M30KX- NIB	S3M40KX- NIB	S3M60KX	S3M80KX	S3M100KX	S3M120KX	S3M160KX	S3M200KX
OVERVIEW										
Capacity (VA)	30 kVA	40 kVA	30 kVA	40 kVA	60 kVA	80 kVA	100 kVA	120 kVA	160 kVA	200 kVA
Capacity (Watts)	27 kW	36 kW	27 kW	36 kW	54 kW	72 kW	90 kW	108 kW	144 kW	180 kW
Battery Configuration	Internal/ External	Internal/ External	External	External	External	External	External	External	External	External
UPS Technology	True	On-Line Doub	ole Conversior	n; Voltage- and	d Frequency-Ir	ndependent (\	/FI); Pure Sine	Wave Output	; Monolithic D	esign
INPUT										
Voltage and Phase		Ph-Ph	380V/400V/41	5V (Ph-N 220V	//230V/240V); 3	3-Phase with N	leutral (3-Phas	e, Neutral + C	Ground)	
Voltage Range	Ph	-Ph 208–478V	′ at < 50% Loa		478V to 305–4 h-Ph 305–478			oltage Range V	Varies with Loa	ad);
Voltage Comeback				Low-Loss	Voltage +10V;	High-Loss Vo	ltage -10V			
Nominal Frequency					50/60 Hz (Aut	to-Selectable)				
Frequency Range		46–54 Hz (50 Hz System)	; 56–64 Hz (60	Hz System)			40-	70 Hz	
Power Factor					≥0,99 (10	10% Load)				
Harmonic Distortion (THDi)					< 3% (10	0% Load)				
OUTPUT	1									
Voltage and Phase		Ph-Ph	380V/400V/41	5V (Ph-N 220V	//230V/240V); 3	3-Phase with N	leutral (3-Phas	se, Neutral + C	Ground)	
AC Voltage Regulation		Converter N	lode or Batter	1ode (Balance ry Mode: ±1% 11V of Nomina	of Nominal;		Double-Conversion Mode (Balanced Load), Converter Mode or Battery Mode: ± 1% of Nomi ECO Mode: ± 15V of Nominal			
Power Factor					0	,9				
Frequency		46–54 Hz (50 Hz System)	; 56–64 Hz (60	Hz System)		Selectable ± 1 Hz, ± 2 Hz, ± 4 Hz of Input (Default: \pm			
Frequency Regulation				Conver	ter Mode or B	attery Mode:	±0,1 Hz			
Frequency Range				Battery N	/lode: 50 Hz ±	0,1 Hz or 60 H	z ±0,1 Hz			
Overload		AC Mode: ≤11 Battery Mode:					AC Mode: ≤110%=1 h; ≤125%=10 min.; 150%=1 mir >150%=200 ms; Battery Mode: ≤110%=1 h; ≤125%=10 min.; ≤150%=1 min.; >150%= 200 ms			
Current Crest Ratio					3:1 Ma	iximum				
Harmonic Distortion			≤2%	5 THD (100% L	inear Load); ≤∙	4% THD (1009	6 Non-Linear L	₋oad)		
Waveform					Pure Sir	ne Wave				
Transfer Time	Inve	Line () Ba erter () Bypass		nverter (→ ECC ronous) or ≤4		ious)		Bypass: 0 ms	nverter ↔ ECC (Synchronous) nronous)	
BYPASS INPUT										
Voltage and Phase		Ph-Ph	380V/400V/41	5V (Ph-N 220V	//230V/240V); 3	3-Phase with N	leutral (3-Phas	se, Neutral + C	Ground)	
Voltage Range				°h-N 231−264\ ′h-N 176−209\					1%, +15% or +2 1%, -20% or -30	
Nominal Frequency						to-Selectable)				
Frequency Range		Sele	ctable: $\pm 1-4$	Hz (Default: ±	4 Hz)		Selectable	e: ±1 Hz, ±2 H	lz, ±4 Hz (Defa	ault: ±4 Hz)
Overload		В	ypass Mode:	<150% = 1 mi	n.				= 1 h; 111–12! n.; >150% = 20	
EFFICIENCY				00.561			0.101		00.551	
AC Line Mode		94% at 100% R	-	-					; 93,5% at 50%	
ECO Mode		98%, at 100% F							d; 97% at 50% R	
Battery Mode		93,5% at 100%	Resistive Loa	d; 93% at 50%	Resistive Load	d	93% at 100%	Resistive Load;	; 92,5% at 50%	Resistive Loa
	LITY			211.1					0.11.1	
Parallel for Capacity				3 Units					2 Units	
Parallel for Redundancy			Ν	/A			External N+1 Bypass Panel	Up to 2 Units	Up to 2 Units	Up to 2 Units

SmartOnline S3MX Series Technical Specifications (continued)

Model	S3M30KX	S3M40KX	S3M30KX- NIB	S3M40KX- NIB	S3M60KX	S3M80KX	S3M100KX	S3M120KX	S3M160KX	S3M200KX
BATTERIES (Note: S	3M30KX and	S3M40KX in	clude internal	batteries. All o	other models r	equire externa	al batteries, sc	old separately.)		
Battery Type				12	' Non-Spillable	vrla AGM/	GEL			
DC Nominal Acceptance Voltage					± 240	VDC				
Battery Quantity	20+20); Ex	2 x Strings of ternal: 40N igs of 20+20)			Extern	nal: 40N (N≥1	I x Strings of 2	0+20)		
Runtime with Internal Batteries	5,5 min. (100% Load)	5 min. (100% Load)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Runtime Range with External Battery Cabinets	19–160 min. (100% Load)	15–129 min. (100% Load)	22–276 min. (100% Load)	15–195 min. (100% Load)	8,5–195 min. (100% Load)	5,6–139 min. (100% Load)	4–239 min. (100% Load)	3–193 min. (100% Load)	1,8–138 min. (100% Load)	1,2–105 min. (100% Load)
External Battery Cabinets	BP480V09 (Optional)	BP480V10 (Optional)		480V100-NIE	abinet(s) are re 5, BP480V100 V10-NIB, BP4	, BP480V65-N	NIB, BP480V6	5, BP480V40-	NIB, BP480V	
Recharge Time		to 90% Batteries)					al Battery Cab			
Maximum Charging Current		Adjustable up ±10%; Max 1		3KIT30-40 .)	Adjustable up (Max 24	1A with	Adjustable up to 24A	Adjustable up to 32A	Adjustable up to 40A	Adjustable up to 48A
Float Voltage					2 x CBKI 13,65V/Batte	,	±1%	±1%	±1%	±1%
×						<i></i>				
Boost Charging End of Discharge					14,1V/Batter 10V/Battery	·				
Charger Temperature Compensation			Ν	/Α	TOV / Battery	, 1,07 V7 Cell	(Requires o	-3 mV/ ptional TEMP	Cell/°C C100200 the	rmostat kit.)
PHYSICAL										
Dimensions	1000 x 300 x	1000 x 300 x	1000 x 300 x	1000 x 300 x	1010 x 360 x	1010 x 360 x	1015 x 567 x	1015 x 567 x	1455 x 567 x	1455 x 567 x
(H×W×D)	815 mm	815 mm	815 mm	815 mm	790 mm	790 mm	945 mm	945 mm	995 mm	995 mm
Unit Weight	265 kg	316 kg	60 kg	61 kg	108 kg	113 kg	197 kg	232 kg	309 kg	343 kg
Cabinet Colour					RAL 9005	(Jet Black)				
ENVIRONMENT										
Operating Temp.					(≤25° C for op	,	1 1			
Storage Temp.			0-3	85° C (UPS with	batteries.); -1	-	without batter	ies.)		
Operating Humidity					0–95% (Non-	0.				
Operating Altitude	(0.15.4	70 10 1		-	output power	2 1	1	-		
Audible Noise	< 60 dBA at 1 m	<70 dBA at 1 m	<60 dBA at 1 m	<70 dBA at 1 m	<70 dBA at 1 m	<75 dBA at 1 m		dBA 1 m	-	dBA 1 m
Heat Dissipation	5527	7362	5527	7362	11054	14738	19600	23507	31343	39179
(100% Load) Heat Dissipation	BTU/h 2994	BTU/h 3992	BTU/h 2994	BTU/h 3992	BTU/h 5998	BTU/h 7984	BTU/h 9974	BTU/h 11048	BTU/h 14731	BTU/h 18414
(50% Load)	BTU/h	BTU/h	BTU/h	BTU/h	BTU/h	BTU/h	BTU/h	BTU/h	BTU/h	BTU/h
MANAGEMENT Network Manage- ment Card (SNMP)			Ор	tional WEBC	ARDLX (See p	age 21 for m	ore informati	on.)		
Control Panel			62 mm Multi	function LCD			Extra-Large	254 mm / 10 in	. Colour LCD	Touchscreen
					tional RELAY	CARDSV Inter				
Contact Closure	Optional RELAYCARDSV Interface Remote Emergency Power Off Included (Default: Normally Closed)						lt: Normally Cl	osed)		
			Remo	ote Emergency	RS-232 (Service Only)					
Contact Closure			Remo							
Contact Closure REPO Comm. Ports			Remo	ote Emergency						
Contact Closure REPO Comm. Ports			Remo			rvice Only)				
Contact Closure REPO Comm. Ports STANDARDS			Kemo	IEC/EN 6	RS-232 (Se	rvice Only) A1:2013 (TUV)	Approval)			
Contact Closure REPO Comm. Ports STANDARDS Safety EMC/EMI Additional				IEC/EN 6 EN 62040-2	RS-232 (Se 2040-1:2008+7	rvice Only) A1:2013 (TUV) 40-2:2016 (TU	Approval) IV Approval)			
Contact Closure REPO Comm. Ports STANDARDS Safety EMC/EMI Additional ADDITIONAL ACC Maintenance	CESSORIES (S			IEC/EN 6 EN 62040-2	RS-232 (Se 2040-1:2008+/ :2017/IEC 620	rvice Only) A1:2013 (TUV / 40-2:2016 (TU /rotection Rati	Approval) V Approval) ng, RoHS	ТМВРКХ	Contact 1	Tripp Lite
Contact Closure REPO Comm. Ports STANDARDS Safety EMC/EMI Additional ADDITIONAL ACC	CESSORIES (SU40K CBKIT	aly)	IEC/EN 6 EN 62040-2	RS-232 (Se 2040-1:2008+7 :2017/IEC 620 IP20 Ingress F	rvice Only) A1:2013 (TUV) 40-2:2016 (TU ?rotection Rati su8окмвркх 30-80	Approval) V Approval) ng, RoHS	мвркх	Contact ⁻ /A	Tripp Lite





businesses; scalable via 30 kVA modules with N+1; high efficiency; low mean time to repair (MTTR)

Key Features and Benefits

MODULAR, SCALABLE, FAULT-TOLERANT ARCHITECTURE

- Hot-swappable 30 kVA power modules can increase capacity and/or provide N+1 redundancy for fault tolerance
- Power and battery modules can be added or replaced without powering down for zero-downtime maintenance
- All UPS capacities are available without internal batteries for long-runtime applications using external battery cabinets
- 30–90 kVA models are also available with internal batteries for shorter-runtime applications with a smaller footprint
- Dual AC inputs can connect to independent sources for additional power redundancy and increased availability
- Built-in static and maintenance bypass transfer load to utility power during faults, overloads and service

POWERFUL UPS MANAGEMENT

- Large LCD control panel permits full-featured local management through a user-friendly interface
- Included WEBCARDLX network card enables remote management through embedded HTML5 web, SSH/telnet and SNMP interfaces, as well as integration with Network Management Systems and DCIM platforms (See page 21 for more information.)
- Standard Emergency Power Off (EPO) allows immediate shutdown during emergencies

SmartOnline SVX Series

30-210 kVA (N+1), 380/400/415V Ph-Ph

- Modular, scalable UPS platform
- Up to 95% double-conversion efficiency
- VFI operation and IGBT with DSP control
- Unity output power factor (1,0)
- Built-in network management card
- Built-in static and maintenance bypass
- N+1 redundancy and dual AC inputs
- Rack-based cabinet (30U or 42U)
- ≤17 min. at full load with internal batteries
- ≤223 min. at full load with external batteries

EFFICIENT, HIGH-PERFORMANCE OPERATION

- 95% double-conversion efficiency and 99% ECO-mode efficiency reduce power and cooling costs
- Voltage- and frequency-independent (VFI) operation and transformerless IGBT rectifier technology with DSP control provide reliable output power quality with pure sine wave
- Low THDi (<3%) improves generator compatibility and eliminates costly over-sizing requirements
- Low THDv (<1,5%) and active power factor correction improve output performance
- Unity output power factor (1,0) allows the UPS to support more equipment without overloading

COMPREHENSIVE SERVICE PROGRAM

- Tripp Lite Care ensures your UPS is ready to protect you from downtime over its entire lifecycle, from initial startup to annual service agreements and preventive maintenance
- Regular service improves UPS reliability, longevity and cost control (See page 24 for more information.)

Typical Applications: Small and medium data centres, light industrial settings and large corporate networks with IT load \leq 210 kW or 26 server racks at 8 kW/rack

SmartOnline SVX Series Technical Specifications

OVERVIEW		30K	60K	90K	120K	150K	180K	210K		
CAPACITY kVA	/kW	30/30	60/60	90/90	120/120	150/150	180/180	210/210		
TOPOLOGY		Voltage- and	Frequency-Ind	lependent (VFI) True On-Line	Double Conve	ersion			
INPUT										
Voltage		380/400/415	/ (Ph-Ph); 220/2	30/240V (Ph-N)					
Voltage Range		305V-478V (F	Ph-Ph); 100% Lo	bad						
Phase C		3-Phase, Neu	tral and Groun	d						
Operating Freq	uency (Range)	50/60 Hz, Sel	ectable (40–70) Hz ±0,1 Hz)						
Power Factor	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	>0,99	,							
THDi		<3%	<3%							
Inverter Bridge		IGBT Technol	loav							
OUTPUT										
Voltage		380/400/415	/ (Ph-Ph); 220/2	230/240V (Ph-N)					
AC Voltage Reg	ulation	<1% (Balance			/					
Frequency (Ran			ectable (40–70) Hz +0 1 Hz)						
	Mode/Line Mode)	>99%/>95%		/TIZ ± 0, TTTZ)						
				1259/ 10	. /10/0/ 1500/	. 1	9/ . 200			
Overload	AC Mode		60 min./111%							
	Battery Mode		60 min./111%	– 125%: 10 mir	1./120%-150%	s. i min./≥150'	/o: ∠UU MS			
Crest Factor		3:1		0/ /1000/ 11	• I IV					
Harmonic Disto			near load); <49	% (100% Non-L	Inear Load)					
Output Wavefor	rm	Pure Sine Wa	ve							
BYPASS										
	tenance Bypass	Standard								
ransfer Time		≤1 ms								
	Tolerance (Default)	+15%/-20%								
Dverload		105%-110%:	60 min./111%	–125%: 10 mir	n./126%—150%	5: 1 min./>150	%: 200 ms			
BATTERY										
Battery Type*		Maintenance	-Free Sealed V	alve-Regulated	d Lead-Acid (VI	rla)				
Battery Capacity	y*	12V 9 Ah								
-loat Voltage		2,3V/Cell								
Boost Voltage		2,35V/Cell								
End-of-Discharg	ge Voltage	1,67V/Cell								
Battery Storage	Time*	6 months (Wi	thout Recharge	e, Stored at 25	°C)					
Battery Charger	Capacity	8A (2A defau	lt)							
	mum Runtime with Modules, 100% Load	17 min.	7 min.	4,2 min.	N/A	N/A	N/A	N/A		
	num Runtime with Cabinet(s), 100% Load**	222 min.	98 min.	59 min.	41 min.	31 min.	24 min.	20 min.		
	vith internal battery modules. ** Extern	al battery cabinets are s	old separately. Run	time varies with mo	del. See accessorie	s section on next pa	age for more inform	ation.		
INVIRONMEN	Τ									
Operating Temp	perature	0° to 40° C								
Storage Temper		-15° to 60° C	(Excluding Bat	tery)	-					
Dperating Hum			n-Condensing)							
Operating Altitu			Deration per 7		000 m)					
Audible Noise		<73 dBA at 1			,					
Colour		RAL 9005 (Jet								
	т	10 (2 7003 (38)								
Control Panel		Large 1/15 mm	n Multifunctior							
	gement Card (SNMP)	-	K Included (See		oro information					
						J11.]				
Contact Closure			LAYCARDSV S	old separately	7					
Emergency Pow		Standard								
TANDARDS										
Safety		IEC/EN 62040								
N // C		IEC/EN 62040	J-2							
EMC										
Approvals Additional		TUV	gress Protectio							

SmartOnline SVX Series Technical Specifications (continued)

ADDITIONAL ACCESSORIES (Sold Separately)								
	30K	60K	90K	120K	150K	180K	210K	
Power Modules	SVX30PM (Hot-swappable 30 kVA/30 kW power modules for SVX series UPS models.)							
Internal Battery Modules	SVXBM (Hot-s	swappable batt	ery modules fo	r SVX series UP	S models with i	internal batterie	es.)	
	BP480V370 (Matching 42U b	attery cabinet	with batteries f	or long-runtime	applications.)		
External Battery Cabinets	BP480V370NB (Matching 42U battery cabinet without batteries for long-runtime applications.)							
-	BP480V200/BP480V300/BP480V400/BP480V500 (Non-matching battery cabinets with batteries for a range of long-runtime applications. See www.tripplite.com for more information.)							
Maintenance Bypass Panels	SU40KMBPKX	SU60KMBPKX	Contact Tripp Lite	SU120KMBPKX	c	Contact Tripp Lite	9	

Small Frame (30U) Maximum Configurable Power: 90kVA/90kW

Total Dimensions (H x W x D): 1475 x 600 x 1100 mm • Shipping Dimensions (H x W x D): 1650 x 750 x 1220 mm

Capacity	Model	Battery Configuration	Runtime (100% Load)	Unit Weight	Shipping Weight
30 kVA/30 kW	SVX30KS1P2B	Internal Batteries: 2 SVXBM	4,7 min.	502 kg	573 kg
30 kVA / 30 kW	SVX30KS1P3B	Internal Batteries: 3 SVXBM	9 min.	606 kg	684 kg
60 kVA / 60 kW	SVX60KS2P3B	Internal Batteries: 3 SVXBM	3,5 min.	641 kg	722 kg
90 kVA / 90 kW	SVX90KS3P	External Battery Cabinet(s)*	6,2–59 min.**	363 kg***	427 kg***

* External battery cabinets are sold separately. ** Range available with recommended battery cabinet options. *** Without external battery cabinets.

Medium Frame (42U) Maximum Configurable Power: 90kVA/90kW

Total Dimensions (H x W x D): 2010 x 600 x 1100 mm • Shipping Dimensions (H x W x D): 2175 x 750 x 1220 mm

Capacity	Model	Battery Configuration	Runtime (100% Load)	Unit Weight	Shipping Weight
30 kVA / 30 kW	SVX30KM1P2B	Internal Batteries: 2 SVXBM	4,7 min.	517 kg	596 kg
30 kVA/30 kW	SVX30KM1P3B	Internal Batteries: 3 SVXBM	9 min.	621 kg	707 kg
30 kVA / 30 kW	SVX30KM1P4B	Internal Batteries: 4 SVXBM	13 min.	725 kg	818 kg
30 kVA / 30 kW	SVX30KM1P5B	Internal Batteries: 5 SVXBM	17 min.	829 kg	929 kg
60 kVA / 60 kW	SVX60KM2P3B	Internal Batteries: 3 SVXBM	3,5 min.	655 kg	745 kg
60 kVA / 60 kW	SVX60KM2P4B	Internal Batteries: 4 SVXBM	5 min.	759 kg	856 kg
60 kVA / 60 kW	SVX60KM2P5B	Internal Batteries: 5 SVXBM	7 min.	863 kg	967 kg
90 kVA / 90 kW	SVX90KM3P5B	Internal Batteries: 5 SVXBM	4,2 min.	898 kg	1005 kg

Large Frame (42U) Maximum Configurable Power: 210kVA/210kW

Total Dimensions (H x W x D): 2010 x 600 x 1100 mm • Shipping Dimensions (H x W x D): 2175 x 750 x 1220 mm

Capacity	Model	Battery Configuration	Runtime (100% Load)	Unit Weight	Shipping Weight
30 kVA / 30 kW	SVX30KL	External Battery Cabinet(s)*	28-223 min.**	308 kg***	373 kg***
60 kVA / 60 kW	SVX60KL	External Battery Cabinet(s)*	11–98 min.**	342 kg***	411 kg***
90 kVA/90 kW	SVX90KL	External Battery Cabinet(s)*	6,2–59 min.**	377 kg***	449 kg***
120 kVA / 120 kW	SVX120KL	External Battery Cabinet(s)*	4-41 min.**	411 kg***	487 kg***
150 kVA / 150 kW	SVX150KL	External Battery Cabinet(s)*	4,9-31 min.**	446 kg***	525 kg***
180 kVA / 180 kW	SVX180KL	External Battery Cabinet(s)*	5,7–24 min.**	480 kg***	563 kg***
210kVA/210kW	SVX210KL7P	External Battery Cabinet(s)*	4,3-20 min.**	515 kg***	601 kg***
210kVA/210kW N+1	SVX210KL8P	External Battery Cabinet(s)*	4,3-20 min.**	549 ka***	639 kg***

*External battery cabinets are sold separately. **Range available with recommended battery cabinet options. ***Without external battery cabinets.

TRIPP-LITE SUT SERIES



SmartOnline SUT Series

20/30/40/60 kVA, 208/220V Ph-Ph

- VFI operation and IGBT with DSP control
- Up to 93% double-conversion efficiency
- Unity output power factor (1,0)
- Optional network management card
- Built-in static bypass
- Parallel capability up to 240 kVA
- Dual redundant AC inputs
- ≤6 min. at full load with internal batteries
- ≤110 min. at full load with external batteries

Key Features and Benefits

SCALABLE, FAULT-TOLERANT ARCHITECTURE

- Parallel capability provides up to 240 kVA and supports N+N redundancy
- Space-saving internal batteries enable short-runtime applications with a small footprint
- Optional external battery cabinets outlast extended outages to enable long-runtime applications
- Built-in static bypass transfers load to utility power during faults and overloads
- Dual AC inputs can connect to independent sources for additional power redundancy and increased availability

POWERFUL UPS MANAGEMENT

- User-friendly LCD control panel permits full-featured local management through a user-friendly interface
- Optional WEBCARDLX network card enables remote management through embedded HTML5 web, SSH/telnet and SNMP interfaces, as well as integration with Network Management Systems and DCIM platforms (See page 21 for more information.)
- Standard Emergency Power Off (EPO) allows immediate shutdown during emergencies

EFFICIENT, HIGH-PERFORMANCE OPERATION

- Voltage- and frequency-independent (VFI) operation and transformerless IGBT rectifier technology with DSP control provide reliable output power quality with pure sine wave
- 93% double-conversion efficiency and 98% ECO-mode efficiency reduce power and cooling costs
- Low THDi (<3-4%) improves generator compatibility and eliminates costly over-sizing requirements
- Low THDv (≤3%) and active power factor correction improve output performance
- Unity output power factor (1,0) allows the UPS to support more equipment without overloading
- High charging capacity allows the UPS to ride through multiple power failures in rapid succession

COMPREHENSIVE SERVICE PROGRAM

• Tripp Lite Care improves UPS reliability, longevity and cost control (See page 24 for more information.)

Typical Applications: Small and medium installations, dedicated IT space and mixed-use buildings with IT load ≤80 kW

SmartOnline SUT Series Technical Specifications

Model	SUT20K	SUT30K	SUT40K	SUT60K		
Capacity	20kVA/20kW	30kVA/30kW	40kVA/40kW	60kVA/60kW		
Topology	Voltage- and	d Frequency-Independen [.]	t (VFI) True On-Line Double	e Conversion		
INPUT						
Voltage		208/220V (Ph-Ph); 120/127V (Ph-N)			
Voltage Range	125–253V (Ph-Ph)					
Phase	3-Phase, Neutral and Ground					
Operating Frequency (Range)	50/60 Hz, Selectable (40–70 Hz)					
Power Factor),99			
THDi	<4% <3%					
nverter Bridge		IGBT Te	chnology			
OUTPUT						
/oltage	208/220V	(Ph-Ph); 3-Phase, 4-Wire,	Neutral Reference to Bypa	iss Neutral		
AC Voltage Regulation		±	1%			
Frequency (Range)			ctable (±0,05 Hz)			
Overload (AC and Battery Mode)	105% (Conti		n.); 126–150% (1 min.); >15	50% (0,5 sec.)		
Crest Factor			3:1			
Harmonic Distortion	<2%	<2%	<2%	<3%		
Fransfer Time			0 ms (Inverter			
Dutput Waveform		Pure Si	ne Wave			
BYPASS						
Static Bypass			ndard			
Fransfer Time			ms			
Default Bypass Voltage Tolerance			15%			
Dverload	105% (Conti	nuous); 106–125% (10 mi	n.); 126–150% (1 min.); >15	o0% (0,5 sec.)		
BATTERY						
Battery Type	Mair		ve-Regulated Lead-Acid (V	(RLA)		
Battery Capacity			′9Ah	1		
Quantity	48	72	72	96		
Battery Charging Capacity	1–10A (Default 5A)	1–10A (Default 7,5A)	1–20A (Default 7,5A)	1–20A (Default 10A)		
Float Voltage			/DC ± 2V			
Boost Voltage			$DC \pm 2V$			
End of Discharge Voltage			$DC \pm 2V$			
Battery Storage Time nternal Battery Runtime (50%/100% Load)	15/5 min.	15/6 min.	Recharge, 77° F/25° C) 11/3,5 min.	9,5/3 min.		
ENVIRONMENT	137311111.	13/011111.	117 5,5 mm.	7,57511111.		
			220/			
Efficiency (Line Mode) Efficiency (ECO Mode)			73% 8%			
Operating Temperature	32° – 101° E (Ear Optim); 0° to 40°C (For Optimal I	Battery Life 17°_25°()		
Operating Humidity	32 - 104 T (101 Optill		n-Condensing)			
Operating Altitude	<3280 ft (1% Deration	per 328 ft Above 3280 ft); <1000 m (1% Deration pe	er 100 m Above 1000 m		
Audible Noise @ 3 ft./1 m		dBA		dBA		
MANAGEMENT						
Control Panel		130 mm Mul	tifunction LCD			
RS-232 Serial (DB9)		Star	ndard			
Contact Closure			ndard			
Network Management Card (SNMP)	Opt		page 21 for more informat	ion.)		
Parallel Capability			pacity or Redundancy			
EPO (Emergency Power Off)		Star	ndard			
STANDARDS						
Safety			22.2 No. 107.3-14			
EMC	FCC Part 1		2; IEC/EN61000-4-2; IEC/EI	NO 1000-4-3		
Surge Conduction Immunity			00-4-5 Level 4 61000-4-6			
Approvals			JL			
Additional			s Protection Rating			
PHYSICAL						
Jnit Dimensions (H x W x D)	54,3 x 20.5 x 31.5 in (1380 x 521 x 800 mm)	69,3 x 20.5 x 31.5 in	(1760 x 521 x 800 mm)		
Jnit Weight	767 lb. (348 kg)	926 lb. (420 kg)	1076 lb. (488 kg)	1244 lb. (564 kg)		
Shipping Dimensions (H x W x D)		'0 x 720 x 1000 mm)		20 x 720 x 1000 mm)		
Shipping Weight	855 lb. (388 kg)	1014 lb. (460 kg)	1186 lb. (538 kg)	1355 lb. (615 kg)		
Colour			(Jet Black)			
ADDITIONAL ACCESSORIES (Sold Separate						
External Battery Cabinets			BP288VEBPNB (Without B			
	Up to 4 per UPS	Up to 3 per UPS SUT30KMBP	Up to 9 per UPS	Up to 9 per UPS SUT60KMBP		
Maintenance Bypass Panels	SUT20KMBP		SUT40KMBP			

TRIPP-LITE SV SERIES



SmartOnline SV Series

20-140 kVA (N+1), 208/220V Ph-Ph

- Modular, scalable UPS platform
- VFI operation and IGBT with DSP control
- High output power factor (0,9)
- Control panel with large LCD screen
- Built-in network management card
- Built-in static and maintenance bypass
- N+1 redundancy and dual AC inputs
- Rack-based cabinet (30U or 42U)
- ≤24,5 min. at full load with internal batteries
- ≤405 min. at full load with external batteries

Key Features and Benefits

MODULAR, SCALABLE, FAULT-TOLERANT ARCHITECTURE

- Hot-swappable 20 kVA power modules increase capacity and/or provide N+1 redundancy for fault tolerance
- Power and battery modules can be added or replaced without powering down for zero-downtime maintenance
- All UPS sizes are available without internal batteries for long-runtime applications using external battery cabinets
- Select models are also available with internal batteries for shorter-runtime applications with a smaller footprint
- Dual AC inputs can connect to independent sources for additional power redundancy and increased availability
- Built-in static and maintenance bypass transfer load to utility power during faults, overloads and service

POWERFUL UPS MANAGEMENT

- Large LCD control panel permits full-featured local management through a user-friendly interface
- Included WEBCARDLX network card enables remote management through embedded HTML5 web, SSH/telnet and SNMP interfaces, as well as integration with Network Management Systems and DCIM platforms (See page 21 for more information.)
- Standard Emergency Power Off (EPO) allows immediate shutdown during emergencies

HIGH-PERFORMANCE OPERATION

- Voltage- and frequency-independent (VFI) operation and transformerless IGBT rectifier technology with DSP control provide reliable output power quality with pure sine wave
- Low THDi (<3%) improves generator compatibility and eliminates costly over-sizing requirements
- Low THDv (<2%) and active power factor correction improve output performance
- High output power factor (0,9) allows the UPS to support more equipment without overloading

COMPREHENSIVE SERVICE PROGRAM

- Tripp Lite Care ensures your UPS is ready to protect you from downtime over its entire lifecycle, from initial startup to annual service agreements and preventive maintenance
- Regular service improves UPS reliability, longevity and cost control (See page 24 for more information.)

Typical Applications: Small and medium data centres, light industrial settings and large corporate networks with IT load \leq 126 kW or 15 server racks at 8 kW/rack

SmartOnline SV Series Technical Specifications

OVERVIEW		20K	40K	60K	80K	100K	120K	140K					
CAPACITY kVA		20	40	60	80	100	120	140					
CAPACITY kW		18	36	54	72	90	108	126					
TOPOLOGY		Voltage- and Frequency-Independent (VFI) True On-Line Double Conversion											
INPUT													
Voltage		208/220V (Ph-	Ph); 120/127V	(Ph-N)									
Voltage Range				6V (Ph-N); 100	% load								
Phase			ral and ground										
Operating Freque	ancy (Range)		ectable (40–70										
Power Factor		>0,99		112 = 0,1112									
THDi		<3%											
Inverter Bridge		IGBT Technol	0.01/										
Ű		IGBT Technol	ogy										
OUTPUT		200/220V/ (Ph	Ph); 120/127V										
Voltage		<1% (Balance		(FN-N)									
AC Voltage Regul													
Frequency (Range			ectable (40–70	$Hz \pm 0, I Hz)$									
Efficiency (ECO M		>98%/>91%		1050/ 10	110101 15001								
Overload	AC Mode			– 125%: 10 min									
0 5	Battery Mode		60 min. / 111%	–125%: 10 min	./126%-150%	: 1 min./>1509	%: 200 ms						
Crest Factor		3:1											
Harmonic Distorti				1% (100% Non-	Linear Load)								
Output Waveform	1	Pure Sine Way	ve										
BYPASS													
Static and Mainter	nance Bypass	Standard											
Transfer Time		≤1 ms											
Bypass Voltage To	olerance (Default)	+15%/-20%											
Overload		105%-110%:	60 min./111%	–125%: 10 min	./126%-150%	: 1 min./>1509	%: 200 ms						
BATTERY													
Battery Type*		Maintenance-	Free Sealed Va	alve-Regulated	Lead-Acid (VF	rla)							
Battery Capacity*		12V 18Ah/Module											
Success Supacity					2,3V/Cell								
Float Voltage		2,3V/Cell											
Float Voltage	Voltage	2,3V/Cell											
Float Voltage Boost Voltage End-of-Discharge		2,3V/Cell 2,35V/Cell 1,67V/Cell		e, Stored at 77°	°F/25°C)								
Float Voltage Boost Voltage	ime*	2,3V/Cell 2,35V/Cell 1,67V/Cell	thout Recharge	e, Stored at 77°	F/25°C)								
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti	ime* Capacity	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit	thout Recharge	e, Stored at 77° 5,7 min.	²F/25°C) 4 min.	N/A	N/A	N/A					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu	ime* Capacity	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul	thout Recharge			N/A	N/A	N/A					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu	ime" Capacity um Runtime with Iodules, 100% Load um Runtime with	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul	thout Recharge			N/A 61 min.	N/A 49 min.	N/A 40 min.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C	ime" Capacity um Runtime with Iodules, 100% Load um Runtime with Cabinet(s), 100% Load**	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min.	thout Recharge It) 10 min. 185 min.	5,7 min. 114 min.	4 min. 80 min.	61 min.	49 min.	40 min.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with	ime" Capacity um Runtime with Iodules, 100% Load um Runtime with	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min.	thout Recharge It) 10 min. 185 min.	5,7 min. 114 min.	4 min. 80 min.	61 min.	49 min.	40 min.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** n internal battery modules. ** External b	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min.	thout Recharge t) 10 min. 185 min. sold separately. Rur	5,7 min. 114 min.	4 min. 80 min.	61 min.	49 min.	40 min.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** h internal battery modules. ** External b trature	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/	thout Recharge (t) 10 min. 185 min. sold separately. Rur	5,7 min. 114 min. time varies with mc	4 min. 80 min. del. See accessorie	61 min.	49 min.	40 min.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe Storage Temperat	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** n internal battery modules. ** External b errature ture	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/-	thout Recharge (t) 10 min. 185 min. sold separately. Rur '0° to 40° C 15° to 60° C (Es	5,7 min. 114 min. time varies with mc xcluding Batter	4 min. 80 min. del. See accessorie	61 min.	49 min.	40 min.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe Storage Temperat Operating Humidi	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** h internal battery modules. ** External b errature ture ture	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/- 0 to 95% (Nor	thout Recharge (t) 10 min. 185 min. sold separately. Rur 0° to 40° C 15° to 60° C (Es n-Condensing)	5,7 min. 114 min. time varies with mc xcluding Batter	4 min. 80 min. del. See accessorie y)	61 min.	49 min. age for more inform	40 min. ation.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe Storage Temperat Operating Humid Operating Altitud	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** h internal battery modules. ** External b errature ture ture	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/- 0 to 95% (Nor < 3281 ft. (Def	thout Recharge It) 10 min. 185 min. 185 min. 0° to 40° C 15° to 60° C (E: n-Condensing) rate 1% per 320	5,7 min. 114 min. time varies with mc xcluding Batter	4 min. 80 min. del. See accessorie y)	61 min.	49 min.	40 min. ation.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe Storage Temperat Operating Humid Operating Altitud Audible Noise	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** h internal battery modules. ** External b errature ture ture	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/- 0 to 95% (Nor < 3281 ft. (Der < 73 dBA at 3	thout Recharge It) 10 min. 185 min. 0° to 40° C 15° to 60° C (E: n-Condensing) rate 1% per 320 ,3 ft. (1 m)	5,7 min. 114 min. time varies with mc xcluding Batter	4 min. 80 min. del. See accessorie y)	61 min.	49 min. age for more inform	40 min. ation.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe Storage Temperat Operating Humid Operating Altitud Audible Noise Colour	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** h internal battery modules. ** External b errature ture ture	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/- 0 to 95% (Nor < 3281 ft. (Def	thout Recharge It) 10 min. 185 min. 0° to 40° C 15° to 60° C (E: n-Condensing) rate 1% per 320 ,3 ft. (1 m)	5,7 min. 114 min. time varies with mc xcluding Batter	4 min. 80 min. del. See accessorie y)	61 min.	49 min. age for more inform	40 min. ation.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe Storage Temperat Operating Humid Operating Altitud Audible Noise Colour MANAGEMENT	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** h internal battery modules. ** External b errature ture ture	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/- 0 to 95% (Nor < 3281 ft. (Dei < 73 dBA at 3 RAL 9005 (Jet	thout Recharge It) 10 min. 185 min. 185 min. sold separately. Run '0° to 40° C 15° to 60° C (E: n-Condensing) rate 1% per 320 ;3 ft. (1 m) Black)	5,7 min. 114 min. time varies with mo xcluding Batter 8 ft. above 328	4 min. 80 min. del. See accessorie y)	61 min.	49 min. age for more inform	40 min. ation.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe Storage Temperat Operating Humid Operating Altitud Audible Noise Colour MANAGEMENT Control Panel	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** h internal battery modules. ** External b erature ture ture le	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/- 0 to 95% (Nor < 3281 ft. (Der < 73 dBA at 3 RAL 9005 (Jet Large 145 mm	thout Recharge It) 10 min. 185 min. 185 min. 0° to 40° C 15° to 60° C (E: n-Condensing) rate 1% per 320 ,3 ft. (1 m) Black)	5,7 min. 114 min. time varies with mo xcluding Batter 8 ft. above 328 LCD	4 min. 80 min. del. See accessorie y) 1 ft.); < 1000 m	61 min. Is section on next p (Derate 1% pe	49 min. age for more inform	40 min. ation.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe Storage Temperat Operating Humid Operating Altitud Audible Noise Colour MANAGEMENT Control Panel Network Manager	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** h internal battery modules. ** External b errature ture ture	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/- 0 to 95% (Nor < 3281 ft. (Der < 73 dBA at 3 RAL 9005 (Jet Large 145 mm WEBCARDLX	thout Recharge It) 10 min. 185 min. 185 min. sold separately. Run '0° to 40° C 15° to 60° C (E: n-Condensing) rate 1% per 320 ,3 ft. (1 m) Black) n Multifunction (Included (See	5,7 min. 114 min. time varies with mo xcluding Batter 8 ft. above 328 LCD a page 21 for m	4 min. 80 min. del. See accessorie y) 1 ft.); < 1000 m nore informatic	61 min. Is section on next p (Derate 1% pe	49 min. age for more inform	40 min. ation.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe Storage Temperat Operating Humid Operating Altitud Audible Noise Colour MANAGEMENT Control Panel Network Manager Contact Closure	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** n internal battery modules. ** External b erature ture ture ture ture ture ture	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/- 0 to 95% (Nor < 3281 ft. (Der < 73 dBA at 3 RAL 9005 (Jet Large 145 mm WEBCARDLX Optional (REL	thout Recharge It) 10 min. 185 min. 185 min. sold separately. Run '0° to 40° C 15° to 60° C (E: n-Condensing) rate 1% per 320 ,3 ft. (1 m) Black) n Multifunction (Included (See	5,7 min. 114 min. time varies with mo xcluding Batter 8 ft. above 328	4 min. 80 min. del. See accessorie y) 1 ft.); < 1000 m nore informatic	61 min. Is section on next p (Derate 1% pe	49 min. age for more inform	40 min. ation.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe Storage Temperat Operating Humid Operating Altitud Audible Noise Colour MANAGEMENT Control Panel Network Manager Contact Closure Emergency Power	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** n internal battery modules. ** External b erature ture ture ture ture ture ture	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/- 0 to 95% (Nor < 3281 ft. (Der < 73 dBA at 3 RAL 9005 (Jet Large 145 mm WEBCARDLX	thout Recharge It) 10 min. 185 min. 185 min. sold separately. Run '0° to 40° C 15° to 60° C (E: n-Condensing) rate 1% per 320 ,3 ft. (1 m) Black) n Multifunction (Included (See	5,7 min. 114 min. time varies with mo xcluding Batter 8 ft. above 328 LCD a page 21 for m	4 min. 80 min. del. See accessorie y) 1 ft.); < 1000 m nore informatic	61 min. Is section on next p (Derate 1% pe	49 min. age for more inform	40 min. ation.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe Storage Temperat Operating Humid Operating Altitud Audible Noise Colour MANAGEMENT Control Panel Network Manager Contact Closure	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** n internal battery modules. ** External b erature ture ture ture ture ture ture	2,3V/Cell 2,35V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/- 0 to 95% (Nor < 3281 ft. (Del <73 dBA at 3 RAL 9005 (Jet Large 145 mm WEBCARDLX Optional (REL Standard	thout Recharge It) 10 min. 185 min. 185 min. sold separately. Rur '0° to 40° C 15° to 60° C (E: n-Condensing) rate 1% per 324 ,3 ft. (1 m) : Black) n Multifunction C Included (See LAYCARDSV S	5,7 min. 114 min. time varies with mo xcluding Batter 8 ft. above 328 LCD a page 21 for m	4 min. 80 min. del. See accessorie ry) 1 ft.); < 1000 m nore informatic	61 min. Is section on next p (Derate 1% pe	49 min. age for more inform	40 min. ation.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Tempe Storage Temperat Operating Humid Operating Altitud Audible Noise Colour MANAGEMENT Control Panel Network Manager Contact Closure Emergency Power STANDARDS	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** n internal battery modules. ** External b erature ture ture ture ture ture ture	2,3V/Cell 2,35V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/- 0 to 95% (Nor < 3281 ft. (Del <73 dBA at 3 RAL 9005 (Jet Large 145 mm WEBCARDLX Optional (REL Standard	thout Recharge It) 10 min. 185 min. 185 min. 185 min. 185 model of the second 15° to 40° C 15° to 40° C 15° to 60° C (E: n-Condensing) rate 1% per 324 ,3 ft. (1 m) Elack) n Multifunction Cincluded (See AYCARDSV S idition; CSA C2	5,7 min. 114 min. time varies with mo xcluding Batter 8 ft. above 328 LCD page 21 for m old Separately	4 min. 80 min. del. See accessorie ry) 1 ft.); < 1000 m nore informatic	61 min. Is section on next p (Derate 1% pe	49 min. age for more inform	40 min. ation.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Temper Storage Temperat Operating Humid Operating Altitud Audible Noise Colour MANAGEMENT Control Panel Network Manager Contact Closure Emergency Power STANDARDS Safety	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** n internal battery modules. ** External b erature ture ture ture ture ture ture	2,3V/Cell 2,35V/Cell 1,67V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/ 5° to 140° F/- 0 to 95% (Nor < 3281 ft. (Der < 73 dBA at 3 RAL 9005 (Jet Large 145 mm WEBCARDLY Optional (REL Standard	thout Recharge It) 10 min. 185 min. 185 min. 185 min. 185 model of the second 15° to 40° C 15° to 40° C 15° to 60° C (E: n-Condensing) rate 1% per 324 ,3 ft. (1 m) Elack) n Multifunction Cincluded (See AYCARDSV S idition; CSA C2	5,7 min. 114 min. time varies with mo xcluding Batter 8 ft. above 328 LCD page 21 for m old Separately	4 min. 80 min. del. See accessorie ry) 1 ft.); < 1000 m nore informatic	61 min. Is section on next p (Derate 1% pe	49 min. age for more inform	40 min. ation.					
Float Voltage Boost Voltage End-of-Discharge Battery Storage Ti Battery Charger C Estimated Maximu Internal Battery M Estimated Maximu External Battery C *Applies to models with ENVIRONMENT Operating Temper Storage Temperat Operating Humid Operating Altitud Audible Noise Colour MANAGEMENT Control Panel Network Manager Contact Closure Emergency Power STANDARDS Safety EMC	ime" Capacity um Runtime with lodules, 100% Load um Runtime with Cabinet(s), 100% Load** n internal battery modules. ** External b erature ture ture ture ture ture ture	2,3V/Cell 2,35V/Cell 6 months (Wit 8A (2A Defaul 24,5 min. 405 min. 32° to 104° F/- 5° to 140° F/- 0 to 95% (Nor < 3281 ft. (Det < 73 dBA at 3 RAL 9005 (Jet Large 145 mm WEBCARDLY Optional (REL Standard UL 1778 5th E FCC Part 15 C TUV	thout Recharge It) 10 min. 185 min. 185 min. 185 min. 185 model of the second 15° to 40° C 15° to 40° C 15° to 60° C (E: n-Condensing) rate 1% per 324 ,3 ft. (1 m) Elack) n Multifunction Cincluded (See AYCARDSV S idition; CSA C2	5,7 min. 114 min. time varies with mo xcluding Batter 8 ft. above 328 LCD 9 page 21 for m old Separately 22.2 No. 107.3-	4 min. 80 min. del. See accessorie ry) 1 ft.); < 1000 m nore informatic	61 min. Is section on next p (Derate 1% pe	49 min. age for more inform	40 min. ation.					

SmartOnline SV Series Technical Specifications (continued)

ADDITIONAL ACCESSORIES (Sold Separately)									
	20K	40K	60K	80K	100K	120K	140K		
Power Modules	SV20PM (Hot-swappable 20kVA/18kW power modules for SV series UPS models.)								
Internal Battery Modules	SVBM (Hot-swa	SVBM (Hot-swappable battery modules for SV series UPS models with internal batteries.)							
External Battery Cabinets	BP240V370 (Ma	atching 42U batte	ery cabinet with b	atteries for long-ı	runtime application	ons.)			
	BP240V370NB	BP240V370NB (Matching 42U battery cabinet without batteries for long-runtime applications.)							
		EBP240V Series (Non-matching battery cabinets with or without batteries. 16 models available for a wide range of							
	long-runtime applications. See www.tripplite.com for more information.)								
Maintenance Bypass Panels	SU2030KMBP	SU40KMBPK	SU60KMBPK	SU80KMBPK	C	Contact Tripp Lit	e		

Small Frame (30U) Maximum Configurable Power: 60 kVA/54 kW

Total Dimensions (H x W x D): 58,1 x 23,6 x 43,3 in. / 1475 x 600 x 1100 mm • Shipping Dimensions (H x W x D): 64,9 x 29,5 x 48 in. / 1650 x 750 x 1220 mm

			Runtime		
Capacity	Model	Battery Configuration	(100% Load)	Unit Weight	Shipping Weight
20 kVA / 18 kW	SV20KS1P0B	External Battery Cabinet(s)*	27–400 min.**	648 lb. (294 kg)***	773 lb. (351 kg)***
20 kVA / 18 kW	SV20KS1P1B	Internal Batteries: 1 SVBM	4 min.	878 lb. (398 kg)	1033 lb. (469 kg)
20 kVA / 18 kW	SV20KS1P2B	Internal Batteries: 2 SVBM	10 min.	1108 lb. (503 kg)	1293 lb. (587 kg)
20 kVA / 18 kW	SV20KS1P3B	Internal Batteries: 3 SVBM	21,5 min.	1338 lb. (607 kg)	1553 lb. (705 kg)
40 kVA / 36 kW	SV40KS2P0B	External Battery Cabinet(s)*	11–183 min.**	724 lb. (328 kg)***	857 lb. (389 kg)***
40 kVA / 36 kW	SV40KS2P2B	Internal Batteries: 2 SVBM	4 min.	1184 lb. (537 kg)	1377 lb. (625 kg)
40 kVA / 36 kW	SV40KS2P3B	Internal Batteries: 3 SVBM	6,7 min.	1414 lb. (642 kg)	1637 lb. (743 kg)
60 kVA / 54 kW	SV60KS3P0B	External Battery Cabinet(s)*	5,9–113 min.**	800 lb. (363 kg)***	941 lb. (427 kg)***
60 kVA / 54 kW	SV60KS3P3B	Internal Batteries: 3 SVBM	4 min.	1490 lb. (676 kg)	1721 lb. (781 kg)

*External battery cabinets are sold separately. **Range available with recommended battery cabinet options. ***Without external battery cabinets.

Medium Frame (42U) Maximum Configurable Power: 80kVA/72kW

Total Dimensions (H x W x D): 79,1 x 23,6 x 43,3 in. / 2010 x 600 x 1100 mm • Shipping Dimensions (H x W x D): 85,6 x 29,5 x 48 in. / 2175 x 750 x 1220 mm

			Runtime		
Capacity	Model	Battery Configuration	(100% Load)	Unit Weight	Shipping Weight
20 kVA / 18 kW	SV20KM1P0B	External Battery Cabinet(s)*	26-404 min.**	679 lb. (308 kg)***	822 lb. (373 kg)***
20 kVA/18 kW	SV20KM1P1B	Internal Batteries: 1 SVBM	4 min.	909 lb. (413 kg)	1082 lb. (491 kg)
20 kVA/18 kW	SV20KM1P2B	Internal Batteries: 2 SVBM	10 min.	1139 lb. (517 kg)	1342 lb. (609 kg)
20 kVA/18 kW	SV20KM1P3B	Internal Batteries: 3 SVBM	21,5 min.	1369 lb. (621 kg)	1602 lb. (727 kg)
20 kVA/18 kW	SV20KM1P4B	Internal Batteries: 4 SVBM	24,5 min.	1599 lb. (726 kg)	1862 lb. (845 kg)
40 kVA/36 kW	SV40KM2P0B	External Battery Cabinet(s)*	11–185 min.**	755 lb. (343 kg)***	906 lb. (411 kg)***
40 kVA/36 kW	SV40KM2P2B	Internal Batteries: 2 SVBM	4 min.	1215 lb. (552 kg)	1426 lb. (647 kg)
40 kVA / 36 kW	SV40KM2P3B	Internal Batteries: 3 SVBM	6,7 min.	1445 lb. (656 kg)	1686 lb. (765 kg)
40 kVA/36 kW	SV40KM2P4B	Internal Batteries: 4 SVBM	10 min.	1675 lb. (760 kg)	1946 lb. (883 kg)
60 kVA / 54 kW	SV60KM3P0B	External Battery Cabinet(s)*	6–114 min.**	831 lb. (377 kg)***	991 lb. (450 kg)***
60 kVA / 54 kW	SV60KM3P3B	Internal Batteries: 3 SVBM	4 min.	1521 lb. (690 kg)	1770 lb. (803 kg)
60 kVA / 54 kW	SV60KM3P4B	Internal Batteries: 4 SVBM	5,7 min.	1751 lb. (795 kg)	2030 lb. (921 kg)
80 kVA/72 kW	SV80KM4P0B	External Battery Cabinet(s)*	5,7-80 min.**	907 lb. (411 kg)***	1074 lb. (487 kg)***
80 kVA/72 kW	SV80KM4P4B	Internal Batteries: 4 SVBM	4 min.	1827 lb. (829 kg)	2114 lb. (959 kg)

*External battery cabinets are sold separately. **Range available with recommended battery cabinet options. ***Without external battery cabinets.

Large Frame (42U) Maximum Configurable Power: 140kVA/126kW

Total Dimensions (H x W x D): 79,1 x 23,6 x 43,3 in. / 2010 x 600 x 1100 mm • Shipping Dimensions (H x W x D): 85,6 x 29,5 x 48 in. / 2175 x 750 x 1220 mm

			Runtime		
Capacity	Model	Battery Configuration	(100% Load)	Unit Weight***	Shipping Weight***
20 kVA/18 kW	SV20KL	External Battery Cabinet(s)	27–405 min.**	677 lb. (307 kg)	820 lb. (372 kg)
40 kVA / 36 kW	SV40KL	External Battery Cabinet(s)	11–185 min.**	753 lb. (342 kg)	904 lb. (410 kg)
60 kVA / 54 kW	SV60KL	External Battery Cabinet(s)	6–114 min.**	829 lb. (376 kg)	988 lb. (449 kg)
80 kVA/72 kW	SV80KL	External Battery Cabinet(s)	5,7–80 min.**	905 lb. (411 kg)	1072 lb. (487 kg)
100 kVA / 90 kW	SV100KL	External Battery Cabinet(s)	6,6–61 min.**	981 lb. (445 kg)	1156 lb. (525 kg)
120 kVA / 108 kW	SV120KL	External Battery Cabinet(s)	6–49 min.**	1057 lb. (480 kg)	1240 lb. (563 kg)
140 kVA / 126 kW	SV140KL7P	External Battery Cabinet(s)	6,9–40 min.**	1133 lb. (514 kg)	1324 lb. (601 kg)
140 kVA / 126 kW (N+1)	SV140KL8P	External Battery Cabinet(s)	6,9-40 min.**	1209 lb. (549 kg)	1408 lb. (639 kg)

* External battery cabinets are sold separately. ** Range available with recommended battery cabinet options. *** Without external battery cabinets.

Powerful Network Management is Only a Click Away



The **WEBCARDLX** network management card enables remote monitoring and control through HTML5 web, SSH/telnet and SNMP interfaces, as well as integration with Network Management Systems and

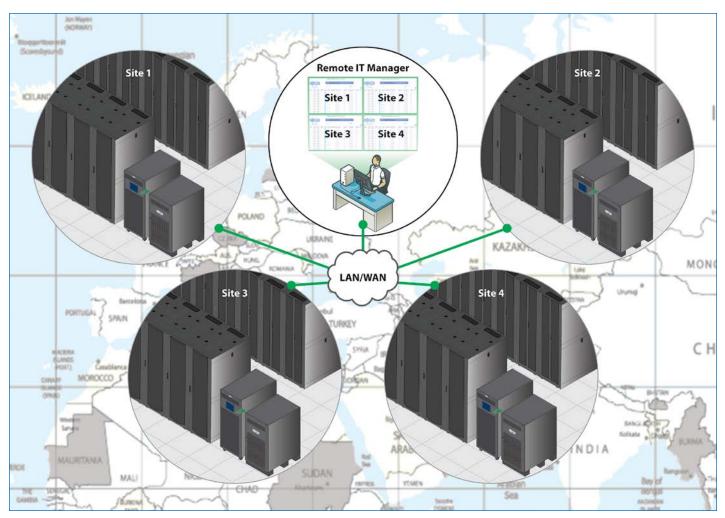
DCIM platforms. Compatible with all Tripp Lite 3-phase UPS systems, **WEBCARDLX** is included with SV and SVX models.

WEBCARDLX also supports

environmental sensors for remote monitoring of temperature, humidity and/or dry contacts that allow you to connect alarm, security and telecom devices. You can connect up to three sensors to monitor multiple locations from a single card.



Network Management Card							
WEBCARDLX	Network Management Card for Compatible Tripp Lite UPS Systems. Provides HTML5 Web, SSH/Telnet and SNMP Interfaces.						
	Environmental Sensors (Require WEBCARDLX)						
E2MT							
E2MTDO	EnviroSense2 (E2) Environmental Sensor Module with Temperature and Digital Outputs.						
E2MTHDI	EnviroSense2 (E2) Environmental Sensor Module with Temperature, Humidity and Digital Inputs.						
E2SLD	EnviroSense2 (E2) Water Leak Detection Sensor.						
Intrusion Detect	ion Sensor						
SRSWITCH	Magnetic Door Switch Kit (Monitors Front and Rear Doors of a Single Cabinet; Requires E2MTHDI).						



With the **WEBCARDLX** network management card installed, you can monitor and control UPS systems across multiple sites from any location. The unified LX platform is also available with Tripp Lite PDUs, allowing you to manage power throughout your facilities.

Scalable, Customisable Runtime

Whether you only need a few minutes of battery backup runtime to ride through brief power problems or multiple hours to outlast extended power outages, Tripp Lite can provide external battery cabinet configurations to match your application.

External battery cabinets are available in a variety of sizes, with or without internal batteries. External battery cabinets also support daisy-chaining multiple cabinets to increase runtime.



External Battery Cabinets for Tripp Lite 3-Phase UPS Systems

	3-Phase UPS Family	Battery Bus	External Battery Cabinet Model	Unit Dimensions HxWxD (mm)	Unit Dimensions HxWxD (in.)	Unit Weight (kg)	Unit Weight (Ib.)	Shipping Weight (kg)	Shipping Weight (lb.)
	SVTX	±240V DC	BP240V135	580 x 250 x 826	22,8 x 9,85 x 32,5	155,1	342	170,1	375
			BP480V200	1499 x 737 x 800	59 x 29 x 31,5	986,6	2175	1036,5	2285
			BP480V26B	1161 x 521 x 856	45,7 x 20,5 x 33,7	487,6	1075	555,5	1225
	SUTX	. 2401/ DC	BP480V300	1999 x 914 x 749	78,7 x 36 x 29,5	1300	2866	1351,7	2980
S	svx	±240V DC	BP480V400	1999 x 914 x 749	78,7 x 36 x 29,5	1662,9	3666	1714,6	3780
eW			BP480V40C	1699 x 521 x 856	66,9 x 20,5 x 33,7	727,1	1603	889	1960
yst			BP480V500	1999 x 1016 x 749	78,7 x 40 x 29,5	2159,1	4760	2195,4	4840
S S	C) AV	. 2401/ DC	BP480V370*	2005 x 647 x 1100	78,9 x 25,5 x 43,3	1606,2	3541	1688,3	3722
Ð	svx	±240V DC	BP480V370NB*,**	2005 x 647 x 1100	78,9 x 25,5 x 43,3	120,7	266	157,9	348
ase	S3MX (30K)	±240V DC	BP480V09	836 x 250 x 780	32,9 x 9,85 x 30,7	246,5	543,4	273,5	602,9
400V 3-Phase UPS Systems	COMV (40K)	±240V DC	BP480V10	836 x 250 x 780	32,9 x 9,85 x 30,7	273	601,9	290	639,3
ά >	S3MX (40K)	±240V DC	BP480V10-NIB**	836 x 250 x 780	32,9 x 9,85 x 30,7	54,6	120,4	81,6	179,9
8	S3MX (60–200K) ±		BP480V40	1220 x 626 x 900	48 x 24,7 x 35,4	607,8	1340	651,4	1436
4		K) ±240V DC	BP480V40-NIB**	1220 x 626 x 900	48 x 24,7 x 35,4	103,3	227,7	146,8	323,6
			BP480V65	1499 x 826 x 1135	59 x 32,5 x 44,7	957,4	2110,7	1013,4	2234,1
			BP480V65-NIB**	1499 x 826 x 1135	59 x 32,5 x 44,7	157,6	347,5	213,6	470,9
			BP480V100	1499 x 826 x 1135	59 x 32,5 x 44,7	1496,3	3298,7	1552,2	3422
			BP480V100-NIB**	1499 x 826 x 1135	59 x 32,5 x 44,7	157,6	347,5	213,6	470,9
	SUT ± 144V D		BP288VEBP	597 x 764 x 853	23,5 x 30,1 x 33,6	350	771,6	360	793,7
		± 144V DC	BP288VEBPNB**	597 x 764 x 853	23,5 x 30,1 x 33,6	81	178,6	92	202,8
			BP240V370*	2005 x 647 x 1100	78,9 x 25,5 x 43,3	1574,9	3472	1657	3653
			BP240V370NB*,**	2005 x 647 x 1100	78,9 x 25,5 x 43,3	120,7	266	157,9	348
			EBP240V2501	1499 x 737 x 800	59 x 29 x 31,5	722,6	1593	758,9	1673
S			EBP240V2501NB**	1499 x 737 x 800	59 x 29 x 31,5	206,4	455	242,7	535
em			EBP240V2502	1499 x 1473 x 800	59 x 58 x 31,5	1238,7	2731	1275,1	2811
yst			EBP240V2502NB**	1499 x 1473 x 800	59 x 58 x 31,5	412,8	910	485,3	1070
S			EBP240V3501	1499 x 737 x 800	59 x 29 x 31,5	866,8	1911	903,1	1991
5			EBP240V3501NB**	1499 x 737 x 800	59 x 29 x 31,5	206,4	455	242,7	535
ase	sv	±120V DC	EBP240V3502	1499 x 737 x 800	59 x 58 x 31,5	1394,8	3075	1431,1	3155
Å	50	± 120V DC	EBP240V3502NB**	1499 x 737 x 800	59 x 58 x 31,5	412,8	910	485,3	1070
208V 3-Phase UPS Systems			EBP240V5001	1499 x 737 x 800	59 x 29 x 31,5	1083,6	2389	1119,9	2469
08			EBP240V5001NB**	1499 x 737 x 800	59 x 29 x 31,5	206,4	455	242,7	535
N			EBP240V5002	1499 x 737 x 800	59 x 29 x 31,5	1083,6	2389	1119,9	2469
			EBP240V5002NB**	1499 x 737 x 800	59 x 29 x 31,5	412,8	910	485,3	1070
			EBP240V6002	1499 x 1473 x 800	59 x 58 x 31,5	2035,3	4487	2071,6	4567
			EBP240V6002NB**	1499 x 1473 x 800	59 x 58 x 31,5	412,8	910	485,3	1070
			EBP240V6003	1499 x 2210 x 800	59 x 87 x 31,5	2949,7	6503	2986	6583
			EBP240V6003NB**	1499 x 2210 x 800	59 x 87 x 31,5	619,2	1365	728	1605

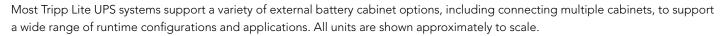
*Battery cabinet does not include internal batteries. **Battery cabinet closely matches appearance of primary UPS cabinet.

User-Friendly Online Runtime Tools

Tripp Lite's website provides a wealth of runtime data to help you configure battery capacity for your application, including dynamic interactive runtime charts, interactive runtime tables, load calculators and downloadable, printable runtime chart PDFs.

These tools allow you to compare battery configurations to see how they affect available runtime at various load levels. They are accessible from each UPS product page at www.tripplite.com.

Sample UPS and External Battery Cabinet Pairings





SVT10KX UPS with BP240V135 External Battery Cabinets



S3M40KX UPS with **BP480V10** External Battery Cabinets



S3M200KX UPS with **BP480V100** External Battery Cabinet



SUTX40K UPS with BP480V200 External Battery Cabinet



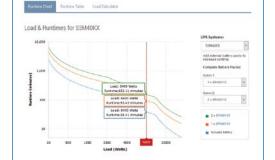
42U SVX or SV Series UPS with **BP480V370** (SVX) or **BP240V370** (SV) Matching 42U External Battery Cabinet



SUT20K UPS with BP288VEBP External Battery Cabinet



SV40KS2P0B UPS with EBP240V2501 External Battery Cabinet



Tripp Lite Care Service and Support

Service is the most critical component of 3-phase UPS ownership. When you invest in a large UPS, you may need it to operate reliably for 10 years or more. Tripp Lite CareSM 3-phase UPS services are designed to protect your UPS over its entire lifecycle, from commissioning to preventive maintenance and eventual replacement. They keep your UPS in peak condition so it is always ready to protect you from downtime.

Warranty

Tripp Lite 3-phase UPS system factory warranties vary by region. Optional extended warranties up to three years past the standard factory warranty are available. External batteries include a one-year warranty in all regions.



Commissioning

Commissioning builds a solid foundation for improved reliability, higher efficiency, reduced costs, enhanced safety, fewer repairs, quicker service and longer UPS lifespan. Commissioning helps you verify and document the proper installation and startup of your UPS system at the installation site. Commissioning also registers your UPS, initiates its service record and establishes a working relationship between your organisation and the Tripp Lite service team, which is essential for a successful 3-phase UPS deployment. Lastly, commissioning activates an enhanced 24/7/365 on-site UPS warranty, which covers parts, travel and labour.

Annual Service Agreements with Preventive Maintenance

Annual service agreements include extended 24/7/365 on-site warranties and on-site preventive maintenance visits. Regular preventive maintenance significantly reduces failure rates by identifying potential threats early and correcting problems before they cause downtime. UPS systems with regular preventive maintenance are much less likely to experience a failure than UPS systems without it. Component failures can still happen, but on-site warranties minimise the cost and disruption of unavoidable repairs.

Non-Warranty Services

Tripp Lite provides non-warranty services when the UPS system is outside the warranty or service agreement period, or when a required service or repair is not covered under the terms of the current warranty or service agreement. Tripp Lite quotes non-warranty services on a case-by-case, time-and-materials basis, and cost depends on the UPS model and specific service requested. Available non-warranty services include rapid-response on-site repair, battery installation and battery service/replacement.

Planned Replacement Services

Although Tripp Lite products are built to provide long service life, there comes a point for every UPS system when it makes more sense to modernise than to keep an older system in service. Tripp Lite's planned replacement services provide a free assessment of your current UPS, balancing the cost of replacement against the cost of maintenance and risk of downtime. Once you decide to modernise, Tripp Lite helps you make the transition efficient and seamless, minimising disruption to your critical operations. Note: Service availability varies with location.

Contact Tripp Lite for more information:

Tripp Lite Asia Pacific +972.54.530.4120 | salesint@tripplite.com Tripp Lite Canada +1.416.661.6090 | canada@tripplite.com Tripp Lite Eastern Europe +36.70.388.7680 | salesint@tripplite.com Tripp Lite East/West Africa +254.731.137.202 | salesint@tripplite.com Tripp Lite France +33.0.68.388.9150 | salesint@tripplite.com Tripp Lite Middle East +971.4.887.1633 | infome@tripplite.com Tripp Lite Southern Africa +27.76.033.3294 | salesint@tripplite.com Tripp Lite United Kingdom & Nordics +44.01635.887396 | info-uk@tripplite.com Tripp Lite USA +1.773.869.1236 | solutions@tripplite.com Tripp Lite Western Europe +44.01234.868010 | salesint@tripplite.com



SO 9001



Tripp Lite Corporate Headquarters 1111 W. 35th Street Chicago, IL 60609 USA +1.773.869.1111 www.tripplite.com

© 2019 Tripp Lite. All trademarks are the property of their respective owners. Tripp Lite has a policy of continuous improvement. Specifications are subject to change without notice. Images may differ slightly from actual products. Tripp Lite uses primary and third-party agencies to test products for compliance with standards. Go to Tripp Lite's website for more information, including complete warranty terms and conditions.