Features and Benefits:

Economy

- Input power factor correction
- Frequency and voltage regulation
- Manual maintenance bypass

Availability

- Hot-swappable batteries
- Dual mains input
- Automatic internal bypass
- Generator compatible

Serviceability

- Scalable runtime
- Battery replacement without tools

Manageability

- Built-in Web/SNMP management
- LCD display
- Audible alarms

Line-up-and-match options

- Battery Enclosure
- Maintenance Bypass Panel with or without power distribution features

Smart-UPS® VT — Legendary Reliability and Performance for a wide range of 3-phase IT Environments



Smart-UPS $^{\circ}$ VT provides performance power protection with scalable runtime for small data centers in the 10-30kVA power range

Smart-UPS VT offers IT professionals the performance and legendary reliability of the award winning Smart-UPS VT family. With its small footprint and user-friendly system management, Smart-UPS VT is ideal for entry-level and performance-power protection needs. Smart-UPS VT features double-conversion on-line design and offers both internal and external batteries in a user-friendly, scalable design. The UPS includes dual mains input for increased availability and a built-in maintenance bypass breaker provides serviceability and eliminates the need for an external maintenance bypass breaker. And with the highest efficiency ratings within its class* Smart-UPS VT offers a very cost-effective approach to any power protection strategy.

Typical applications

- Small data centers
- Telecommunications and internet hubs
- Networking and communications equipment
- Branch back offices
- Point-of-sale retail applications
- Diagnostic laboratory equipment

*tested by TÜV, 2004



Specifications

Smart-UPS [®] VT				
Part No.	SUVT10KF1B2/SUVT10KF1B4	SUVT15KF2B2/SUVT15KF2B4	SUVT20KF2B4	SUVT30KF3B4
Mains Input				
	200/2001/	200/200 \/	200/200 \/	200/2001/
Nominal Input Voltage Nominal Input Current (208V)	200/208V	200/208 V	200/208 V	200/208V
•	24.6A	36.9A	49.3A	73.9A
General Input Specifications				
Input Wiring	L1, L2, L3, N, PE			
Input Frequency	40-70Hz			
Input Power Factor	>0.98 at load>50%			
I THD	<5% at full load			
Max. Short-Circuit Withstand Level (I_{cw})	30 kA			
Input Voltage Tolerance Utility Operation	160V to 240V at full load, 100V t	o 240V at half load		
Dual Mains Input	Yes			
Input Voltage Tolerance Bypass	±10% standard ±4, 6, 8, 10% (pr	ogrammable)		
Backfeed Protection	Built-in backfeed contactor			
Output				
Power Rating	10kVA/8kW	15kVA/12kW	20kVA/16kW	30kVA/24kW
Nominal Output Voltage	200/208V	200/208V	200/208V	200/208V
Nominal Output Current (208V)	27.8A	41.6A	55.5A	83.3A
General Output Specifications				
Efficiency in Battery Operation	93.8%	93.8%	93.8%	93,8%
Efficiency at Full Load (AC-AC)	93.5%	93.0%	93.8%	93.8%
Efficiency at 50% Load (AC-AC)	92.5%	93.4%*	93.4%	93.3% 94.3%*
Output Wiring	92.5% L1, L2, L3, N, PE	JJ.T /U	JJ.T /U	U, U.TU
Load Power Factor	0.5 leading to 0.5 lagging			
Output Frequency				
Overload Capacity Utility Operation	Mains synchronized in normal operation 60Hz ± 0.05% free-running 125% for 1 minute, 150% for 30 seconds			
Overload Capacity Battery Operation	150% for 30 seconds	3600103		
V THD	2% for 30 seconds 2% from 0 to 100% linear load, <5% full non-linear load			
Output Voltage Tolerance	<2%from 0 to 100% linear load, <5% full non-linear load ±1% static, ±5% at 100% load step			
Nominal Battery Voltage	Split battery ± 192V referenced	to neutral		
End of Discharge Battery Voltage	± 154V			
Max. Battery Current at end of Discharge	28.9A	43.3A	57.7A	86.6A
, .				
Communication Interface	Web/SNMP management card			
Control Panel	PowerView multi-function LCD, status and control console			
Audible Alarm	Yes			
Emergency Power Off (EPO)	Yes			
2				
D : (11.141 D)				
Dimensions (HxWxD)				
	59x14/20.5x36.4in	59x14/20.5x36.4in	59x20.5x36.4in	59x20.5x36.4in
	1500x355/521x925mm	1500x355/521x925mm	1500x521x925mm	1500x521x925mm
Weights (lbs/kg) installed	1500x355/521x925mm 671/305; 711/323 (6min. runtime	1500x355/521x925mm) 873/397; 913/415 (10min. runtime	1500x521x925mm) 979/445 (6min. runtime)	
Minimum Clearance Around UPS in/mm	1500x355/521x925mm 671/305; 711/323 (6min. runtime Min. rear 4/10 for ventilation, to	1500x355/521x925mm	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color	1500x355/521x925mm 671/305; 711/323 (6min. runtime Min. rear 4/10 for ventilation, to Raven Black	1500x355/521x925mm) 873/397; 913/415 (10min. runtime	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm	1500x355/521x925mm 671/305; 711/323 (6min. runtime Min. rear 4/10 for ventilation, to	1500x355/521x925mm) 873/397; 913/415 (10min. runtime	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color	1500x355/521x925mm 671/305; 711/323 (6min. runtime Min. rear 4/10 for ventilation, to Raven Black	1500x355/521x925mm) 873/397; 913/415 (10min. runtime	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color	1500x355/521x925mm 671/305; 711/323 (6min. runtime Min. rear 4/10 for ventilation, to Raven Black	1500x355/521x925mm) 873/397; 913/415 (10min. runtime	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring	1500x355/521x925mm 671/305; 711/323 (6min. runtime Min. rear 4/10 for ventilation, to Raven Black Optional	1500x355/521x925mm) 873/397; 913/415 (10min. runtime	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2	1500x355/521x925mm) 873/397; 913/415 (10min. runtime	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal	1500x355/521x925mm 671/305; 711/323 (6min. runtime Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes	1500x355/521x925mm) 873/397; 913/415 (10min. runtime	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal Short Circuit	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes Yes	1500x355/521x925mm 873/397; 913/415 (10min. runtime p 20/500, front 36/914, no side clea	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal Short Circuit Safety	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes Yes UL1778 (CSA for Canada) IEC/E	1500x355/521x925mm 873/397; 913/415 (10min. runtime p 20/500, front 36/914, no side clea	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal Short Circuit Safety EMC/EMI/RFI	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes Yes UL1778 (CSA for Canada) IEC/E EN50091-2 and FCC part 15 Class	1500x355/521x925mm 873/397; 913/415 (10min. runtime p 20/500, front 36/914, no side clea	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal Short Circuit Safety	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes Yes UL1778 (CSA for Canada) IEC/E	1500x355/521x925mm 873/397; 913/415 (10min. runtime p 20/500, front 36/914, no side clea	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal Short Circuit Safety EMC/EMI/RFI Approvals	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes Yes UL1778 (CSA for Canada) IEC/E EN50091-2 and FCC part 15 Clas UL/CSA	1500x355/521x925mm 873/397; 913/415 (10min. runtime p 20/500, front 36/914, no side clea	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal Short Circuit Safety EMC/EMI/RFI Approvals Operating Temperature	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes Yes UL1778 (CSA for Canada) IEC/E EN50091-2 and FCC part 15 Clas UL/CSA 32° to 104°F / 0 to 40°C	1500x355/521x925mm 873/397; 913/415 (10min. runtime p 20/500, front 36/914, no side clea	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal Short Circuit Safety EMC/EMI/RFI Approvals Operating Temperature Storage Temperature	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes UL1778 (CSA for Canada) IEC/E EN50091-2 and FCC part 15 Clast UL/CSA 32° to 104°F / 0 to 40°C -58° to 104°F / -50 to 40°C	1500x355/521x925mm 873/397; 913/415 (10min. runtime p 20/500, front 36/914, no side clea	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal Short Circuit Safety EMC/EMI/RFI Approvals Operating Temperature Storage Temperature Operating Relative Humidity	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes UL1778 (CSA for Canada) IEC/E EN50091-2 and FCC part 15 Clast UL/CSA 32° to 104°F / 0 to 40°C -58° to 104°F / -50 to 40°C 0 to 95% non-condensing	1500x355/521x925mm 873/397; 913/415 (10min. runtime p 20/500, front 36/914, no side clea	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal Short Circuit Safety EMC/EMI/RFI Approvals Operating Temperature Storage Temperature Operating Relative Humidity	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes UL1778 (CSA for Canada) IEC/E EN50091-2 and FCC part 15 Clast UL/CSA 32° to 104°F / 0 to 40°C -58° to 104°F / -50 to 40°C	1500x355/521x925mm 873/397; 913/415 (10min. runtime p 20/500, front 36/914, no side clea	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal Short Circuit Safety EMC/EMI/RFI Approvals Operating Temperature Storage Temperature Operating Relative Humidity Storage Relative Humidity Operating Elevation	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes UL1778 (CSA for Canada) IEC/E EN50091-2 and FCC part 15 Clast UL/CSA 32° to 104°F / 0 to 40°C -58° to 104°F / -50 to 40°C 0 to 95% non-condensing	1500x355/521x925mm 873/397; 913/415 (10min. runtime p 20/500, front 36/914, no side clea	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal Short Circuit Safety EMC/EMI/RFI Approvals Operating Temperature Storage Temperature Operating Relative Humidity	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes UL1778 (CSA for Canada) IEC/E EN50091-2 and FCC part 15 Clast UL/CSA 32° to 104°F / 0 to 40°C -58° to 104°F / -50 to 40°C 0 to 95% non-condensing 0 to 95% non-condensing	1500x355/521x925mm 873/397; 913/415 (10min. runtime p 20/500, front 36/914, no side clea	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm
Minimum Clearance Around UPS in/mm Color Seismic Anchoring Surge Thermal Short Circuit Safety EMC/EMI/RFI Approvals Operating Temperature Storage Temperature Operating Relative Humidity Storage Relative Humidity Operating Elevation	1500x355/521x925mm 671/305; 711/323 (6min. runtime) Min. rear 4/10 for ventilation, to Raven Black Optional IEC61000-4-5, EN50091-2 Yes UL1778 (CSA for Canada) IEC/E EN50091-2 and FCC part 15 Clast UL/CSA 32° to 104°F / 0 to 40°C -58° to 104°F / -50 to 40°C 0 to 95% non-condensing 0 to 3,333ft / 0 to 1,000 m	1500x355/521x925mm 873/397; 913/415 (10min. runtime p 20/500, front 36/914, no side clea N62040-1-1 and EN60950 ss A	1500x521x925mm) 979/445 (6min. runtime)	1500x521x925mm 1181/537 (6 min. runtime)

*tested by TÜV



APC is certified by ISO9001 (Quality standards), and by ISO14001 (Environmental standards).



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