

STM33 Series Tower Online UPS

60-500kVA (380V/400V/415V)

STM33 series three phase UPS offer advance technology that increase performance and reliability: three high speed DSPs with complete digital control ensure high quality of power supply, high input power factor and low input power current distortion. It also offers humanization design, full front access of serviceability and user friendly interface.



Main Features:-

- High efficiency, up to 96%
- High input PF > 0.99
- Input current THDi < 3%
- Multi Protection, over-temperature protection with 8 sensors, over-load, battery under voltage, fan failures, short circuit.
- High power density
- Parallel up to 1500kVA
- Modular design of subsystem and hot swappable power module, convenient for field maintenance
- Battery cold start, power on from battery without utility
- Battery management with smart charging control, greatly extend the battery life
- Friendly operation interface, colour touch LCD screen

Application:-

ISP (Internet Service Provider)
Service Centre
Intelligent equipment

IDC (Internet Data Center)
Medical equipment

IT Room
Precision instrument

1. Totally digital control system

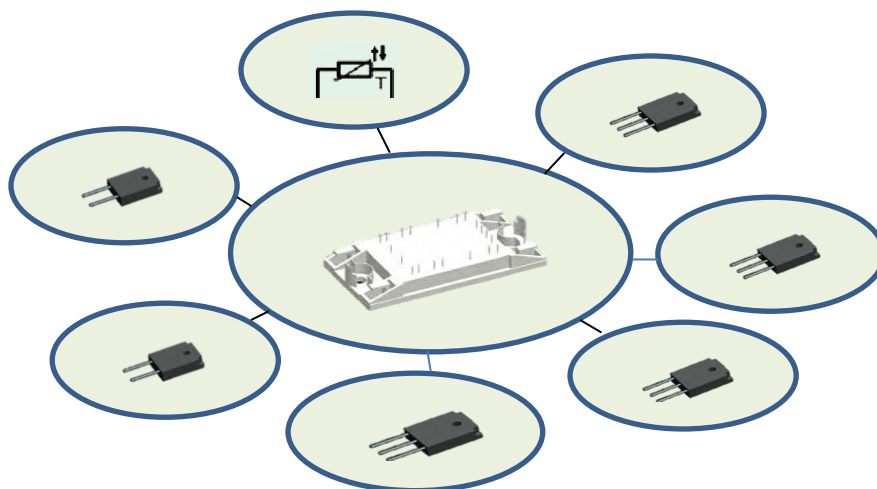


The double DSP based control system realized the digital control for all the power conversions of the UPS. Excellent performance is realized together with high reliability of the system.

2. Unique Design for High Reliability

Instead of discrete IGBT and SCR components, ST33 series UPS uses modular IGBT and SCR in Rectifier and Inverter, bringing in extremely high reliability.

- All components in one module, less fault points, higher reliability
- All components integrated as one modular design, smaller disparity
- Less space needed, UPS with compact design and higher power design
- Integrated inner thermal sensors display GBT inner temperature directly

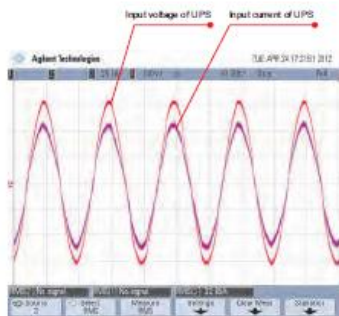


3. State of the art PCB design



Most of the components are SMT type, combine with the conformal coating technology, the reliability is much higher than the traditional DIP component design.

4. Excellent input performance

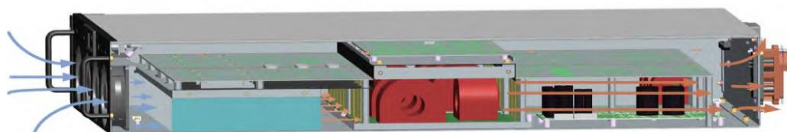


High input power factor, low input total harmonic distortion of current, STM33 is green power system and energy saving products.

5. Isolated Air Flow

The PCB boards and heat-sinkers are in two completely different layers, which allows the UPS run in dusty environments, significantly improving its stability and environmental adaptability.

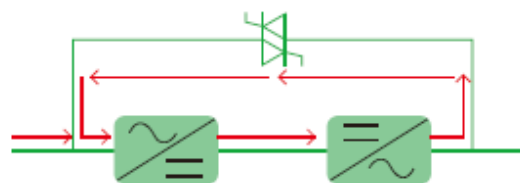
- Cooling air flows in the lower layer, keeping the upper PCB free of dust
- One air flow channel ensures fan redundancy, even one fan fails, power module can run normally



6. Self-aging

Self-aging function can test UPS under different load situations without real load, saving more than 90% of energy.

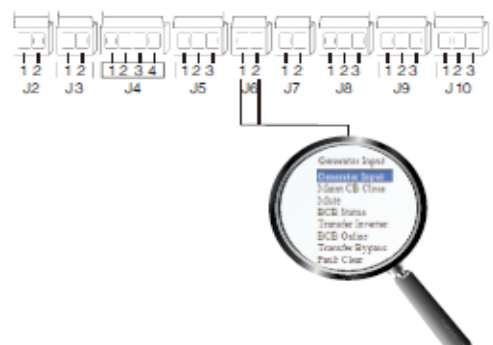
- Simulate different load conditions, without connecting to any real load, saving 90% of energy
- On site setting, easy for factory testing



7. Programmable Dry Contacts

Customers can easily expand or modify the definition of each port.

- Abundant options with three inputs and four outputs, all programmable
- Easy setting, just pull the drop-down menu and set

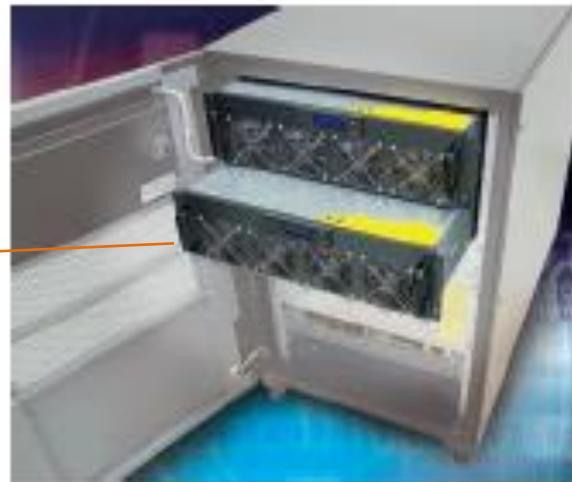


8. Hot Swappable Power Module

Hot swappable power module rating: 30kVA, 40kVA, 50kVA



Hot Swappable Power Module



9. Conformal Coating

All the PCBs are protected by conformal coating, which guarantees high reliability under different circumstances



SPECIFICATION

MODEL	STM60K-33	STM80K-33	STM90K-33	STM100K-33	STM120K-33	STM150K-33	STM200K-33	STM250K-33	STM300K-33	STM400K-33	STM500K-33
Capacity	60kVA	80kVA	90kVA	100kVA	120kVA	150kVA	200kVA	250kVA	300kVA	400kVA	500kVA
INPUT											
Dual Input	Standard						Optional		Standard		
Voltage	380V / 400V / 415V (line to line)										
Phase	3 Phase+Neutral+Ground, 380V/400V/415V (line to line)										
Power factor	>0.99										
THDi	<3% (full linear load)										
Voltage range	304-478VAC (line to line), full load 228V-304Vac (line to line), load decrease linearly according to the min phase voltage										
Frequency range	40-70Hz										
BYPASS											
Rate Voltage	380/400/415Vac (line to line)										
Rate Frequency	50/60Hz										
Input Voltage Range	Settable, -40% ~ +25%										
Frequency Range	Settable, ± 1 Hz, ± 3 Hz, ± 5 Hz,										
Bypass Overload	125% long term operation						110% long term operation				
	130% for 10 mins						125% for 5 mins				
	150% for 1 min						150% for 1 min				
	>150% for 300ms						>150% for 1s				
OUTPUT											
Voltage	380V / 400V / 415V (line to line)										
Voltage Regulation	1% for balance load; 1.5% for unbalance load										
Rated Frequency	50 / 60Hz										
THDu	< 1% (100% linear load); < 5.5% (non-linear load)										
Power factor	1.0										
Frequency precision	0.1%										
Crest Factor	3:1										
Overload capacity	110% for 60 mins; 125% for 10 mins; 150% for 1 min; >150% for 200ms										
BATTERY											
Voltage	± 240 VDC										
Battery Number	40pcs (Settable: even number from 32 to 44)										
Charger power	Up to 20% * Output active power										
Voltage precision	± 1 %										
Battery cold start	Optional						Standard				
SYSTEM											
Efficiency	AC Mode	95%	96%	95%	96%	95%	96%				
	ECO Mode	99%									
	Battery Mode	95%	96%	95%	96%	95%	96%				
Display	10.4" touch screen LCD + LED + Keyboard										
IP Class	IP20										
Interface	Standard: RS232, RS485, Programmable Dry Contact, USB										
	Optional: SNMP, Parallel kit, SPD, LBS, Dust filter										
Temperature	Operation: 0 ~ 40°C, Storage: -40 ~ 70°C										
Relative Humidity	0 ~ 95% (Non-condensing)										
Altitude	<1000m. Within 1000m to 2000m, power derate 1% for every 100m rise										
Noise (1 meter)	65dB @ 100% load, 62dB @ 45% load										
PHYSICAL											
Weight (kg)	170	210	231	210	266	305	350	445	490	810	900
Dimension (W*D*H) (mm)	600*980*950	600*980*1150	600*980*1400	600*980*1150	600*980*1400	650*960*1600	650*960*1600	650*960*2000	650*960*2000	1300*1100*2000	1300*1100*2000

Note: Product specifications are subject to change without notice

AMP & VOLT TEKNOLOGI SDN BHD (199401002564 (288242-V))

No 9, Jalan 3/118C, Desa Tun Razak,

56000 Kuala Lumpur

Tel: 03-9173 9648 Fax: 03-9173 9649 Email: ampnvolt@gmail.com