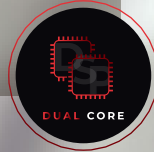


## Reliable Protection for Mission-Critical Applications

10 - 15 kVA/kW  
Three Phase UPS  
220/127V

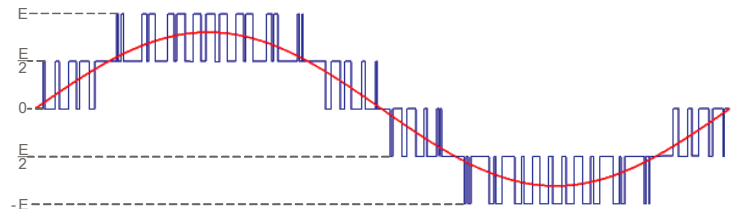


### FEATURES

- › 3-level IGBT technology
- › Advanced dual core DSP control technology and Active power factor correction technology, input power factor up to 0.99
- › Independent bypass (Dual input)
- › Output power factor 1.0
- › Wide input voltage range (110 ~ 295)VAC
- › Frequency converter function 60->50Hz & 50->60Hz
- › Intelligent fan speed, reducing noise and extending its service life
- › Conformal coating technology makes UPS operate in harsh environment
- › Cold start function
- › 5 inches LCD colorful touch screen, friendly human & machine interface
- › Advanced multi-platform communication: RS232, USB, RS485, dry contacts, SNMP card
- › Intelligent battery management, automatic charging and dormancy control, the reliability of charger and extending the battery life improving
- › Effective hardware and software protection, robust self-diagnosis function, abundant event log for future check
- › Conformal coating on electronic PCB, for working harsh environment for a long time
- › Ready for Lithium battery banks

### 3-level topology

UPS 3-Phase Powersan series include a 3-level IGBT topology, increasing their operating efficiency.



### Complete protection



Blackouts



Spikes



Harmonics



Transient



Frequency  
variation



Noise



Sags/swells



Surges



Under-voltage

## Applications

Protection for critical equipment in Data Centers, financial centers, government, education, hospitals, computing, PLC, security systems, telecom, etc.

### POWERSAN TL SERIES 3 PHASE UPS

MODEL	PS33-10TL	PS33-15TL
Ratings	10 kVA/ 10 kW	15 kVA/ 15 kW
Topology	True double-conversion online	
<b>INPUT</b>		
Nominal voltage	208, 220 VAC (3Ph, N + G)	
Voltage range	(128 ~ 260) VAC, Line voltage (73 ~ 150) VAC, Phase voltage	
Frequency	50/60 Hz (auto-sensing)	
Rated frequency	(40 ~ 70) Hz	
Power factor	≥0.99 typical	
Total harmonic distortion (THDi)	≤ 3% (linear load); ≤ 5% non-linear load	
Connection type	Hardwire terminal block; Input and Bypass (3Ph, N + G)	
<b>OUTPUT</b>		
Rated voltage (selectable by LCD display)	(3Ph, N + G) 190 / 208 / 220 VAC; Line voltage 110 / 120 / 127 VAC; Phase voltage	
Voltage regulation	±1%	
Frequency (synchronized with Input)	(55 ~ 65)Hz @ 60 Hz; (45 ~ 55)Hz @ 50Hz	
Frequency (Battery mode)	50/60 Hz ±0.1 Hz	
Power factor	1.0	
Waveform	Pure sine wave	
Crest factor	3:1	
Total harmonic distortion (THDv)	≤ 1% (linear load); ≤ 3% (non-linear load)	
Overload capacity	105% ~110% @ 60min, 110% ~ 125% @ 10min, 125% ~ 150% @ 1min, >150% @ 30 sec	
Connection type	Hardwire terminal block; Output (3Ph, N + G)	
<b>BATTERY</b>		
Battery type	Lead Acid Batteries (VRLA) default, and ready for Lithium	
DC bus voltage; battery quantity	±120 VDC; (20 batteries per string)	
Backup time 50% load Internal battery in UPS	1 strings: (9Ah/12V)(20)= 9.5 min 2 strings (9Ah/12V)(40)= 24 min	2 strings (9Ah/12V)(40)= 14 min 3 strings (9Ah/12V)(60)= 24 min
Backup time 100% load Internal battery in UPS	1 strings: (9Ah/12V)(20)= 4 min 2 strings: (9Ah/12V)(40)= 9.5 min	2 strings (9Ah/12V)(40)= 5 min 3 strings (9Ah/12V)(60)= 9.5 min
Charger current	1 ~ 10 Amp	
External battery bank connection type	Hardwire terminal block (Positive, Negative & Neutral)	
<b>UPS SYSTEM</b>		
Efficiency Line mode	93%	
Efficiency ECO mode	98%	
Max. parallel UPS	Up to 4 units	
Control panel	LCD 5" color touch screen + LED status indicator + Audible alarm	
Smart protection	Short-circuit, overload, overtemperature, battery low voltage, overvoltage, undervoltage, fan failure, etc.	
Frequency converter mode	Integrated	
<b>ENVIRONMENT</b>		
Audible noise	≤60dB (full load) @ 3.8 ft (1 m.)	
Relative humidity	0 - 95% (non-condensing)	
Operating temperature	(32 ~ 104)°F ; (0 ~ 40) °C	
IP Level	IP 20	
<b>PHISICAL</b>		
Dimensions (Width x Depth x Height)	(9.84 x 31.49 x 27.55) in (250 x 800 x 700) mm	(27.55 x 33.07 x 36.61) in (250 x 840 x 930) mm
Weight (without internal batteries)	136.68 lb (62 kg)	216.05 lb (98 kg)
Weight (1 String: 20 internal batteries)	255.73 lb (116 kg)	NA
Weight (2 String: 40 internal batteries)	374.78 lb (170 kg)	374.78 lb (170 kg)
Weight (3 String: 60 internal batteries)	NA	493.83 lb (224 kg)
<b>MANAGEMENT &amp; CONTROL</b>		
Communication ports	RS232, USB, RS485, dry contacts, Intelligent slot (SNMP), parallelports.	
Intelligent slot	SNMP, Wi-Fi, Dry Contact card (optional)	
<b>CONFORMITY &amp; STANDARDS</b>		
Safety Certification	EN IEC 62040-2:2018, EN 61000-3-12:2011, EN 6100-3-11:2000, EN IEC62040-1:2019, IEC 62040-3:2011, IEC 62040-1:2017, CE, UL 1778 5th Ed. CSA C22.2 No. 107.3	



\*If the UPS operates at an altitude above 1500m, the output power should be reduced by 1% for each additional 100m

\*\*Product specifications are subject to change without notice.  
USA-V2510-REV1.0