

# AETES

## TITAN

Powerful On-Line UPS



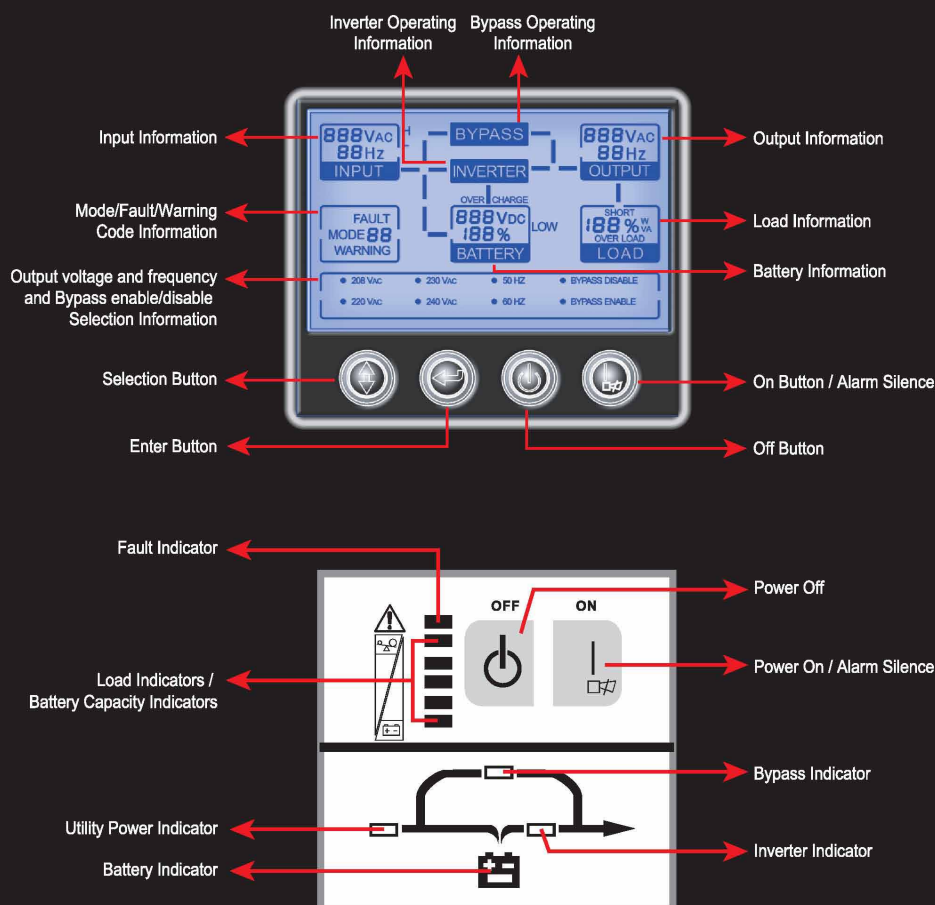
Powering Your Connection

## ❖ Titan, built for reliability, purity and power

Titan Series UPS make use of the unique double conversion circuitry to detect the electricity current and voltage output of utility power supply. The current is input via the high frequency PWM to maintain uniform wave form and phase in line with the voltage, so as to attain high input power factor over 95% and avoid generating comparatively significant harmonic interference on the power network.

With the use of the outstanding IGBT as the power conversion component, the operating frequency of the Inverter of UPS is capable of reaching tens of KHz, due to the high frequency operating characteristics of IGBT. Higher working efficiency of the inverter also improves the overall efficiency of UPS and higher inversion frequency reduces the noise of the inverter as well.

## ❖ Trendy & Elegant LCD Design for real-time UPS system information



### Microprocessor Control

By means of innovative software and control programs, the complicated hardware circuitry is inlaid in the powerful microprocessor. Apart from reduced size, it also lowers the defective rate of UPS.

### Communication Ports

Titan Offers three different communication ports for user selection: RS-232, USB card, SNMP card and AS-400 card. Through either one of them, the user can control and monitor UPS status easily.

### Extended Backup Time

Long Backup Models are allowed to connect external batteries to get prolonged backup time. The feature is particularly suitable for the areas where power supply are consistently in shortage.

### Auto Self-Testing System

When turning on the Titan UPS system, it immediately performs an inspection of the components such as the inverter, the battery, and the load. The system will also detect any problems in time to avoid causing any damage to the system.

### Modular Design

Titan 1-3KVA is the modular design UPS. There are many small modular boards on the Power Board. They are Fan module, charger module, Power Supply module, DC-DC module, PFC module and PWM Driver module etc. The modular design helps technicians to maintain and repair the UPS easily and the product performance will be more stable.

### N+X Parallel Redundancy

The parallel redundancy feature is available for high level 6Kva to 20Kva models. Comparing to current 1+1 parallel redundancy technology in the market, Centralion N+X Parallel Redundancy architecture technology can even achieve the saving of purchasing an extra UPS with corresponding backup rating. This feature benefits on reducing the cost on your IT equipment investment.

### User Selectable Output Voltage

Titan enables users to select corresponding output voltage to the local mains power without changing hardware. Users can select output voltage by just pushing a button.

### Power Management Software

To provide the battery control of the Titan UPS system, we developed a free download software, Winpower, available online for you to monitor and manage UPS Working Status easily and in real time.

# ❖ 220/230/240V Online UPS Specification

MODEL			TITAN- 1K	TITAN-1KS*	TITAN-2K	TITAN-2KS*	TITAN-3K	TITAN-3KS*
CAPACITY	VA/W		1000VA/700W		2000VA/1400W		3000VA/2100W	
INPUT			Base on load percentage (100%-80% / 80%-70% / 70%-60% / 60%-0%)					
	Voltage Range	Low Line Transfer	160VAC/140VAC/120VAC/110VAC ± 5VAC					
		Low Line Comeback	175VAC ± 5VAC					
		High Line Transfer	300VAC ± 5VAC					
		High Line Comeback	285VAC ± 5VAC					
	Frequency Range		46Hz ~ 54Hz					
	Phase		Single phase with ground					
	Power Factor		≥0.95					
OUTPUT	Voltage		220VAC/230VAC/240VAC					
	Voltage Regulation		±2%					
	Frequency (Synchronized range)		46~54Hz					
	Frequency (Battery Mode)		50 ± 0.2 Hz					
	Current Crest Ratio		3:1					
	Harmonic Distortion	Tower Case	≤3% THD ( Linear Load) ≤6% THD ( Non-Linear Load)	≤4% THD ( Linear Load) ≤7% THD ( Non-Linear Load)				
		Rack Case	≤4% THD ( Linear Load) ≤7% THD ( Non-Linear Load)					
Output Waveform		Pure Sinewave						
EFFICIENCY	To AC Mode		85%		85%		88%	
	To Battery Mode		83%		83%		83%	
BATTERY	Tower Case	Battery Type	12V/7.2Ah		12V/7.2Ah		12V/7.2Ah	
		Numbers of Batteries	3	Depending on the capacity of external batteries	8	Depending on the capacity of external batteries	8	Depending on the capacity of external batteries
		Backup Time (Full Load)	>5 minutes		>9 minutes		>5 minutes	
		Recharge Time	5 hours to 90%		5 hours to 90%		5 hours to 90%	
		Charging Current (Max.)	1.0A		8 A		1.0A	
		Charging Voltage	41.1Vdc±0.6V		110Vdc±0.4V			
	Rack Case	Battery Type	12V/7.2Ah	Depending on the capacity of external batteries	12V/7.2Ah	Depending on the capacity of external batteries	12V/7.2Ah	Depending on the capacity of external batteries
		Numbers of Batteries	3		8		8	
		Backup Time (Full Load)	>5 minutes		>9 minutes		>5 minutes	
		Charging Current (Max.)	1.0A		8 A		1.0A	
Charging Voltage		41.1Vdc±0.6V		110Vdc±0.4V				
TRANSFER TIME	AC to DC		Zero					
	Inverter to Bypass		2.5ms (Typical )					
INDICATOR	Status		Load Level / Battery Level / Battery Mode / AC Mode / Bypass Mode / Fault					
AUDIBLE ALARM	Battery Mode		Sounding every 4 seconds					
	Low Battery		Sounding every second					
	Overload		Sounding twice every second					
	Fault		Continuously Sounding					
DIMENSION	Tower Case (DxWxH) mm		400x145x220		460x192x340			
	Rack Case (DxWxH) mm	UPS Case	482.6x450x87 (w. battery)		482.6x450x87			
Battery Pack		482.6x450x87		482.6x450x87				
WEIGHT	Tower Case		14 kgs	7 kgs	34.5 kgs	15 kgs	35.5 kgs	16 kgs
	Rack Case		16.3 kgs (w. battery)		10.3 kgs	11.5 kgs	11.2 kgs	12.3 kgs
ENVIRONMENT	Operating Temperature		0~40°C					
	Relative Humidity		20-90% (NON-CONDENSING)					
	Noise Level		<45dB @ 1 Meter		<50dB @ 1 Meter			
INTERFACE	Smart RS-232		Software supports Windows family, Linux, Sun Solaris, IBM Aix, Compaq True64, SGI IRIX, FreeBSD, HP-UX, and MAC					
	SNMP (option)		Power management from SNMP manager and web browser					
	USB (optional)		Windows family and Mac OS					