

# MARS 1K/1.5K/3K

## Powerful On-Line UPS



### 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 is 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.

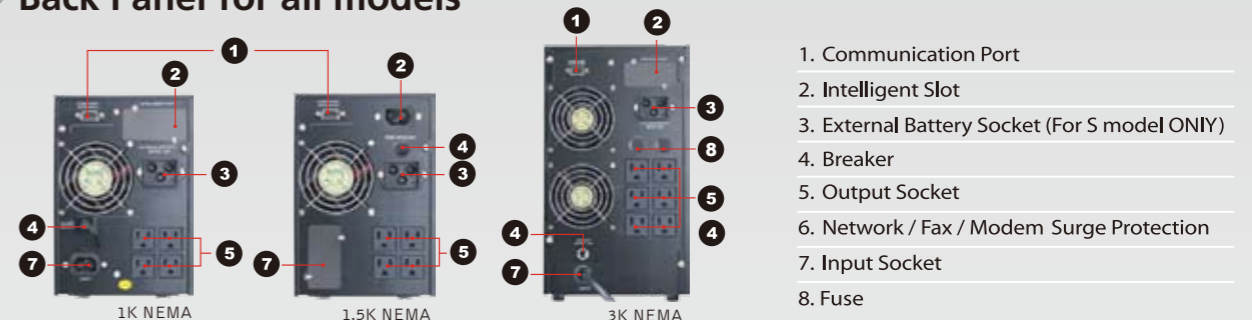
### User Selectable Output Voltage

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.

### Back Panel for all models



### 110/115/120V Online UPS Specification

MODEL			MARS 1K		MARS 1Ks*		MARS 1.5K		MARS 1.5Ks*		MARS 3K		MARS 3Ks*	
CAPACITY	VA/W		1000VA/700W				1500VA/1050W				3000VA/2100W			
INPUT	Voltage		60~138VAC											
	Voltage Range		Base on load percentage (100%-70% / 70%-60% / 60%-50% / 50%-40% / 40%-0% )											
		Low Line Transfer	80VAC/70VAC/70VAC/60VAC/60VAC											
		Low Line Comeback	85VAC/85VAC/75VAC/75VAC/65VAC											
		High Line Transfer	138VAC											
		High Line Comeback	133VAC											
	Frequency Range		46Hz ~ 54Hz / 56Hz ~ 64Hz											
	Phase		Single phase with ground											
Power Factor		≥0.95												
OUTPUT	Voltage		110VAC/115VAC/120VAC											
	Voltage Regulation		±2%											
	Frequency (Synchronized range)		46Hz ~ 54Hz / 56Hz ~ 64Hz											
	Frequency (Battery Mode)		50/60Hz ± 0.2 Hz											
	Current Crest Ratio		3:1											
	Harmonic Distortion		≤4% THD (Linear Load) ≤7% THD (Non-Linear Load)											
	Output Waveform		Pure Sinewave											
	EFFICIENCY	Tower Case	To AC Mode	85%				83%				86%		
To Battery Mode			83%				82%				83%			
Rack Case		To AC Mode	85%				83%				86%			
		To Battery Mode	83%				82%				83%			
BATTERY	Tower 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			4			8					
		Backup Time (Full Load)	> 5 minutes			> 5 minutes			> 5 minutes					
		Recharge Time	8 hours to 90%			8 hours to 90%			8 hours to 90%					
		Charging Current (Max.)	1.0A		8A		1.0A		8A		1.0A		8A	
		Charging Voltage	41.1Vdc 0.6V				54.9Vdc 0.4V				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			4			8					
		Backup Time (Full Load)	> 5 minutes			> 5 minutes			> 5 minutes					
		Recharge Time	8 hours to 90%			8 hours to 90%			8 hours to 90%					
		Charging Current (Max.)	1.0A		8A		1.0A		8A		1.0A		8A	
		Charging Voltage	41.1Vdc +0.6V/-0.8V				54.9Vdc +0.4V				110Vdc 0.4V			
		External Battery Rack	N/A		12V/7.2Ahx6		N/A		12V/7.2Ahx8		N/A		12V/7.2Ahx8	
		TRANSFER TIME	AC to DC		Zero									
Inverter to Bypass			2.5ms (Typical )								Zero			
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				465x145x220				465x192x340			
	Rack Case (DxWxH) mm		482.6x450x87(w. battery)				482.6x450x88				482.6x450x88			
WEIGHT	Tower Case		13 kgs	7 kgs	17.5 kgs		9 kgs		33 kgs		16 kgs			
	Rack Case	UPS Case	15.3 kgs	9.1 kgs	19.3 kgs		11.5 kgs		11.2 kgs		12.3 kgs			
		Battery Pack	N/A	20.5 kgs	N/A		25.3 kgs		N/A		25.3 kgs			
ENVIRONMENT	Operating Temperature		0-40℃											
	Relative Humidity		20-90% (Non-Condensing)											
	Noise Level		<45dB @ 1Meter				<45dB @ 1Meter				<50dB @ 1Meter			
INTERFACE	Smart RS-232		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											