**TITTAN PLUS** 

6 kVA ~ 10 kVA PF0.9



## **Features**

- High frequency on-line double conversion technology
- ullet DSP (Digital signal processors) technology
- $\bullet$  Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- $\bullet$  Wide input voltage range (110 V  $^{\sim}$  300 Vac) and frequency range (40  $^{\sim}$  70 Hz)
- Auto sensing frequency
- ullet 50/60Hz frequency conversion
- Cold start
- Rear ventilation design and variable speed fan
- Effective software and hardware protection
- Flexible battery configuration (Settable 14 20 pcs batteries)
- Quick and stable charging, 90% capacity restored in 4 h (standard model UPS)
- Linear derating in low voltage input reducing battery discharging times
- Settable delayed start when power is restored
- Advanced battery management (ABM)
- Multiple functions settable via LCD: output voltage, battery quantity, EOD, EPO, ECO mode, frequency conversion mode and parallel enable
- Powerful background software for parameters configuration, function settings and online updating

• Multi-platform communications: RS232 (standard), USB / RS485 / SNMP / dry contacts (optional)

## **Available Options**

• Optional USB, RS485 card, AS400 dry contacts, SNMP card, SMS alarms, maintenance bypass, EPO function, parallel function, battery temperature compensation and EMD environmental sensors

## Rear Panel

- 1. Input and output terminal
- 2. Input breaker
- 3. Battery breaker
- 4. Maintenance bypass (optional)
- 5. Inbuilt battery
- 6. Fan
- 7. External battery connector
- 8. Intelligent slot (SNMP / AS400 / RS485 optional)
- 9.USB (optional)
- 10. RS232
- 11. EPO
- 12. Parallel card (optional)
- 13. Battery temperature compensation (optional)



Long time model



Standard model

## **Specifications**

MODEL	TITTAN+ 6S	TITTAN+ 6H	TITTAN+ 10S	TITTAN+ 10H
Capacity	6 kVA /	5400 W	10 kVA	9000 W
INPUT				
Rated voltage	208 V / 220 V / 230 V / 240 Vac			
Voltage range	$110$ $^{\sim}$ $160$ Vac (linear derating between 50% and $100$ % load); $160$ $^{\sim}$ $280$ Vac (no derating); $280$ $^{\sim}$ $300$ Vac (derating 50%)			
Rated frequency	50 / 60 Hz (auto-sense)			
Frequency range	40 ~ 70 Hz			
Power factor	≥ 0.99			
Total harmonic distortion (THDI)	≤ 5%			
Bypass voltage range	- 40% ~ + 15% (settable)			
OUTPUT				
Voltage		208 V / 220 V / 230 V	/ 240 Vac (settable)	
Voltage regulation	+ 1%			
Frequency	$\pm$ 1 M $\pm$ 55 Hz or 55 $^{\circ}$ 65 Hz (synchronized range); 50 / 60 Hz $\pm$ 0.1 Hz (battery mode			
Waveform	Pure sine wave			
Crest factor	3:1			
Total harmonic distortion (THDV)	≤ 2% (linear load); ≤ 5% (non-linear load)			
Transfer time	Mains mode to battery mode: 0 ms; Inverter mode to bypass mode: 0 ms			
Transfer time	102% ~ 125%: Transfer to bypass in 10 min;			
Inverter overload capability	102% - 125%: Transfer to bypass in 10 min; $125\%$ $^{\sim}$ 150%: Transfer to bypass in 1 min;			
	> 150%: Transfer to bypass in 0.5 s			
	102% ~ 125%; Shut down in 20 min;			
Bypass overload capability	125%: Shut down in 20 min; 125% ~ 150%: Shut down in 2 min;			
	> 150%: Shut down in 1 s			
BATTERIES		7 100%. Shat	, down in i s	
DC voltage	10	12 Vdc (168 / 192 / 2	16 / 240 Vdc ontiona	1)
Inbuilt battery	192 Vdc (168 / 192 / 216 / 240 Vdc optional) 16×7 Ah			
Charging current	Standard model: 1 A; Long time model: 1 A, 2 A, 3.5 A (settable)			
Recharge time	Standard model (S): 90% capacity restored in 4 hours; Long time model (H): depend on the capacity of battery			
SYSTEM				
EFFICIENCY	≥ 93%, ECO mode 98%			
Display	LCD + LED			
Alarms	Battery mode, battery voltage low, fans fault etc.			
Maximum Parallel numbers	6			
Communications	RS232 (standard), USB / RS485 / dry contacts / SNMP (optional)			
EMI	IEC/EN62040-2			
EMS	IEC61000-4-2 (ESD)			
	IEC61000-4-3 (RS)			
	IEC61000-4-4 (EFT)			
	IEC61000-4-5 (Surge)			
OTHERS				
Humidity	20 $^{\sim}$ 90% RH @ 0 $^{\sim}$ 40 $^{\circ}$ C (non-condensing)			
Noise level	≤ 55 dB (1 m)			
	191×462×710	191×462×350	191×462×710	191×462×350
Dimensions $(W \times D \times H)$ $(mm)$	131 / 404 / 110			
Dimensions ( $W \times D \times H$ ) (mm)  Packaged dimensions ( $W \times D \times H$ ) (mm)	308×640×896	$267 \times 573 \times 436$	308×640×896	267×573×436
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<sup>• 1</sup>Derate capacity to 70% in frequency conversion mode and to 90% when the output voltage is adjusted to 208 Vac.
• S means standard model, H means long time model.

All specifications subject to change without notice.Custom-made specifications are acceptable.