

TITTAN PLUS

1 kVA ~ 3 kVA

PF 0.9



Features

- High frequency on-line double conversion technology
- DSP (Digital signal processors) control technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Wide input voltage range (110 V ~ 300 Vac) and frequency range (40 ~ 70 Hz)
- Auto sensing frequency
- 50 / 60 Hz frequency conversion
- Cold start
- Rear ventilation design and variable speed fan
- Effective software and hardware protection
- Quick and stable charging, 90% capacity restored in 3 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, EOD, auto-

start, bypass mode, ECO mode and frequency conversion mode

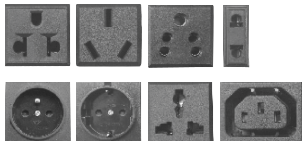
- Multi-platform communications: RS232 (standard), USB / RS485 / SNMP / dry contacts (optional)

Available Options

- Optional USB, RS485 card, AS400 dry contacts, SNMP card, SMS alarms, EPO function, and 12 A charger (2-3 kVA only)

Rear Panel

1. Overcurrent Protection
2. AC Input
3. Modem/Tel/Fax
4. DC Input
5. Outlet
6. Fan
7. RS232
8. USB (optional)
9. EPO (optional)
10. SNMP/AS400 (optional)



Optional sockets



Specifications

MODEL	TITTAN+ 1 S			TITTAN+ 1H	TITTAN+ 2S		TITTAN+ 2H	TITTAN+ 3S		TITTAN+ 3H
Capacity	1 kVA / 900 W			2 kVA / 1800 W			3 kVA / 2700 W			
INPUT										
Rated voltage	208 V / 220 V / 230 V / 240 Vac									
Voltage range	110 ~ 176 Vac (linear derating between 50% and 100% load) ; 176 ~ 280 Vac (no derating) ; 280 ~ 300 Vac (derating 50%)									
Frequency	40 ~ 70 Hz (auto-sense)									
Power factor	≥ 0.99									
Bypass voltage range	- 25% ~ +15% (settable)									
OUTPUT										
Voltage	208 V / 220 V / 230 V / 240 Vac (settable via LCD)									
Voltage regulation	±1%									
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range) ; 50 / 60 Hz ±0.1 Hz (battery mode)									
Waveform	Sinusoidal									
Crest factor	3:1									
Harmonic distortion	≤ 2% (linear load) ; ≤ 5% (non-linear load)									
Transfer time	Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 4 ms (typical)									
Overload	105% ~ 125% for 1 min, 125% ~ 150% for 30 s, > 150% for 300 ms									
EFFICIENCY										
Mains mode	≥ 90%			≥ 91%			≥ 92%			
Battery mode	≥ 85%			≥ 86%			≥ 87%			
ECO mode	≥ 95%			≥ 96%			≥ 97%			
BATTERIES										
DC voltage	24 V	36 V	36 V	48 V	72 V	72 V	72 V	96 V	96 V	
Inbuilt battery	2 × 9 Ah	3 × 7 Ah	/	4 × 9 Ah	6 × 7 Ah	/	6 × 9 Ah	8 × 7 Ah	/	
Charging current (max.)	1 A		6 A	1 A		6 A	1 A		6 A	
Recharge time	8 h									
ALARMS										
Utility failure	4 s per beep									
Low battery	1 s per beep									
Overload	1 s twice beep									
UPS fault	Long beep									
OTHERS										
Communications	RS232 (standard), USB / RS485 / dry contacts / SNMP (optional)									
Operating temperature	0 ~ 40℃									
Relative Humidity	0 ~ 90% (non-condensing)									
Noise level	≤ 50 dB (1 m)									
Dimensions (W×D×H) (mm)	144 × 336 × 214	144 × 414 × 214	144 × 336 × 214	191 × 418 × 335				191 × 464 × 335	191 × 418 × 335	
Packaged dimensions (W×D×H) (mm)	232 × 417 × 318	230 × 492 × 320	232 × 417 × 318	318 × 533 × 471				320 × 573 × 472	318 × 533 × 471	
Net weight (kg)	9.5	13	6	18	25.8	10.5	27.2	32	11	
Gross weight (kg)	10.5	14.2	7	19.5	27.4	12	29	34	12.5	

●Derate capacity to 70% in CUCF 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.