

TITTAN PLUS

6 kVA ~ 20 kVA (3:1)

PF 0.9



Features

- High frequency and true double-conversion
- DSP digital control technology
- Wide input voltage range (110 V ~ 300 V)
- Output power factor 0.9
- Optimized battery configuration: 192 V / 240 V
- Cold start
- Auto sensing frequency
- ECO mode operation for energy saving
- 50/60Hz frequency conversion mode
- Selectable output voltage via LCD
- Selectable battery shutdown voltage (EOD) via LCD
- Selectable input mode via LCD (3 : 1 or 1 : 1)
- Power-on self test
- Advanced battery management (ABM)
- Short circuit and overload protection
- Automatic charging in OFF mode
- Fan speed auto control when temperature varies
- Standard RS232 / USB communication port
- Standard emergency power off (EPO)
- Optional RS485 / SNMP / AS400 communication port
- Optional extension battery bank
- Optional battery temperature compensation
- Optional built-in isolation transformer
- Optional manual bypass
- Optional N+X redundancy parallel

Rear Panel

- | | |
|-------------|------------------------------|
| 1. AC Input | 7. EPO |
| 2. DC Input | 8. Manual Bypass (optional) |
| 3. Outlet | 9. SNMP/AS400 (optional) |
| 4. Fan | 10. Breaker |
| 5. RS232 | 11. Parallel Card (optional) |
| 6. USB | 12. BAT_NTC (optional) |



6 / 10 KS

15 / 20 KH

6 / 10 KH

Specifications

MODEL	TITTAN+ 6	TITTAN+ 10	TITTAN+ 15	TITTAN+ 20
Capacity	6 kVA / 5.4 kW	10 kVA / 9 kW	15 kVA / 13.5 kW	20 kVA / 18 kW
INPUT				
Rated voltage	3:1: 360 V / 380 V / 400V / 415 Vac; 1:1: 208 V / 220 V / 230 V / 240 Vac (settable via LCD)			
Voltage range	3:1: 190 ~ 277 Vac (derating 50%), 277 ~ 520 Vac (no derating); 1:1: 110 ~ 160 Vac (derating 50%), 160 ~ 300 Vac (no derating)			
Frequency	40 ~ 70 Hz (auto-sense)			
Power factor	3:1 ≥ 0.95; 1:1 ≥ 0.99			
BYPASS				
Voltage range	- 40% ~ + 15% (settable)			
Frequency	50 / 60 Hz ± 5 Hz			
OUTPUT				
Voltage	208 V / 220 V / 230 V / 240 Vac (settable via LCD)			
Voltage regulation	±1%			
Frequency	Synchronized with utility in mains mode; 50 / 60 ± 0.2 Hz in battery mode			
Waveform	Sinusoidal			
Crest factor	3:1			
Harmonic distortion	≤ 2% (linear load); ≤ 5% (non-linear load)			
Transfer time	0 ms			
Overload capability	105% ~ 125%: transfer to bypass in 3 min; 125% ~ 150%: transfer to bypass in 30 s; > 150%: transfer to bypass in 0.5 s			
EFFICIENCY				
Mains mode	≥ 92%			
Battery mode	≥ 91%			
ECO mode	≥ 98%			
BATTERIES				
DC voltage	192 Vdc / 240 Vdc			
Inbuilt battery of standard model	16 / 20 × 7 Ah	16 / 20 × 9 Ah	/	
Charging current	Standard model	1 A		/
	Long time model	7 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 / USB (standard), RS485 / dry contacts / SNMP (optional)			
Humidity	20 ~ 90% RH @ 0 ~ 40°C (non-condensing)			
Noise level	≤ 58 dB (1 m)			≤ 60 dB (1 m)
Dimensions (W × D × H) (mm)	262 × 580 × 455 (H), 262 × 580 × 732 (S)		262 × 580 × 628 (H)	
Packaged dimensions (W × D × H) (mm)	355 × 682 × 615 (H), 359 × 687 × 937 (S)		359 × 687 × 832 (H)	
Net weight (kg)	25.0 (H), 73.0 (S)	25.5 (H), 74.0 (S)	38.5 (H)	39.0 (H)
Gross weight (kg)	28.5 (H), 82.5 (S)	29.0 (H), 83.5 (S)	47.0 (H)	47.5 (H)

- Derate capacity to 70% in CUCF mode and to 90% when the output voltage is adjusted to 208 Vac.
- 3 : 1 means three-phase input and single-phase output mode; 1 : 1 means single-phase input and single-phase output mode.
- S means standard model, H means long time model.

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