

Titan X10 Modular



- **High efficiency online double conversion technology**

Titan X10 is applied online double conversion technology with high performance over 94.5% at 50% load. It significantly reduces overall Total Cost of Ownership (TCO).

- **High scalability**

DSP control provides an improved solution with high performance. Integrated with modular design and parallel technology, Titan X10 simplifies future power expansion.

- **Unity output power factor**

Titan X10 delivers unity output power (kVA=kW) providing the maximum power capacity to mission critical loads. It satisfies the requirements of the latest servers and optimizes IT investment with every penny.

- **Modular design lowers MTTR**

Modular design is applied in power module, STS module and battery module. It will simplify maintenance and replacement with low MTTR (Mean Time To Repair).

- **N+1 or N+X parallel redundancy for power guarantee**

Scalable architecture allows you to optimize cost expense to meet power demands by vertically expanding in a single rack enclosure from 30KVA to 210KVA and achieve N+1 or N+X redundancy in the same rack.

- **Ease of installation and maintenance**

Built-in maintenance bypass assures continuous power to critical loads during UPS maintenance. Besides, to facilitate installation and maintenance, all panel control and connectors are front accessibility.

- **Flexible battery configuration adapts different applications**

Battery numbers can be adjusted flexibly. It will adapt different power demands and shorten system downtime. Battery voltage can be set from 32 to 40 pieces per string.

- **Adjustable charging current**

Titan X10 provides maximum 8A charging current for every power module and it's adjustable based on requirement.

- **High overload capability**

Titan X10 supports, 110% overload for 60 minutes, 120% for 10 minutes, and 150% for 1 minute.

- **Graphic 5.7" LCD design for easy management**

Designed for easy management, Titan X10 is equipped with 5.7" graphic LCD screen. Intuitive design enhances display information identified and advanced configuration.

30U Cabinet



42U Cabinet



Titan X10 Modular UPS Selection Guide

MODEL	Titan X10 30K	Titan X10 60K	Titan X10 90K	Titan X10 120K	Titan X10 150K	Titan X10 180K	Titan X10 210K
PHASE	3-phase in / 3-phase out						
TOTAL CAPACITY*	30 KW	60 KW	90 KW	120 KW	150 KW	180 KW	210 KW
UPS POWER MODULES	1	2	3	4	5	6	7
TOPOLOGY	True Double-Conversion Online						
INPUT							
Nominal Voltage	3 x 400 VAC (3Ph+N)						
Voltage Range	305 ~ 477 VAC @Full load; 208 ~ 304VAC@ <70% Load						
Nominal Frequency	50/60Hz (Auto Sensing)						
Frequency Range	40Hz ~70Hz						
Power Factor	> 0.99 @ 100% Load ; >0.98 @ 50% Load						
Harmonic Distortion (THDI)	< 3% @ 100% load						
OUTPUT							
Nominal Voltage	3 x 400 VAC (3Ph+N)						
Voltage Regulation (Steady state)	± 1% Typical (balanced load) ; ~ ± 2% Typical (unbalanced load)						
Voltage Regulation (Transient)	± 5% Typical						
Nominal Frequency	50/60Hz						
Frequency Range (Synchronized)	46Hz ~ 54Hz or 56Hz ~ 64Hz						
Overload Capability	1 hour for 110%, 10 mins for 120%;, 1 min for 150%, 200ms for >150%						
Harmonic Distortion	~1.5% THD (Linear Load) ; ~ 4% THD (Non-linear Load)						
Efficiency	>94.5% at load >50%						
BATTERY / CHARGER							
Nominal Voltage	+/- 216V (12V x 36 pcs)						
Maximum Voltage	+/- 240V (12V x 40 pcs)						
Minimum Voltage	+/- 192V (12V x 32 pcs)						
Float Charging Voltage	2.25V / Cell						
Boost Charging Voltage	2.35V / Cell						
Temperature Compensation	Yes						
Maximum Charging Current	8A (User-adjustable)						
PHYSICAL							
Medium Size, D x W x H(mm)	1100 x 600 x 1485 (30U) mm						
Full Size, D x W x H(mm)	1100 x 600 x 2030 (42U) mm						
ENVIRONMENT							
Operation Temperature	0 ~ 40°C						
Relative Humidity	0 ~ 95% non-condensing						
Altitude	<1000m for Nominal power						
IP Class	IP 20						
MANAGEMENT							
Smart RS-232 / USB	Supports Windows ² 2000/2003/XP/Vista/2008, Windows ⁷ , Linux, Unix, and MAC						
Optional SNMP	Power management from SNMP manager and web browser						
STANDARDS							
Safety	IEC/EN 60950-1; IEC/EN 62040-1						
EMC	IEC/EN 62040-2 Category C3						

* When temperature is above 30°C, the output power factor will become 0.8.
 * Note: One battery module contains 10 pcs of 12V/7Ah or 12/9Ah sealed lead acid batteries. One power module provides 30kW power capacity
 Product specifications are subject to change without further notice.

System Cabinet Selection

Complete System Cabinet							
Chassis Size	30U			42U			
Capacity	30KVA	60KVA	90KVA	30KVA	60KVA	90KVA	120KVA
Power Module Units	1	2	3	1	2	3	4
Power Redundancy Availability	Yes, 1+1	Yes, 2+1	No	Yes, 1+1	Yes, 2+1	Yes, 3+1	No
Built-in Battery	Yes, 80 pcs	Yes, 120 pcs	Yes, 120pcs *	Yes, 80 pcs	Yes, 120 pcs	Yes, 200 pcs	Yes, 200 pcs*

* External battery cabinet is necessary.

Long Backup Cabinet (including power modules, STS module and Input/Output control module)						
Chassis Size	30U					
Capacity	30KVA	60KVA	90KVA	120KVA	150KVA	180KVA
Power Module Units	1	2	3	4	5	6
Power Redundancy Availability	Yes, 1+1	Yes, 2+1	Yes, 3+1	Yes, 4+1	Yes, 5+1	No
Built-in Battery	No (External battery is depending on customer's application. For detailed battery spec, please check us first.)					

Long Backup Cabinet (Including power modules, STS module and Input/Output control module)							
Chassis Size	42U						
Capacity	30KVA	60KVA	90KVA	120KVA	150KVA	180KVA	210KVA
Power Module Units	1	2	3	4	5	6	7
Power Redundancy Availability	Yes, 1+1	Yes, 2+1	Yes, 3+1	Yes, 4+1	Yes, 5+1	Yes, 6+1	Yes, 7+1
Built-in Battery	No (External battery is depending on customer's application. For detailed battery spec, please check us first.)						