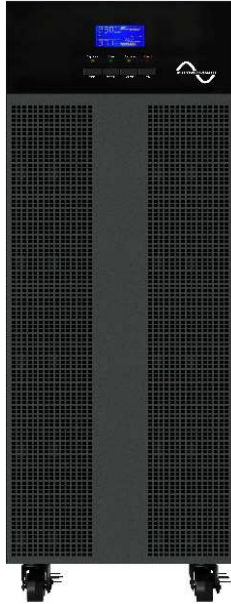


TITANIUM SERIES UPS

(2-4kVA)



True On-line Double Conversion Titanium Series UPS Series integrates DSP technology and a unique isolation transformer design to easily adapt to complicated loads. Small datacenters, Medical Lab equipment, light industrial facilities all require rugged UPS systems like the Titanium Series.

Engineered to support demanding applications

- **Available sizes**
2kVA, 3kVA and 4kVA models available
- **Variable Voltages (Input/Output)**
Variable voltages are available for the input (208/220/230/240VAC) and for the output (120/208/220/230/240VAC)
- **High Voltage Units**
The Titanium Series UPS systems will have high voltage units (2/3/4kVA). 208V/220/230/240VAC
- **Isolated Transformer**
All Titanium UPS units include an internal isolation transformer. This rugged design ensured low Common Mode noise (>0.5V), and low Normal Mode noise (>10V) neutral to ground when tested to ANSI/IEEE C62.41
- **Conformal Coated Boards**
Conformal coated boards allow for the Titanium Series to be used in "Light Industrial" applications. Boards that are conformal coated include the Main PCB, Comm., Charger and Control board.
- **Internal; Maintenance Bypass**
The Titanium Series UPS includes an internal maintenance bypass. If batteries require replacement switch to MBS mode.
- **In-rush Capabilities**
The Titanium Series UPS systems include a high in-rush capability. Supporting an overload for 300% at 163ms will allow the user to properly size their UPS system.
- **Customized Back Panels**
Back panels are "customized" per customer. Allows for specific designs to ensure all power requirements are supported.
- **Extended Battery Cabinets**
Extended battery cabinets are optional. Allows user to have extended runtimes dependent on requirement.
- **External Maintenance Bypass Systems**
External Maintenance Bypass Systems (MBS) are available in two types. Isolated and non-isolated version. Consult Factory for recommendations.
- **Warranty**
Three (3) year warranty on the electronics and batteries. For additional warranty options please call factory.
- **TAA Compliant**
All units comply with Trade Agreement Act (TAA), 19 U.S.C. ~2501.2581

Specifications:

MODEL	2kVA(L)	2kVA(H)	3kVA(L)	3kVA(H)	4kVA (H)
CAPACITY*	2kVA / 2kW	2kVA / 2kW	3kVA / 3kW	3kVA / 3kW	4kVA/4kW
INPUT					
Nominal Voltage/ Low-High / Range	(L) 120VAC - (H) 208 /220 /230 / 240 VAC / +28% / -15% @ full load				
Frequency Range	46Hz ~ 54 Hz @ 50Hz system, 56Hz ~ 64 Hz @ 60Hz system				
Phase	Two Phases or One Phase + Neutral				
Power Factor	≥ 0.99 at 100% Load				
OUTPUT					
Phase	1 Phase with Neutral				
Output Voltage / Low-High	(L) 104/110/115/120, (H) 208 /220 / 230 / 240				
AC Voltage Regulation	± 1% (Normal)				
Frequency Range (Sync Range)	46Hz ~ 54 Hz @ 50Hz system, 56Hz ~ 64 Hz @ 60Hz system, (Batt Mode) +/- 0.1% Hz				
Overload	AC Mode/	100%~110%: 1 hour; 110%~130%: 1min; >130% : 1sec			
	Battery Mode	100%~110%: 30sec; 110%~130%: 10sec; >130% : 1sec			
Current Crest Ratio	3:1 max				
Voltage THD	≤ 2 % @ 100% Linear Load; ≤ 4 % @ 100% Non-linear Load (PF≥0.8)				
Step Load Response	+/- 4% 50% step load, +/-6% 100% step load, Return +/-3% of nominal (11 cycles)				
Common Mode Noise	< 0.5 VRMS				
Normal Mode Noise	< 10% V				
EFFICIENCY					
AC Mode	90%				
Battery Mode	88%				
ECO Mode	97%				
BATTERY					
Voltage (VDC)	240, Nominal, 270 Float				
Battery Backup Time Full Load (Internal)	2kVA = 25 min batt backup, 3kVA = 15 min batt backup, 4kVA = 11 min batt backup at @ 100% full load				
Quantity	20				
Recharge Time	7 hours to 90%				
PHYSICAL					
Standard Model	Dimension, W x D x H (In.)	9.8" x 28.2" x 32.5"	9.8" x 28.2" x 32.5"		9.8" x 28.2" x 32.5"
	Net Weight (lbs)	266	266	266	266
BYPASS					
Input Voltage	110 ~276 VAC				
Output Voltage	110 ~ 276 VAC				
Transformer Voltage Regulation	+/- 3%				
Overload Conditions	Continuous below 130%, 1 minute at 130%, 1 cycle at 1000%				
ENVIRONMENT					
Operation Temperature	0 ~ 40°C (the battery life will down when > 25°C)				
Operation Humidity	<95 % and non-condensing				
Operation Altitude	3000 ft.				
Heat Dissipation (BTU/Hr)	1264	1264	1264	1264	1686
Acoustic Noise Level (Front of Unit)	55-60dB @ 1 Meter	60dB @ 1 Meter	60dB @ 1 Meter	60dB @ 1 Meter	60dB @ 1 Meter
MANAGEMENT					
Smart RS-232 or USB	Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux, Unix, and MAC				
Optional SNMP	Power management from SNMP manager and web browser				
MODBUS Card	Power Management with MODBUS communication				
AGENCIES					
RoHS	All units are RoHS compliant				
Safety Agencies	TUV certified to comply to UL1778 5 th Edition, CSA22.2 No.107.3-14 UPS Safety Standards				
EMC	FCC Part 15J, Class A, EN 55022 Class A / CISPR 22, IEC 61000-3-2, IEC 61000-4-2, Electrostatic Discharge, IEC61000-4-3 Level 3 Radiated Electromagnetic Filed immunity. (Additional EMC Agencies listed in User's Manual).				