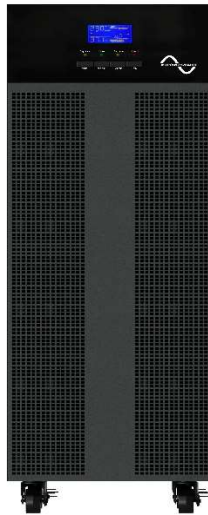




# TITANIUM SERIES UPS

(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)
- Low Voltage and High Voltage Units**  
 The Titanium Series UPS systems will have low voltage units (2/3kVA), and high voltage units (2/3/4/5.2/6/8/10kVA)
- 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.
- In-rush Capabilities**  
 The Titanium Series UPS systems include a high in-rush capability. Supporting an overload for 300% at 500mS 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**  
 Two (2) year warranty on the electronics, one (1) year warranty on the batteries.  
 For additional warranty options please call factory.

## Specifications:

MODEL	2kVA(L)	2kVA(H)	3kVA(L)	3kVA(H)	4kVA (H)
<b>CAPACITY*</b>	2kVA / 2kW	2kVA / 2kW	3kVA / 3kW	3kVA / 3kW	4kVA/4kW
<b>INPUT</b>					
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	1 Phase with Neutral				
Power Factor	≥ 0.99 at 100% Load				
<b>OUTPUT</b>					
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				
<b>EFFICIENCY</b>					
AC Mode	90%				
Battery Mode	88%				
ECO Mode	97%				
<b>BATTERY</b>					
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%				
<b>PHYSICAL</b>					
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"	9.8" x 28.2" x 32.5"
	Net Weight (lbs)	266	266	266	266
<b>BYPASS</b>					
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%				
<b>ENVIRONMENT</b>					
Operation Temperature	0 ~ 40°C (the battery life will down when > 25°C)				
Operation Humidity	<95 % and non-condensing				
Operation Altitude	2000 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
<b>MANAGEMENT</b>					
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				
<b>AGENCIES</b>					
RoHS	All units are RoHS compliant				
Safety Agencies	UL1778 5 <sup>th</sup> Edition, CSA22.2 No.107.3, IEC 62040-2:2018				
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).				

