



Power System Solution for Harsh Environment

PRODUCT INTRODUCTION

TD series low frequency online UPS adopts advanced DSP digital control technology to realize the leap from analog to digital. In harsh environments, for the power grid that often occurs the situation such as the mains voltage is too high or too low, the voltage is instantaneously low or damped, high-voltage pulses, voltage fluctuations, surge voltages, harmonic distortion, clutter interference, frequency fluctuations, TD series products can provide reliable power supply under these conditions, and combine with the mature technology of high-frequency machines, further improve product performance and reliability and stability of UPS, which can run stably even in harsh environments.

PRODUCT FEATURES

1 Advanced DSP Digital Control Technology

Adopt advanced full digital DSP control technology to ensure the data processing more accurate and fast and output performance more excellent, which can better improve the reliability of machine.

2 Large LCD+LED Display Screen

Fully considering the humanized design, the perfect combination of LCD+LED, Chinese and English bilingual display, and the display content is rich and easy to understand, and the operation is convenient. The LCD display panel is also equipped with a switch protection device to avoid various problems

3 Intelligent Charging System

Users can freely set the appropriate charging current (1-25A) on the LCD control panel according to the battery type, capacity and battery usage status. The scientific charging method has fully extended the service life of the battery.

4 High-guaranteed Dual AC Power Input Function

The main AC input power supply and the bypass AC input power supply can be input from different power grids, so that the user's power supply has been more comprehensively guaranteed.

5 Frequency and Phase Sequence Adaptive System

Output frequency can be set to 50Hz or 60Hz according to mains frequency. And output phase sequence can automatically track and lock according to the input phase sequence.

6 Better Electrical Performance

The efficiency of the whole machine is as high as 93%-94%, and with the ECO mode equipped, which makes the efficiency increase to more than 97% and greatly reduces the power loss of the UPS. The full-bridge topology with output isolation transformer is adopted, and the load capacity and shock resistance become stronger. The output load power factor reaches 0.8.

7 High reliable IGBT technology

Full microprocessor control with no-break static and manual bypass

Remote real-time monitoring of UPS (new function) supports mobile smart monitoring card, which can monitor UPS data in real time through mobile APP.

- Computers or mobile phones can realize and control the running status of UPS anytime and anywhere; (such as real-time data such as input and output voltage, operating frequency, load condition, battery voltage, etc.);
- When the UPS has state changes and fault alarms, the system will immediately send an information to the mobile phone or computer in the form of network text messages: (such as mains power failure, power restoration, battery voltage is too low, overload and failure), so that users can keep
- The remote terminal can manage as many as 256 pcs UPS, and one UPS can be managed by multi-users.
- Can remotely perform self-check, turn on/off the buzzer, remotely turn on/off the UPS and perform periodic discharge maintenance and etc.
- Can remotely diagnose UPS faults and modify UPS parameters (this function is provided only for UPS factories)
- The highly encrypted password protection of the APP smart card prevents the UPS from being maliciously operated.

TENSA

TD Series

TD series

Single phase input single phase output



PRODUCT FEATURES

- Advanced DSP digital control technology
- LCD+LED display
- With output isolated transformer
- DC cold start function
- Frequency self-adaptive system
- Special short-circuit protection design
- Intelligent mobile monitoring cards are supported to monitor UPS data in real time through mobile apps.

PARAMETER

Model		TD11 3KVA	TD11 6KVA	TD11 10KVA	TD11 15KVA	TD11 20KVA
Rated Power		3kVA/2.4kW	6kVA/4.8kW	10kVA/8kW	15kVA/12kW	20kVA/16kW
Input	Rated Voltage and Range	220Vac±25%				
	Input Form	1P2W+G				
	Frequency Range	40Hz-70Hz (settable)				
Output	Rated Voltage	220Vac				
	Output Form	1P2W+G				
	Static Voltage Accuracy	±2%				
	Dynamic Voltage Transient	≤9%				
	Distortion of output voltage waveform	≤3%(liner), ≤8%(non-liner)				
	Power Factor	0.8				
	Output Frequency	50Hz / 60Hz				
Battery	Rated Voltage	192Vdc				
	Operating Temperature	0°C ~ 40°C				
	Operating Humidity	20% ~ 95% (non-condensing)				
Dimension (LxWxH) mm		533*260*501	560*260*717		655*370*900	
Weight		40	65	79.5	122	152

TD series

Three phase input single phase output



PRODUCT FEATURES

- 1 Advanced DSP digital control technology
- 2 LCD+LED display
- 3 With output isolated transformer
- 4 DC cold start function
- 5 Frequency self-adaptive system
- 6 Special short-circuit protection design
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PARAMETER

Model	TD31 10KVA	TD31 15KVA	TD31 20KVA	TD31 30KVA	TD31 40KVA	
Rated Power		10kVA/8kW	15kVA/12kW	20kVA/16kW	30kVA/24kW	40kVA/32kW
Main Input	Rated Voltage and Range	380±25%				
	Input Form	3P4W+G				
	Frequency Range	40Hz-70Hz (settable)				
Bypass Input	Rated Voltage and Range	220Vac±25%				
	Input mode	Input Mode: 1P+2W				
Output	Rated Voltage	220Vac				
	Output Form	1P2W+G				
	Static Voltage Accuracy	±2%				
	Dynamic Voltage Transient	≤9%				
	Distortion of output voltage waveform	≤3%(liner)、≤8%(non-liner)				
	Power Factor	0.8				
	Output Frequency	50Hz /60Hz				
	Output Overload	105%±5%≤ Load: Overload warning; 105%±5%<Load≤125%±5%: Convert to bypass output after 2 mins; 125%±5%<Load≤150%±5%: Convert to bypass output after 30s; Load>150%±5%: Convert to bypass output after 500ms.				
Battery	Rated Voltage	192Vdc		384Vdc		
Environment	Operating Temperature	0℃~40℃				
	Operating Humidity	20%~95% (non-condensing)				
Dimension (L×W×H) mm		560*260*717	655*370*900	830*455*1055		830*515*1135
Weight		79.5	122	195	210	285

TD series

Three phase input three phase output



PRODUCT FEATURES

- 1 Advanced DSP digital control technology
- 2 LCD+LED display
- 3 With output isolated transformer
- 4 DC cold start function
- 5 Frequency self-adaptive system
- 6 Frequency self-adaptive system
- 7 Special short-circuit protection design
- 8 Intelligent mobile monitoring cards are supported to monitor UPS data in real time through mobile apps.
- 9 Equipped with three output isolation transformers, to meet the three-phase 100% unbalanced output.

PARAMETER

Model		TD33 10kVA	TD33 15kVA	TD33 20kVA	TD33 30kVA	TD33 40kVA	TD33 60kVA	TD33 80kVA	TD33 100kVA	TD33 120kVA	TD33 160kVA	TD33 200kVA	TD33 250kVA	TD33 300kVA	TD33 400kVA	TD33 500kVA
Rated Power		10kVA /8kW	15kVA /12kW	20kVA /16kW	30kVA /24kW	40kVA /32kW	60kVA /48kW	80kVA /64kW	100kVA /80kW	120kVA /96kW	160kVA /128kW	200kVA /160kW	250kVA /200kW	300kVA /240kW	400kVA /320kW	500kVA /400kW
Main Input	Rated Voltage and Range	380Vac±25%														
	Input Form	3P4W+G														
	Frequency Range	40Hz-70Hz (settable)														
Bypass Input	Rated Voltage and Range	380Vac±25%														
	Input Form	3P4W+G														
Output	Rated Voltage	380Vac ±25% (line voltage)														
	Output Form	3P4W+G														
	Static Voltage Accuracy	±2%														
	Dynamic Voltage Transient	≤9%														
	Distortion of output voltage waveform	≤3%(liner), ≤8%(non-liner)												≤3%(liner), ≤5%(non-liner)		
	Power Factor	0.8														
	Output Frequency	50Hz/60Hz														
	Output Overload	105%±5%≤ Load: Overload warning; 105%±5%<Load≤125%±5%: Convert to bypass output after 2 mins; 125%±5%<Load≤150%±5%: Convert to bypass output after 30s; Load>150%±5%: Convert to bypass output after 500ms.												110%≥300Min; 125%≥10Min; 150%≥1min		
Battery	Rated Voltage	192Vdc	384Vdc										480Vdc		768Vdc	
Dimension (LxWxH) mm		830*455*1055				830*515*1135	800*700*1600		880*850*1650		870*1300*1850		1420*908*1650		1630*1026*1902	2100*1100*2000
Weight		218	208	208	243	309	506.5	521.5	800	800	1099	1243	1200	1240	2600	3660