

TDS Series

Hybrid Wave Inverter



The TDS Series is a professional low-frequency toroidal transformer inverter charger for backup, off-grid, and energy storage systems. It features pure sine wave output (7–10KW rated, 21–30KW surge power), ≤8ms UPS transfer, built-in AVR stabilizer, and ≥85% transfer efficiency. It includes a 20A AC charger compatible with lead-acid and lithium batteries, with selectable 48/96V battery voltage, integrated 100A MPPT solar controller, and RS485 communication

FEATURES

-  Rated power 7KW-10KW.
-  Pure sine wave AC output.
-  Clear display for real-time system monitoring.
-  With CAN/RS485 for BMS communication.
-  High efficiency, low loss, long-term reliability.
-  Compatible with LiFePO4 batteries.
-  WiFi remote monitoring (optional).

PRODUCT CONNECTION DIAGRAM



Model	TDS-702	TDS-103
Rated Power	7KW	10KW
Surge Power	21KW	30KW

AC Input & Output		
Voltage	220VAC	
Selectable Voltage Range	140-275VAC (220/230/240VAC) ±4%	
Frequency Range	50Hz/60Hz automatic recognition	
AC Voltage Regulation (BATT. Mode)	(DC Batt.mode)220vac±3%	
Transfer Time	≤8ms	
Wave Form	Pure Sine Wave	
Transformer Type	Toroidal	
Transfer Efficiency	≥85%	

Battery		
Battery Voltage	48VDC	48/96VDC
Type	Gel/SLA/AGM/Water/Lithium(lifepo4) Battery	
DC Charge Voltage	40~64VDC(48V)/ 80~128VDC(96V)	

Solar charger & AC Charger		
Maximum PV Array Open Circuit Voltage	200VDC	
Maximum PV Array Power	5600W(48V)/11500W(96V)	
Maximum AC Charge Current	20A	
Maximum Solar Charge Current	100A MPPT	
Maximum Charging Current	120A	

Communication Portal		
Type	RS485, available for wifi box & external control screen	

Physical		
Dimension, D*W*H(MM)	640*400*820	
G.W.(KGS)	80	85

Environment		
Humidity	0~95% (NO Condensation)	
Operating Temperature	0~60℃	
Storage Temperature	0~60℃	