

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℃