

TN5000 TCI Inverter

Alphapower

The TN5000 is designed with TCI technology and is equipped with a 50Hz transformer, built-in static transfer switch and an input isolation transformer to improve system security and ensure the safety of AC loads and equipment. Its rugged design makes it ideal for use in power generation and transmission and various other industrial powering applications.



The TN5000 can be operated as a single unit or can be arranged in 1 + 1 redundancy configuration for higher system reliability and function.



Some key features include:

- TCI technology
- Support 1+1 redundancy
- Pure Sine wave
- Complete isolation AC input/output and DC input
- Built-in static transfer switch
- Soft start
- High efficiency
- Complete protection
- DC input reverse polarity protection
- User friendly interface
- RS232 and RS485 communication port
- Dry contact
- Rack mount or floor mount available
- LED and LCD display

Product Specifications

Model	TN5103D– TN5110D	TN5310D– TN5330D	TN5103E– TN5120E	TN5303E– TN5360E
Rated Power	3 – 10kVA	10 – 30kVA	3 – 20kVA	3 – 60kVA
Rated Voltage	110V _{DC}		220V _{DC}	
Voltage Range	88 – 143V _{DC}		176 – 286V _{DC}	
AC Voltage	165 – 264V _{AC}	304 – 456V _{AC}	165 – 264V _{AC}	304 – 456V _{AC}
Frequency	50Hz ± 10%			
AC Bypass	> 0.9			
Wave form	Pure Sine wave			
Power Factor	0.8			
Rated Voltage	220V _{AC} / 110V _{AC}			
Voltage Variation	Maximum ± 2%			
Frequency	50/60Hz ± 1%			
THD	≤ 2% linear load / ≤ 4% non-linear load			
Crest Factor	3:1			
Efficiency	≥ 85%			
Overload	125% for 10min and 150% for 60sec			
Transfer Time	AC-DC: 0ms Inverter-bypass: < 4ms			
Dynamic Response Time	< 20ms			
Display	LCD and LED			
Interface	RS232 and RS485			
Dry Contact	6 x groups			
Isolation	2000V _{rms} (AC-DC, DC-ground, AC-ground)			
Protection	IP20			
Operating Temperature	-20 – 60°C (-4 – 140°F)			
Storage Temperature	-40 – 85°C (-40 – 185°F)			
Cooling	Forced fan			