



# TSI NOVA 230 VAC



## MODULAR INVERTER MODULE

POWER 0.75 kVA  
INPUT 48 Vdc  
OUTPUT 230 Vac



### DESCRIPTION

NOVA is a compact and scalable modular inverter providing a pure sine wave AC supply. In conjunction with a DC Power system, it provides an excellent AC backup solution. It uses the latest inverter technology, providing superior energy efficiency in a compact size.

The "Twin Sine Innovation" (TSI) technology eliminates all single points of failure with full scalability; up to 32 modules in parallel and high efficiency of up to 93 % reducing operating costs.

### APPLICATIONS

All business critical applications and all types of AC loads. The design is modular and scalable with hot-swappable inverter modules which ensures low Mean Time to Repair (MTTR), reduction in service costs and meets the changing needs for future expansion.

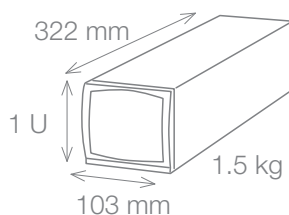
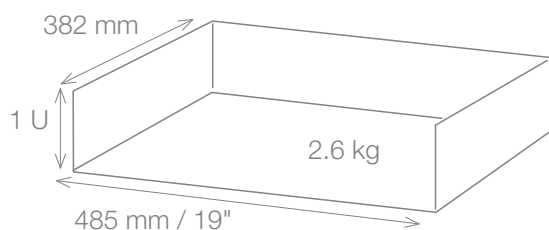
### MAIN FEATURES

- » Dual input sources (AC & DC) with wide AC input range 150 Vac to 265 Vac
- » Compact design
- » High efficiency
- » Transfer time reduced to 0
- » up to 3 kVA in 1 U

48 / 230	
<b>GENERAL</b>	
EMC (immunity)	EN 61000-4-2 / EN 61000-4-3 / EN 61000-4-4 / EN 61000-4-5 / EN 61000-4-6 / EN 61000-4-8
EMC (emission) (class)	EN 55022 (A)
Safety	EN62040-1
Cooling / Isolation	Forced / Doubled
MTBF	200 000 hrs (MIL-217IF)
Efficiency (Typical): Enhanced power conversion / on line	93% / 89%
Dielectric strength DC/AC	4300 Vdc
True Redundant Systems – compliant	3 disconnection levels on AC out and DC in power ports 4 disconnection levels on AC in port
RoHS	Compliant
Vibration	GR63 office vibration 0 to 100 hz-0.1 g / transport vibration 5-100 Hz 0.5 g 100 to 500 hz-1.5 g / Drop test
Operating conditions	Self adaptive to wide operating conditions and comprehensive table of troubleshooting codes
Altitude above sea without de-rating	< 1500 m / derating > 1500 m – 0.8 % per 100 m
Ambient / storage temperature / relative humidity	-20 to 50 ° C / -40 to 70 ° C / 95 %, non-condensing
Material (casing)	Coated steel-ALU ZINC
<b>AC OUTPUT POWER</b>	
Nominal Output power (VA) / (W)	750 VA / 525 W
Short time overload capacity	135 % (15 seconds) 105 % permanent within T° range
Admissible load power factor	Full power rating from 0 inductive to 0 capacitive
Internal temperature management and switch off	/
<b>DC INPUT SPECIFICATIONS</b>	
Nominal voltage (DC)	48 V
Voltage range (DC)	40 - 60 V
Nominal current (at 48 Vdc and 525 W output)	12.5 A
Maximum input current (for 15 second) / voltage ripple	22 A / < 2 mV
Input voltage boundaries	/
<b>AC INPUT SPECIFICATIONS</b>	
Nominal voltage (AC)	220/230/240 V 1P or 3P (Min 3 shelves for 3P)
Voltage range (AC)	150 - 265 V
Brownout	150 to 185 V
Power factor	438 W @ 150 Vac > 99%
Frequency range (selectable) / synchronization range	50 – 60 Hz / range 47 – 53 Hz / 57 – 63 Hz
<b>AC OUTPUT SPECIFICATIONS</b>	
Nominal voltage (AC*)	220/230/240 V
Frequency / frequency accuracy	50 - 60 Hz / 0.03 %
Total harmonic distortion (resistive load)	< 3 %
Load impact recovery time	0.4 ms
Turn on delay	20 s to 40 s depending on the number of modules installed
Nominal current	3.25 A
Crest factor at nominal power	2.5 : 1
With short circuit management and protection	
Short circuit clear up capacity	9 x I <sub>n</sub> for 20 msec - Available while Mains is available at AC input port With magnitude control and management
Short circuit current after clear up capacity	1.89 I <sub>n</sub>
<b>IN TRANSFER PERFORMANCE</b>	
Max. voltage interruption / total transient voltage duration (max)	0 s / 0 s
<b>SIGNALING &amp; SUPERVISION</b>	
Display	Synoptic LED
Alarms output / supervision	Dry contacts on shelf / Use optional devices
Remote on / off	On rear terminal of the shelf via T2S

TSI NOVA 230 – Datasheet v1.1 Specifications can change without notice. New data will be updated on our Web site: [www.cet-power.com](http://www.cet-power.com). The present equipment is protected by several international patents, trademarks and copyrights.

\*Operation within lower voltage networks leads to de-rating of power performances.



Illustrations are non-binding and may include customized fittings.

Leading AC Backup Technology