

## **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
GENERAL	
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
/ITBF	200 000 hrs (MIL-217IF)
Efficiency (Typical): Enhanced power conversion / on line	93% / 89%
Dielectric strength DC/AC	4300 Vdc
rue Redundant Systems – compliant	3 disconnection levels on AC out and DC in power ports
RoHS	4 disconnection levels on AC in port  Compliant
libration	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 tes
	Designed for installation in an IP20 or IP21 environment.
Operating conditions	When installed in a dusty or corrosive environment, appropriate measures (air filtering,) must be taken.
Ititude above sea without de-rating	< 1500 m / derating > 1500 m - 0.8 % per 100 m
mbient / storage temperature / relative humidity	-20 to 50 $^{\circ}$ C / -40 to 70 $^{\circ}$ C / 95 %, non-condensing
laterial (casing)	Coated steel-ALU ZINC
C OUTPUT POWER	
Iominal Output power (VA) / (W)	750 VA / 525 W
hort time overload capacity	135 % (15 seconds) 105 % permanent within T° range
dmissible load power factor	Full power rating from 0 inductive to 0 capacitive
nternal temperature management and switch off	
OC INPUT SPECIFICATIONS	
ominal voltage (DC)	48 V
oltage range (DC)	40 - 60 V
Iominal current (at 48 Vdc and 525 W output)	12.5 A
Maximum input current (for 15 second) / voltage ripple	22 A / < 2 mV
nput voltage boundaries	
C INPUT SPECIFICATIONS	
Iominal voltage (AC)	220/230/240 V 1P or 3P (Min 3 shelves for 3P)
oltage range (AC)	150 - 265 V
Brownout	150 to 185 V
	438 W @ 150 Vac
Power factor	> 99%
requency range (selectable) / synchronization range	50 – 60 Hz / range 47 – 53 Hz / 57 – 63 Hz
C OUTPUT SPECIFICATIONS	
Iominal voltage (AC*)	220/230/240 V
requency / frequency accuracy	50 - 60 Hz / 0.03 %
otal harmonic distortion (resistive load)	< 3 %
oad impact recovery time	0.4 ms
urn on delay	20 s to 40 s depending on the number of modules installed
Iominal current	3.25 A
Crest factor at nominal power	
Vith short circuit management and protection	2.5 : 1
hort 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  1.89 I
Short circuit current after clear up capacity	1.09
N TRANSFER PERFORMANCE	0-70-
Max. voltage interruption / total transient voltage duration (max)	0s/0s
SIGNALING & SUPERVISION	Omerata LED
isplay	Synoptic LED
Alarms output / supervision	Dry contacts on shelf / Use optional devices
Remote on / off	On rear terminal of the shelf via T2S ETH

TSI NOVA 230 - Datasheet v1.3 Specifications can change without notice. New data will be updated on our Web site: <a href="www.oat-power.com">www.oat-power.com</a>. The present equipment is protected by several international patents, trademarks and copyrights.

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





