

# TSI Media 2i 120 VAC

## Modular Inverter System



**Power:** 1.5 kVA

**Input:** 48 Vdc

**Output:** 120 Vac or 120/240 Vac

### Description

The MEDIA 2i is a piggyback inverter package designed to provide a pure sine wave AC supply as a complement to any existing DC power solution.

Compact, friendly Plug & Play installation, racks-mount design ideal for low MTTR and frequently reshuffled applications. It comes with built-in protections and standard NEMA sockets eliminating the need of additional PDU's. Thanks to TSI specifics it provides outstanding power conditioning and high end availability.

### Applications

Convenient for any Mission Critical Applications. A must when any glitch matters.

The solution to power up demanding AC loads at low OPEX from a combination of AC and DC sources present on site. It reveals its full worth in harsh electrical environments and for long autonomy requirements. It handles any type of AC load including laser printers, compressors and induction motors.

Typical applications include: access network infrastructure components (BTS, RSS/Router, repeaters, LTE nodes, ...), decentralized backup source for datacenter, signaling and process monitoring.

### Main Features

- Permanent AC to AC double conversion
- Great disturbance rejection rate
- Redundant AC & DC input sources
- Source changover not visible by the load
- Highly efficient energy conversion
- Preserve battery life expectancy
- Compact form factor with short depth
- Operates until 65°C (de-rating may apply)
- Can be used in 120 Vac and 120/240 Vac system configurations

<b>GENERAL</b>	
Applicable standards	IEC 61000-4 / FCC part 15 / cULus 1778 Listed / ROHS
MTBF (each module)	240 000 hrs
Efficiency (Typical): Enhanced power conversion / on line	94% / 90%
Dielectric strength DC/AC	4 300 Vdc
True Redundant Systems – compliant	3 disconnection levels on AC out and DC in power ports 4 disconnection levels on AC in port
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
Altitude above sea	< 1 500 m no derating > 1 500 m – 0.8 % derating per 100 m
Ambient / storage temperature / relative humidity	-40 to 70 ° C / -40° F to 158° F / 95 %, non-condensing
Operating temperature (Ambient & measured @ air inlet)	-20 to 40 °C; -4° F to 104° F for rated power <sup>7</sup> 40° C to 65° C with 2% / °C derating <sup>1</sup> 104° F to 149° F with 1% / °F derating <sup>1</sup>
Operating environment / Ingress Protection	Free from dust and corrosive materials / NEMA 1 <sup>2</sup>
Material (casing)	Coated steel-ALU ZINC
<b>DC INPUT SPECIFICATIONS</b>	
Nominal voltage (DC) / Voltage range	48 V / (40 -58 V)
Voltage ripple	< 2 mV Psopho
Input voltage boundaries	40 V to 57 V user selectable
DC input protections	No. 1 40 Amps MCB per module
<b>AC INPUT SPECIFICATIONS</b>	
Voltage range (AC) (Full power rating)	100 – 140 Vac
Brownout range and behavior	80 – 104 Vac use DC source contribution if need be (can be disabled)
Conformity range before transfer to DC	Adjustable from 80 to 138 Vac
Power factor	> 99%
Frequency range (selectable) / synchronization range	50 – 60 Hz / range 47 – 53 Hz / 57 – 63 Hz
<b>AC OUTPUT SPECIFICATIONS</b>	
Admissible load power factor	Full VA power rating from 0 inductive to 0 capacitive Limited to W power rating from Pf0,8 to 1
Frequency / frequency accuracy	50 - 60 Hz / 0.03 %
Total harmonic distortion (resistive load)	< 1.5 %
Load impact recovery time	0.4 ms
Turn on delay	30 s
Short duration overload capacity	150 % - 15 s
Long duration overload capacity	110 % permanent
Crest factor at nominal power. With short circuit management and protection	3.1
Short circuit clear up capacity <sup>3</sup>	10 x I <sub>n</sub> for 20 ms
Short circuit clear up capacity when AC is not present	1.5 x I <sub>n</sub> for 15 s
<b>ENERGY SOURCE CHANGEOVER</b>	
Total transient voltage duration (max) (as seen from the load)	0 s (and no glitch)
Maintenance Bypass (MBP)	No
<b>SIGNALING &amp; SUPERVISION</b>	
Display	LED w/module status and power bargraph + [OPTIONAL] CANDIS Display (1/ph)
Alarms output / supervision	No.3 Dry Contacts (Maj, Min, User adj)
Remote Monitoring	[OPTIONAL] TCP-IP with SNMP V1
Remote on / off	via T2S controller

TSI MEDIA 2i – Datasheet v1.0 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.

<sup>1</sup> Operation beyond 40°C (104°F) and derating are not UL certified

<sup>2</sup> Specific execution can be provided on request

<sup>3</sup> While the boost function is enabled and AC source present

<sup>7</sup> Internal temperature management and switch off

**MEDIA 2i 1PH UL LISTED**

GENERAL			
Nominal voltage (AC) Input & Output	120 Vac L-N		
Nominal Output power (VA) / (W) (when fully populated)	3 kVA / 2,4 kW		
DC INPUT SPECIFICATIONS			
Nominal AC output current Protected against reverse current	25 A		
Short circuit current after clear up capacity	28 A		
Nominal DC current (at floating voltage and 2000W per module output)	56 A		
Nominal AC input current <sup>5</sup> (at 120Vac and 2000W per module output)	22 A		
AC INPUT SPECIFICATIONS			
Bulk output			
DC input connection <sup>6,8</sup>	Anderson PowerPole connectors		
AC input connection / protection <sup>6</sup>	Terminal block / none terminal		
AC output connection / protection <sup>6</sup>	block / none		
w/NEMA socket (5-15R) Outline #1			
DC input connection <sup>6</sup>	Anderson PowerPole connectors		
AC input connection / protection <sup>6</sup>	Terminal block / none		
AC output connection / protection <sup>6</sup>	4 x NEMA socket (5-15R) / 15 A MCB ea.		

## TSI Media 2i Inverter System 120v Single Phase L, N

SYSTEM RATING	ORDERING CODE	MODEL	DC INPUT	AC INPUT	AC OUTPUT	PRODUCT REPRESENTATION
<b>120V</b> L,N 3KVA	5000213798P	3KVA TSI Media 2i system with the T2S-ETH ethernet card and 4 NEMA 5-15amp receptacles. ***  Two 1.5kA inverter modules must be ordered seperately	<b>48v</b> 2 - 40amp breakers	30amp, single pole	4 NEMA 5-15amp receptacles	
	5000221397P	3KVA TSI Media 2i system with T2S-ETH ethernet card  Two 1.5KVA inverter modules must be ordered seperately	<b>48v</b> 2 - 40amp breakers	30amp, single pole	Bulk output	
<b>120V</b> 1.5kva	5000208339P	TSI-EPC - 48Vdc - 120Vac - 1.5kva Inverter Module				



