

SYSTE

POWER 500 VA / 1000 VA INPUT 48 Vdc **OUTPUT 120 Vac** 



## DESCRIPTION

Y-ONE is an upscale stand alone inverter providing a pure sine wave AC supply. It is the corner stone of an AC backup solution compatible with any kind of DC Power system. At the leading edge of conversion technology it operates with superior efficiency with no compromise in quality and performance.

The "Twin Sine Innovation" (TSI) technology is designed to empower Business Continuity Solutions with great value for money.

Optional Manual ByPass available for module live replacement.

## **APPLICATIONS**

Convenient for any Mission Critical Applications. It reveals its full worth in large deployments when energy savings at module scale turn into substantial OPEX savings at global level.

Handle any type of AC load including laser printers, compressors and induction motors.

Compact, friendly Plug & Play installation, suitable for racks and wall mount applications.

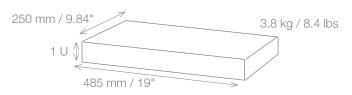
## MAIN FEATURES

- >>> Permanent AC to AC double conversion
- >>> Great disturbance rejection rate
- Short depth, allow 300mm rack integration
- >>> Operates up to 65°C (derating applies from 50°C)
- >> AC output with 15-15R NEMA socket



	EPC 48 / 120 - 500 VA	EPC 48 / 120 - 1000 VA	
GENERAL			
Applicable Standards	IEC 61000-4 / FC	IEC 61000-4 / FCC part 15 / ROHS / CE	
Cooling / Isolation DC/AC	F	Forced	
ITBF (module)	240	240 000 hrs	
fficiency (Typical): Enhanced power conversion / on line	90.5% / 85.5%	90.5% / 85.5% 90.5% / 87%	
ielectric strength DC/AC	,	4,300 Vdc	
ibration		GR63 office vibration 0 to 100 hz-0.1 g / transport vibration 5-100 Hz 0.5 100 to 500 hz-1.5 g / Drop test	
perating ambiance / Ingress Protection		rosive materials / NEMA 1 (2)	
Ititude above sea		< 1500m; no derating	
	>1500m; 0.8 % derating / 100 m -20 to 50 °C; -4°F to 122°F for rated power		
perating temperature (Ambient & measured @ air inlet)	50 °C to 65°C w	50 °C to 65°C with 2%/°C derating <sup>1,4</sup> 122°F to 149°F with 1%/°F derating <sup>1,4</sup>	
mbient / storage temperature / relative humidity		-40° to 70 ° C / -40°F to 158°F / 95 %, non-condensing	
laterial (casing)	Coated st	Coated steel - ALU ZINC	
C OUTPUT POWER			
ominal Output power	500 VA / 400 W	1000 VA / 800 W	
hort duration overload capacity	150 % (15 seconds)	100%	
dmissible load power factor	Full VA power rating from	m 0 inductive to 0 capacitive r rating from Pf 0,8 to 1	
nternal temperature management and switch off	i i	Automatic	
C INPUT SPECIFICATIONS			
ominal voltage (DC) (Operating Range)	48 V	48 V (40 - 60 V)	
ominal current (at floating voltage and 400W or 800W output)	8.75 A <sup>5</sup>	17.5 A <sup>5</sup>	
oltage ripple	<2 m	V Psopho	
aput voltage boundaries	40 V to 60 V		
Connections	Termi	Terminal block <sup>5</sup>	
C INPUT SPECIFICATIONS			
ominal voltage (AC) (Operating range with full rating)	120 Vac L-1	120 Vac L-N (95 – 150 Vac)	
onformity range before transfer to DC		Fixed	
ower factor	> 99%		
requency range (selectable) / synchronization range	50 – 60 Hz / range 47 – 53 Hz / 57 – 63 Hz		
lominal current (at 120Vac and 400W or 800W output)	3.7 A <sup>5</sup>	6.6 A <sup>5</sup>	
Connections		Terminal block	
C OUTPUT SPECIFICATIONS	ICITI	illa biock	
lominal voltage (AC*)	120	120 Vac L-N	
requency / frequency accuracy	50 or 60 Hz / 0.03 %		
otal harmonic distortion (resistive load)		< 1.5 %	
		0.4 ms	
oad impact recovery time		30 s	
urn on delay		4.2 A <sup>5</sup> 8.3 A <sup>5</sup>	
ominal current. Protected against reverse current	4.2 A		
rest factor at nominal power with short circuit management and protection	1 E v. L for 1E o	2.0	
hort circuit clear up capacity when AC is not present	1.5 x I <sub>n</sub> for 15 s	I <sub>n</sub>	
hort circuit current after clear up capacity	4.62 A	9.2 A Terminal block +	
Connections	Terminal block	No.1 NEMA 5-15R receptacle	
NERGY SOURCE CHANGEOVER			
otal transient voltage duration (max) (as seen from the load)		0 s	
flaintenance Bypass (MBP)	Optional		
SIGNALING & SUPERVISION			
Display	LED w/module stat	LED w/module status and power bargraph	
Alarma autaut / aupaniaian	No O Dry Contrate (Mai Min) leasted on the year		

TSI Y-ONE 120 - 500VA 1000 VA - Non UL — Datasheet v2.1 Specifications can change without notice. New data will be updated on our Web site: <a href="https://www.cst-power.com">www.cst-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.

No 2 Dry Contacts (Maj, Min) located on the rear

On terminal block located on the rear

- 1 Derating is not UL certified.
- 2 Specific execution can be provided on request.
- 3 While the boost function is enabled AC source present.
- 4 Automatic temperature management and cut off.
- 5 Refer to specific document for NEC compliance for protections and cable sizing.



Alarms output / supervision

Remote Monitoring
Remote on / off