



ALPHA  
OUTBACK  
ENERGY

# » Y-ONE 1000 - 48/120



TELECOM



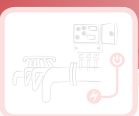
DATA COM



MASS TRANSIT



OIL & GAS



POWER UTILITIES



## STANDALONE INVERTER SYSTEM

POWER 1000 VA  
INPUT 48 Vdc and 120 Vac  
OUTPUT 120 Vac



### DESCRIPTION

This standalone inverter is capable of converting a 48 Vdc power source into a pure 120 Vac sine wave.

An additional AC input is used under normal conditions to achieve an overall conversion efficiency of 90.5%. In the event of a grid failure, it automatically switches to the DC to secure the loads.

With modules in place for many years, the Y-One is extremely reliable. This version comes with a NEMA socket.

### 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

- » Extra AC input for increased efficiency
- » High reliability
- » No disturbances on DC loads & batteries
- » Easy maintenance
- » NEMA socket

Illustrations are non-binding and may include customized fittings.

*Leading AC Backup Technology*



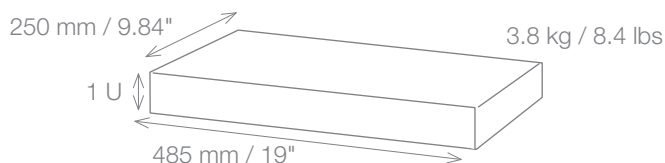
**Y-One 1000 VA - 48/230**

<b>GENERAL</b>	
Part number	T351A30301
Applicable Standards	IEC 61000-4 / FCC part 15 / ROHS / CE
Cooling / Isolation DC/AC	Forced
MTBF (module)	240 000 hrs
Efficiency (Typical): Enhanced power conversion / on line	90.5% / 87%
Dielectric strength DC/AC	4,300 Vdc
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 ambience / Ingress Protection	Free from dust and corrosive materials / NEMA 1 <sup>(2)</sup>
Altitude above sea	< 1500m; no derating >1500m; 0.8 % derating / 100 m
Operating temperature (Ambient & measured @ air inlet)	-20 to 50 °C; -4°F to 122°F for rated power 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>
Ambient / storage temperature / relative humidity	-40° to 70 ° C / -40°F to 158°F / 95 %, non-condensing
Material (casing)	Coated steel - ALU ZINC
<b>AC OUTPUT POWER</b>	
Nominal Output power	1000 VA / 800 W
Short duration overload capacity	100%
Admissible load power factor	Full VA power rating from 0 inductive to 0 capacitive Limited to W power rating from Pf 0,8 to 1
Internal temperature management and switch off	Automatic
<b>DC INPUT SPECIFICATIONS</b>	
Nominal voltage (DC) (Operating Range)	48 V (40 - 60 V)
Nominal current (at floating voltage and 800W output)	17.5 A <sup>5</sup>
Voltage ripple	<2 mV Psopho
Input voltage boundaries	40 V to 60 V
Connections	Terminal block <sup>5</sup>
<b>AC INPUT SPECIFICATIONS</b>	
Nominal voltage (AC) (Operating range with full rating)	120 Vac L-N (95 – 150 Vac)
Conformity range before transfer to DC	Fixed
Power factor	> 99%
Frequency range (selectable) / synchronization range	50 – 60 Hz / range 47 – 53 Hz / 57 – 63 Hz
Nominal current (at 120Vac and 800W output)	6.6 A <sup>5</sup>
Connections	Terminal block
<b>AC OUTPUT SPECIFICATIONS</b>	
Nominal voltage (AC*)	120 Vac L-N
Frequency / frequency accuracy	50 or 60 Hz / 0.03 %
Total harmonic distortion (resistive load)	< 1.5 %
Load impact recovery time	0.4 ms
Turn on delay	30 s
Nominal current. Protected against reverse current	8.3 A <sup>5</sup>
Crest factor at nominal power with short circuit management and protection	2.0
Short circuit clear up capacity when AC is not present	I <sub>n</sub>
Short circuit current after clear up capacity	9.2 A
Connections	Terminal block + No.1 NEMA 5-15R receptacle
<b>ENERGY SOURCE CHANGEOVER</b>	
Total transient voltage duration (max) (as seen from the load)	0 s
Maintenance Bypass (MBP)	Optional
<b>SIGNALING &amp; SUPERVISION</b>	
Display	LED w/module status and power bargraph
Alarms output / supervision	No 2 Dry Contacts (Maj, Min) located on the rear
Remote Monitoring	None
Remote on / off	On terminal block located on the rear

Y-ONE 1000 - 48/120 - 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)  
or [www.alpha-outback-energy.com](http://www.alpha-outback-energy.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.

- 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.



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