

## >> Y-ONE 500 - 48/230

#### **0.°0** U I 🕮 🛑 🕮 🦳



### STANDALONE INVERTER SYSTEM

POWER 500 VA INPUT 48 Vdc and 230 Vac OUTPUT 230 Vac





#### DESCRIPTION

This standalone inverter is capable of converting a 48 Vdc power source into a pure 230 Vac sine wave.

An additional AC input is used under normal conditions to achieve an overall conversion efficiency of 92%. 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 module exists in two versions: with IEC connector or with bulk connections.

#### APPLICATIONS

All business critical applications and all types of AC loads. The design is cost effective, installation easy.

#### MAIN FEATURES

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



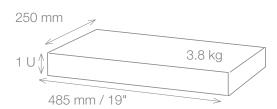
Illustrations are non-binding and may include customized fitting



# >> Y-ONE

	Y-One 500 VA - 48/230 - IEC connector	Y-One 500 VA - 48/230 - Bulk Output
GENERAL		
Part Number	T351730102	T351730101
EMC (immunity)	EN 61000-4-2 up to 6	
EMC (emission) (class)	EN 55022 (A)	
Safety	IEC 60950-1- EN62040-1-1	
Cooling / Isolation	Forced / Doubled	
MTBF	240 000 hrs	
Efficiency (Typical): Enhanced power conversion / on line	92% / 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	Designed for installation in an IP20 or IP21 environment. When installed in a dusty or corrosive environment, appropriate measures (air filtering,) must be taken.	
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	
AC OUTPUT POWER		
Nominal Output power (VA) / (W)	500 / 400	
Short time overload capacity	150 % (15 seconds) 110 % permanent within T° range	
Admissible load power factor	0 lagging to 0 leading	
DC INPUT SPECIFICATIONS		
Nominal voltage (DC)	48 V	
/oltage range (DC)	40 - 60 V	
Nominal current (at 40 V and 400W)	11.2 A	
Maximum input current (for 15 second) / voltage ripple	17 A / 2 mV PSO	
Input voltage boundaries	N/A	
AC INPUT SPECIFICATIONS		
Nominal voltage (AC)	230 V	
Voltage range (AC)	150 - 265 V	
Brownout	150 to 185 V linear derating	
Biomiour	400 VA @ 150 Vac	
Conformity range before transfer to DC	Adjustable	
Power factor	> 99%	
Frequency range (selectable) / synchronization range	50 – 60 Hz / range 47	– 53 Hz / 57 – 63 Hz
AC OUTPUT SPECIFICATIONS		
Nominal voltage (AC*)	230 V	
Frequency / frequency accuracy	50 or 60 Hz / ±0.01 %	
Total harmonic distortion (resistive load)	< 1.5 %	
Load impact recovery time	0.4 ms	
Furn on delay	20 s	
Nominal current. Protected against reverse current	2.2 A	
Crest factor at nominal power	2.8 : 1	
With short circuit management and protection		
Short circuit current capacity	2.1 $I_n$ during 15 s and 1.5 $I_n$ after 15 s	
TRANSFER TIME PERFORMANCE AC to DC and DC to AC		
Max. voltage interruption / total transient voltage duration (max)	0 ms / 0 ms	
SIGNALING & SUPERVISION		
Display	Synoptic LED on front of the module	
Alarms output / supervision	Dry contact on shelf at the rear of the module	
Remote on / off	On rear terminal of the module	

Y-ONE 500 - 48/230 - Datasheet - v1.0 Speci ications can change without notice. New data will be updated on our Web site: www.cet-power.com or 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.



09/2020

Illustrations are non-binding and may include customized fitting

Leading AC Backup Technology







 Worldwide Corporate Offices

 Headquarter Germany
 Eastern Europe
 France and Benelux
 Russia

 Hansastrasse 8
 ee@alpha-outback-energy.com
 fbnl@alpha-outback-energy.com
 russia@alpha-outback-energy.com

 D-91126 Schwabach
 me@alpha-outback-energy.com
 Spain
 russia@alpha-outback-energy.com

 Fax: +49 9122 79889 01
 Middle East
 Spain
 Africa

 Mail: info@alpha-outback-energy.com
 spain@alpha-outback-energy.com
 Africa

Alpha and Outback Energy GmbH reserves the right to make changes to the products and information contained in this document without notice. Copyright © 2020 Alpha and Outback Energy GmbH. All Rights reserved.

For more information please visit **www.alpha-outback-energy.com**