EAGLE EYE
POWER SOLUTIONS

Y-One Inverter System

500 VA - 48 VDC - 120 VAC

Telecom | Datacom

Y-One

Product Description

The 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.

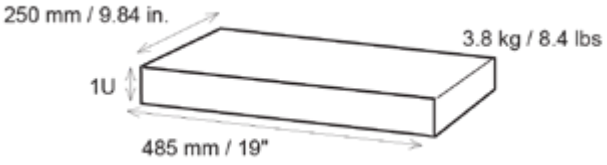
Compact, friendly Plug & Play installation, suitable for racks and wall mount applications.

Product Features

- Permanent AC to AC double conversion
- Great disturbance rejection rate
- Short depth, allow 300mm rack integration
- Operates up to 65°C/149°F (derating applies from 50°C/122°F)
- AC output with 15-15R NEMA socket

General Specifications	
Applicable standards	cULus 1778 Listed / IEC 1000-4 / FCC part 15 / RoHS
Cooling / Isolation DC/AC	Forced
MTBF (module)	240,000 hours
Efficiency (typical)	Enhanced power conversion / online: 90.5% / 85.5%
Dielectric strength DC/AC	4,300VDC
Vibration	GR63 office vibration 0-100Hz-0.1g / transport vibration 5-100Hz 0.5g 100-500Hz-1.5g / Drop test
Operating ambiance / Ingress protection	Free from dust and corrosive materials / NEMA 1 *(2)*
Altitude	<1500m; no derating / >1500m; 0.8% derating per 100m
Operating temperature (Ambient & measured @ air inlet)	-20 to 50°C; -4°F to 122°F for rated power 50 to 65°C with 2%/°C derating (1,4) 122 to 149°F with 1%/°F derating (1,4)
Ambient / storage temp / relative humidity	-40 to 70°C / -40 to 158°F / 95%, non-condensing
Material (casing)	Coated steel - ALU ZINC
Display	LED w/module status and power bargraph
Alarms output / supervision	No 2 Dry Contacts
Remote on / off	On terminal block located on the rear
Energy Source Changeover	Total transient voltage duration (max): 0 seconds (as seen from the load) Maintenance Bypass (MBP): Optional

AC Output Power	
Nominal output power	500VA / 400W
Short duration overload capacity	150% (15 seconds)
Long duration overload capacity	110% permanent
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
DC Input Specifications	
Nominal voltage (DC) (operating range)	48V (40 - 60V)
Nominal current (at floating voltage and 400W output)	8.75A *(5)*
Voltage ripple	<2 mV Psopho
Input voltage boundaries	40V to 60V user selectable
Connections	Terminal block *(5)*
AC Input Specifications	
Nominal voltage (AC) (operating range w/full rating)	48V (40 - 60V)
Conformity range before transfer to DC	8.75A *(5)*
Power factor	<2mV Psopho
Frequency range (selectable) / synchronization range	40V to 60V user selectable
Nominal current (at 120Vac and 400W output)	Terminal block *(5)*
Connections	EPC 48/120 - cUL: 3ft power cord with NEMA 5-15R plug EPC 48/120 - non-UL: Terminal block
AC Output Specifications	
Nominal voltage (AC*)	120VAC L-N
Frequency / frequency accuracy	50 or 60Hz / 0.03%
Total harmonic distortion (resistive load)	< 1.5%
Load impact recovery time	0.4ms
Turn on delay	30s
Nominal current. Protected against reverse current	4.2A *(5)*
Crest factor at nominal power with short circuit management and protection	2.0
Short circuit clear up capacity when AC is not present	1.5 x In for 15 seconds
Short circuit current after clear up capacity	4.62A
Connections	EPC 48/120 - cUL: 3ft power cord with NEMA 5-15R plug EPC 48/120 - non-UL: Terminal block



*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

Ordering Information

Model No.	Description
Y-One-EPC48-120-500UL	UL Listed Stand Alone Inverter: Input 120VAC/48VDC, Ouput Power 120VAC, 500VA (400W)
Y-One-REG48-120-500UL	UL Listed Stand Alone Inverter: Input 48VDC, Output Power 120VAC, 500VA (400W)
Y-One-EPC48-120-500	Non-UL Listed Stand Alone Inverter: Input 120VAC/48VDC, Ouput Power 120VAC, 500VA (400W)
Y-One-REG48-120-500	Non-UL Listed Stand Alone Inverter: Input 48VDC, Output Power 120VAC, 500VA (400W)
Y-One-EPC48-120-1000	Non-UL Listed Stand Alone Inverter: Input 120VAC/48VDC, Ouput Power 120VAC, 1000VA (800W)