



2.5-75
kVA



MODULAR INVERTER MODULE

POWER 2.5 kVA
INPUT 48 / 125 Vdc
OUTPUT 120 Vac



DESCRIPTION

BRAVO is a compact and scalable modular inverter providing a pure sine wave AC supply. In conjunction with a DC Power system, it provides an excellent AC backup solution. It uses the latest inverter technology, providing superior energy efficiency in a compact size.

The "Twin Sine Inverter" (TSI) technology eliminates all single points of failure with full scalability;

up to 32 modules in parallel and high efficiency of up to 96 % reducing operating costs.

APPLICATIONS

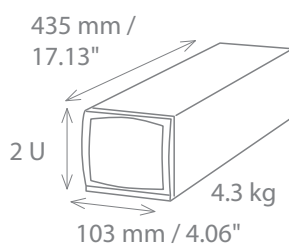
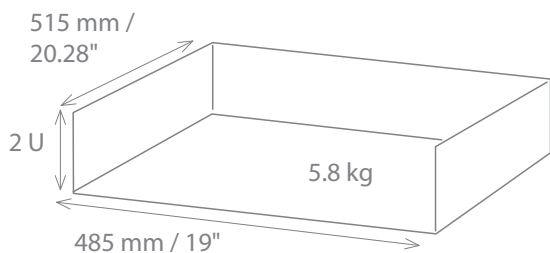
All business critical applications and all types of AC loads. The design is modular and scalable with hot-swappable inverter modules which ensures low Mean Time to Repair (MTTR), reduction in service costs and meets the changing needs for future expansion.

MAIN FEATURES

- » Redundant AC & DC sources 150 Vac to 265 Vac
- » Compact design, up to 10 kVA in 2 RU
- » Great disturbance rejection rate
- » Transfer time reduced to naught
- » Permanent AC to AC double conversion
- » Up to 75 kVA in cabinet enclosure or open relay rack

	48 / 120	125 / 120
EMC (immunity)	IEC 1000 - 4	
EMC (emission) (class)	FCC part 15	
Safety	cUL 1778 Recognized	
Cooling / Isolation	Forced / Doubled	
MTBF	240,000 hrs (MIL-217-F)	
Efficiency (Typical): Enhanced power conversion / on line	95 % / 91 %	
Dielectric strength DC/AC	4300 Vdc	
True Redundant Systems – compliance	3 disconnection levels on AC out and DC in power ports 4 disconnection levels on AC in port	
RoHS	Compliant	
Vibration	GR 63 office vibration 0 to 100 Hz-0,1g / 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 ⁽²⁾	
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-ALU ZINC	
Nominal Output power (VA) (W)	2500 / 2000	
Short time overload capacity	150 % (15 s) 110 % permanent within T° range	
Admissible load power factor	Full power rating from 0 inductive to 0 capacitive	
Internal temperature management and switch off	2 %/°C derating beyond 50° C with cut off at 65° C	
Nominal voltage (DC)	48 V	125 V
Voltage range (DC)	40 - 60 V	90 - 160 V
Nominal current	56 A (at 40 Vdc and 2000 W output)	25 A (at 90 Vdc and 2000 W output)
Maximum input current (for 15 s) / voltage ripple	84 A / <2 mV Psopho	37 A / < 200 mV rms
Input voltage boundaries	User selectable with T2S interface	
Nominal voltage (AC)	120 Vac (120/240 V or 120/208 V with combination of shelves)	
Voltage range (AC)	100 - 138 Vac (without derating) (can be disabled)	
Brownout	80 - 100 Vac use DC source contribution if need be (can be disabled) 2000 VA/1600 W @ 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	
Nominal voltage (AC*)	120 V	
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	20 s to 40 s depending on the number of module installed	
Nominal current. Protected against reverse current	21 A	
Crest factor at nominal power	3 : 1	
With short circuit management and protection		
Short circuit clear up capacity	10 x In for 20msec - Available while Mains is available at AC input port With magnitude control and management	
Short circuit current after clear up capacity	2.1 In during 15 s and 1.5 In after 15 s	
Max. voltage interruption / total transient voltage duration (max)	0 s / 0 s	
Display	Synoptic LED	
Alarms output / supervision	Dry contacts on shelf / Standard USB port and MODBUS on T2S, optional : Candis Display / Candis TCP-IP	
Remote on / off	on rear terminal of the shelf via T2S	

TSI BRAVO 120 – Datasheet v1 Specifications can change without notice. New data will be updated on our Web site: www.heliosps.com



Illustrations are non-binding and may include customized fittings.