





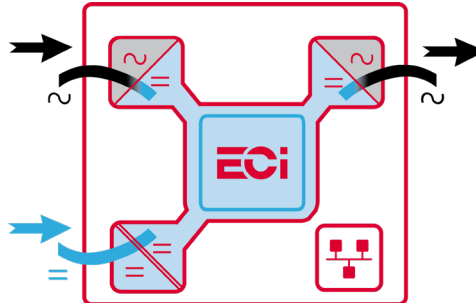
The most reliable modular inverter with an extra AC input for redundancy!

 Telecom
  Datacom
  Mass transport
  Industry
  Power Utilities
  Renewable



Description

Bravo 20 is a reliable 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** and best **reliability**. By default, module operates in DC mode. In case of problem on the DC infrastructure, the module automatically switch to AC mode to keep securing the loads.



The modular inverter **eliminates all single points of failure** with full scalability; up to 32 modules in parallel and high efficiency of up to **96% in AC to AC conversion**, and above **93.5% in DC/AC conversion**, hence 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.

Key features:

- High conversion efficiency (93.5% from DC to AC)
- Proven reliability
- Extra AC input for increased reliability
- Wide AC input range (150V to 265V)
- Up to 10 kVA in 2 U
- Transfer time lower than 10 ms

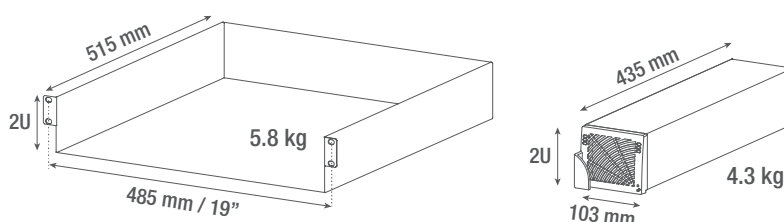
Illustrations are non-binding and may include customized fittings.

Bravo 20 - 48/230

General	
Part Number	T521730101
Cooling	Fan forced cooling with dust filter
MTBF	240 000 hrs (MIL-217IF)
Dielectric strength DC/AC	4300 Vdc
RoHS	Compliant
Operating T° / Relative Humidity (RH) non-condensing	Tested according ETS300-019-2-3 Class 3.1 -20°C to 50°C, power de-rating from 50°C to 65°C / Max RH 95% for 96 hours per year
Storage T° / Relative Humidity (RH) non-condensing	Tested according ETS300-019-2-1 Class 1.2 -40°C to 70°C / Max RH 95% for 96 hours per year
Public transport T°/Relative Humidity (RH) non-condensing	Tested according ETS300-019-2-2 Class 3.1 -40°C to 70°C / Max RH 95% for 96 hours per year
Material (casing)	Zinc coated steel
Power	
AC Input Data	
Nominal voltage (AC)	230 Vac
Voltage range (AC)	150 - 265 Vac
Brownout	1600 W @ 150 Vac / 2000 W @ 190 Vac linear decreasing
Power factor	> 99%
Frequency range (selectable) / synchronization range	50 Hz (range 47 – 53 Hz) / 60 Hz (range 57 – 63 Hz)
DC Input Specifications	
DC voltage: Nominal / range	48 Vdc / (40-60V)*
Nominal current (at 48 Vdc and 2000 W output)	44.5 A
Maximum input current (for 15 second) / voltage ripple	66.8 A / < 10 mV RMS
AC Output Data	
Efficiency (Typical): Enhanced power conversion / on line	96% / >93.5%
Nominal voltage AC** (Adjustable)	230 V (220 - 240 Vac)
Frequency / frequency accuracy	50 or 60 Hz / 0.03%
Nominal Output power (VA) / (W)	2500 VA / 2000 W
Short time overload capacity	150% (15 seconds) / 110% (permanent)
Admissible load power factor	Full power rating from 0 inductive to 0 capacitive
Total harmonic distortion (resistive load)	< 3%
Load impact recovery time (10% - 90%)	≤ 0.4 ms
Nominal current	10.8 A @ 230 Vac
Crest factor at nominal power	3 : 1 for load P.F. ≤ 0.7
Short circuit current for 15 s	18 A RMS
AC output voltage stability	±1% from 10% to 100% load
In Transfer Performance	
Max. Voltage interruption / total transient voltage duration (max)	<10 ms / <10 ms
Signaling & Supervision	
Display	Synoptic LED
Supervision	Inview S / Slot / GW
Remote on / off	On rear terminal of the shelf
Safety & EMC	
Safety	EN62040-1
EMC	EN 61000-4-2 / EN 61000-4-3 / EN 61000-4-4 / EN 61000-4-5 / EN 61000-4-6 / EN 61000-4-8 ETSI EN 300386 v1.9.1

* Permanent 2200 W / derating apply based on internal heatsink T°.

** Operation within lower voltage networks leads to de-rating of power performances.



Bravo 20 - 48/230 - Datasheet v1.0 Specifications can change without notice. New data will be updated on our website: www.cet-power.com. The present equipment is protected by several international patents, trademarks and copyrights.