


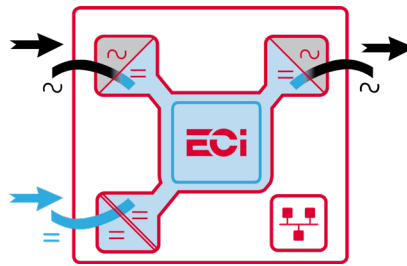
Modular inverter to efficiently secure critical applications from 500 VA / 400 W!

 Telecom
  Datacom
  Mass transport
  Industry
  Power Utilities
  Renewable



Description

Bravo 4 is a **small modular inverter** offering many opportunities to **design a solution** that perfectly fits your needs. The ECi technology offers both **AC and DC inputs** to provide a **perfect AC power** while reducing the number of power conversion (the module operates under normal condition with the AC input delivering a **92% efficiency**)! In conjunction with the DC input, it provides an excellent **AC backup solution**.



From **1 to 4 modules**, with several **options** available (manual external by-pass and AC distribution), the Bravo 4 modular inverter is also **hot-swappable** meaning a very easy and cheap maintenance. The modules are delivered with our new monitoring solution.

Bravo 4 can be used with the **Inview Slot or Inview GW monitoring**. One shelf can accommodate 5 modules (2.5 kVA with Inview GW) or 4 modules (2 kVA with Inview S Slot) to create an all-in-one solution.



Applications

An ideal solution for securing small but critical AC loads, from 500 VA to 2 kVA, such as telecom small cells (4G and 5G), access control, traffic lights, security, etc.

Key features:

- AC and DC input sources (highest efficiency topology)
- 1 to 5 modules
- Customization (manual by-pass and AC distribution)
- Transfer time reduced to 0 ms
- Compact design

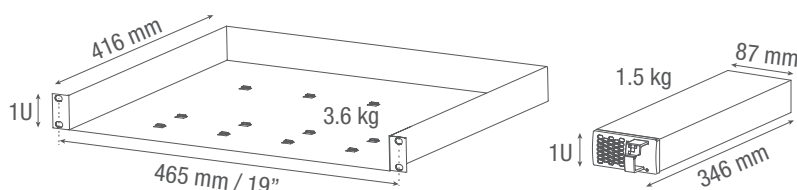
Illustrations are non-binding and may include customized fittings.

Bravo 4 - 48/230

General	
Part Number: Module / Shelf	T641730201 / T614730000
Cooling / Audible noise	Fan forced cooling / < 65 dBA at 1 meter
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 70°C, power de-rating from 65°C to 70°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	
AC voltage: Nominal / range	230 V (150 - 265 V)
Power factor / THD	> 99% / < 3%
Frequency range (selectable) / synchronization range	50 Hz (range 47 – 53 Hz) / 60 Hz (range 57 – 63 Hz)
DC Input Data	
DC voltage: Nominal / range	48 VDC / (40-60V)*
Nominal current (at 48 Vdc and 400 W output)	9.3 A
Maximum input current (at 48 Vdc for 15 second) / voltage ripple	14 A / < 10 mV RMS
AC Output Data	
Efficiency: AC to AC (EPC) / DC to AC	>92% / >90%
Nominal voltage AC** Adjustable)	230 V (200 - 240 VAC)
Frequency / frequency accuracy	50 or 60 Hz / 0.03%
Nominal Output power	500 VA / 400 W
Short time overload capacity	150% (15 seconds)
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	2.2 A @ 230 Vac
Crest factor at nominal power	3 : 1 for load P.F. ≤ 0.7
Short circuit clear up capacity 0 - 20 ms	21.7 A for 20 ms
Short circuit current after 20 ms	3.3 A (20 ms to 15 s) , 2.3 A (15 to 60 s), > 60 s - manual reset is required
AC output voltage stability	±1% from 10% to 100% load
In Transfer Performance	
Max. voltage interruption / total transient voltage duration (max)	0 s / 0 s
Signaling & Supervision	
Display	Synoptic LED
Supervision	Inview ranges: Inview Slot - T602004110, Inview GW DIN - T602004000, and Inview GW Rack - T614730001 (Bravo 10 shelf) and T714730001 (Sierra 10 shelf)
Remote on / off	On rear terminal of the shelf
Alarms output	2 dry contacts and 2 digital inputs
Safety & EMC	
Safety	IEC 62040-1 / EN62040-1 Edition 2017
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 400 W / derating apply based on internal heatsink T°.

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



Bravo 4 - 48/230 - Datasheet - v1.3 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.