



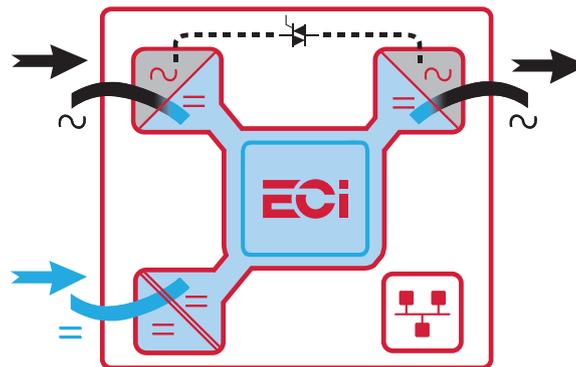
The most efficient modular inverter with an extra AC input to prevent unnecessary watt loss!

 Telecom
  Datacom
  Mass transport
  Industry
  Power Utilities
  Renewable



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 ECI technology **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 **94.5% 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.

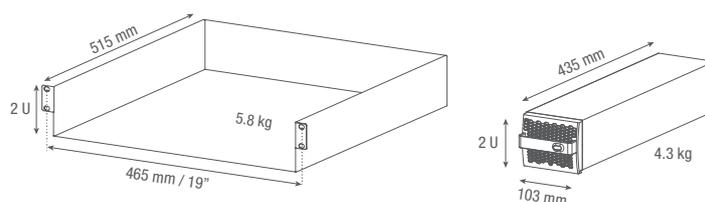
Main Features

- High efficiency (DC to AC >94.5%)
- Compact design
- Dual input sources (AC & DC)
- Transfer time reduced to 0
- Up to 12 kVA in 2 U

Illustrations are non-binding and may include customized fittings.

Bravo ECI 380 Vdc

General	
Part Number: Module / Shelf	T521D70201 / T524D70000
Cooling / Audible noise	Fan forced cooling / <65db @1meter
MTBF	240 000 hrs (MIL-217-F) at 30°C ambient and 80% load
Dielectric strength DC/AC	2100 Vdc
RoHS / Material (casing)	Compliant / Aluzinc steel
Operating T° / Relative Humidity (RH) non-condensing	Tested according ETS300-019-2-3 Class 3.1 -20°C to 65°C, power de-rating from 40°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
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
Altitude above sea without de-rating of power	< 1500 m / derating > 1500 m – 0.8 % per 100 m / max 4000 m
Power	
AC Input Data	
Nominal voltage / Current	230 Vac / 11.8 A, 240 Vac / 11.0 A and 277 Vac / 9.5
Voltage range	195 - 293 Vac
Brownout	1600 W @ 150 Vac / 2400 W @ 190 Vac linear decreasing
Power factor / THD	> 0.99 / < 3%
Frequency (Synchronization range)	50 Hz (47 - 53 Hz) or 60 Hz (57 - 63 Hz)
DC Input Data	
Nominal voltage (range)	336 Vdc (200 - 430 Vdc) ¹
Nominal current at 336 Vdc and 2500 W / 1500 W	8 A
Maximum input current (for 15 seconds) / voltage ripple	9.9 A / < 250 mV RMS
AC Output Data	
Efficiency AC to AC (EPC) / DC to AC	> 96% / > 94.5%
Nominal voltage ² / Current (User selectable)	230 Vac / 13.1 A, 240 Vac / 12.5 A and 277 Vac / 10.8
Frequency / frequency accuracy	50 or 60 Hz / 0.03%
Nominal Output power	3000 VA / 2500 W @ 230 Vac
Short time overload capacity	125% (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	13 A @ 120 Vac and @ 230 Vac
Crest factor at nominal power	3 : 1 for load P.F. ≤ 0.7
Short circuit clear up capacity at AC input / On battery	109 Arms for 20 ms / 34 Arms for 20 ms
Short circuit current after > 20 ms	22.5 A for 15 seconds
AC output voltage stability	±1% from 10% to 100% load
In Transfer Performance	
Max. Voltage interruption / total transient voltage duration (max)	0 sec / 0 sec
Signaling & Supervision	
Display	Synoptic LED
Alarms output / Supervision	Dry contacts on shelf / Use optional devices
Remote on / off	On rear terminal of the shelf via T2S ETH
Safety & EMC	
Electrical Safety	EN60950-EN62040-1-UL1778-IEC62109/1-IEC62109/2
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 / FCCpart 15 class A



¹ De-rating below 200 to 260 Vdc

² Operation within lower voltage networks leads to de-rating of power performances.