

PC100

An Open Firmware 100kW Power Converter

Product Features

- 100 kW 3-ph power converter, included power switches and control board with communication stage for grid-connected systems or island grids.
- Power and Control and protection stage included in the cabinet. DC-bus voltage monitor and power analyzer monitor included.
- Open firmware TI DSP with peripherals and communication ports integrated
- Grid frequency isolation transformer available as an option.

Applications

- Suitable for high voltage measurements
- Power and/or current control strategies implementation for research and development applications.
- Grid-connected or island grid feed strategies implementation
- Performance optimization and validation of primary energy sources like renewables, energy storage or others distributed generation systems.



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Control board based on TI 28335 Defino

Input/Output Channels

- DC Voltage range: 700 – 800Vdc
- AC Voltage range: 360 – 400Vrms (50 or 60 Hz)
- THDi at rated power: <3% (14,5Arms)
- Efficiency: 97%
- 7 output relays NO+NC, 24V_{MAX}

Measurements

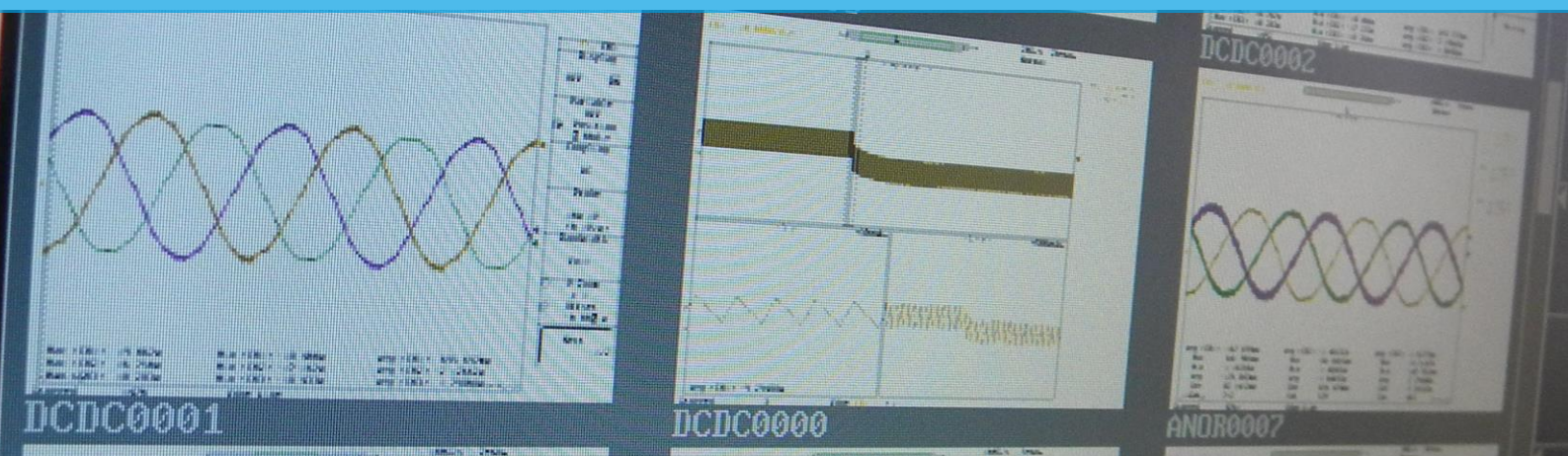
- 4 General inputs $\pm 10V$
- 3 AC Current measurement channels $\pm 10V$
- 2 DC Voltage measurement channels (0-1kV)
- 6 AC Voltage measurements 250Vrms (2 x 3ph)
- 1 NTC 10k temperature sensor

Communications

- Ethernet
- SPI port (DB9 wired and fiber optic)
- CANOpen bus (DB9)
- Modbus
- RS-232 & RS-485
- JTAG connector for direct DSP link

Mechanical Enclosure

- Steel enclosure
- Dimensions : 860W x 1006D x 1930H mm
- Weight: 600kg



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Ready to plug and use it....

Examples and guides

- First steps and user manual to facilitate the equipment connection
- Examples available for programming the DSP with the JTAG communication bus
- Configuration files and examples for Code Composer Studio
- CE Certified and redundant protection system



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