



## FEATURES

- 1kW output power
- High efficiency zero current and voltage switching techniques
- Excellent pulse to pulse repeatability characteristics
- Positive or negative polarity
- Compact size
- Low weight
- RoHS compliant to EU Directive 2002/95/EC
- CE marked

## DESCRIPTION

The Series CC1000 is a range of high performance, high reliability, capacitor charging power supplies intended for use as a component power supply in various applications. These include industrial laser systems, non-contact medical environments, capacitor charging circuits, intense pulsed light systems, Nd:YAG and Er:YAG lasers. The Series CC1000 features high frequency switching techniques to combine a power factor corrector and resonant converter in a compact unit. This range has been designed to allow customisation to suit specific OEM applications.

## SPECIFICATION

### Output Power:

1kW output power.

### Output Voltage:

0 to 2kV max depending on model.

### Output Current:

4000mA max depending on model.

### Input Voltage:

90-255V AC depending on model.

### Input Current:

15A max.

### Polarity:

Positive or negative to order.

### Power Factor Correction:

Power factor corrected to meet the requirements of the EC EMC directive for line harmonics (BS EN61000-3-2).

### Charging Rate:

1000 Joules per second average (equivalent to 1kW average). Peak power during the charging cycle may be up to double this. Peak charging rate up to 1100 J/s.

### Stored Energy:

Less than 0.3 Joules.

### Stability:

±0.2% per hour, after 1 hour warm-up.

### Pulse to Pulse Repeatability:

±0.2% to 300Hz.

Please contact our sales team for ratings outside this range.

### Line Regulation:

±0.2% of rated output.

### Temperature Coefficient:

100ppm/°C over operating temperature range.

### Operating Temperature:

0 to +45°C.

### Storage Temperature:

-40°C to -85°C.

# Series CC1000

## CAPACITOR CHARGING POWER SUPPLIES



### Humidity:

90% maximum relative humidity non-condensing.

### Altitude:

Sea level to 2000m (6500 ft).

### Installation Category:

1 (BS EN61010-1)

### Pollution Degree:

2 (BS EN61010-1)

### Control:

The power supply is operated via the 15-way D-type connector situated on the rear panel. Full control and monitoring functions are available by this method.

### Cooling:

Forced air cooling by an integrated fan. Air insulated HV section.

### Protection:

The units are fully protected against flashover and continuous short circuit (no trip).

### EMC:

The Series CC1000 is intended for installation as a component of a system. Basic EMC filtering is provided.

### Safety:

The Series CC1000 meets the requirements of the Low Voltage Directive (LVD), 2006/95/EC by complying with BS EN61010 when it is installed as a component part of compliant equipment. It is CE marked accordingly.

### RoHS:

The Series CC1000 meets the requirements of EU Directive 2002/95/EC on the Restriction of use of Certain Hazardous Substances in electrical and electronic equipment (RoHS).

### Mechanical Specification:

Dimensions: See outline drawing.

Weight: 2.5kg (5.5 lb)

### Outputs and Ordering Information:

The standard range of units available is as follows:

Model no	Output Voltage	Output Current
CC1000-501*	500V	4000mA
CC1000-102*	1kV	2000mA
CC1000-152*	1.5kV	1300mA
CC1000-202*	2kV	1000mA

\* Please add suffix P (Positive) or N (negative) to the model number for the required polarity.

eg: part number for a 1kV positive unit: CC1000-102P.

For voltages not listed above, please contact our sales team.

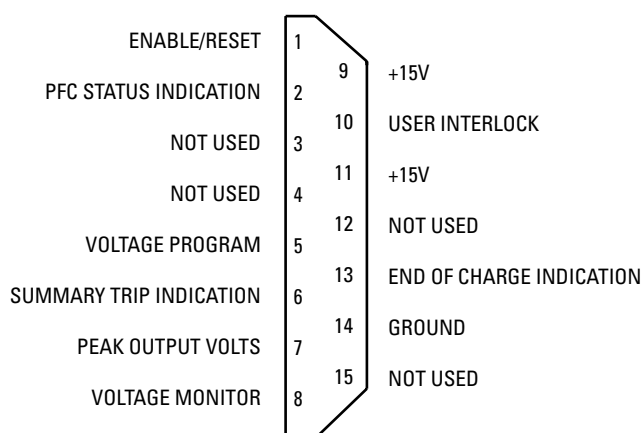
### Interface Connection:

Mains: Screw terminals.

Safety Earth: M5 stud.

HV Output: Flying coaxial lead.

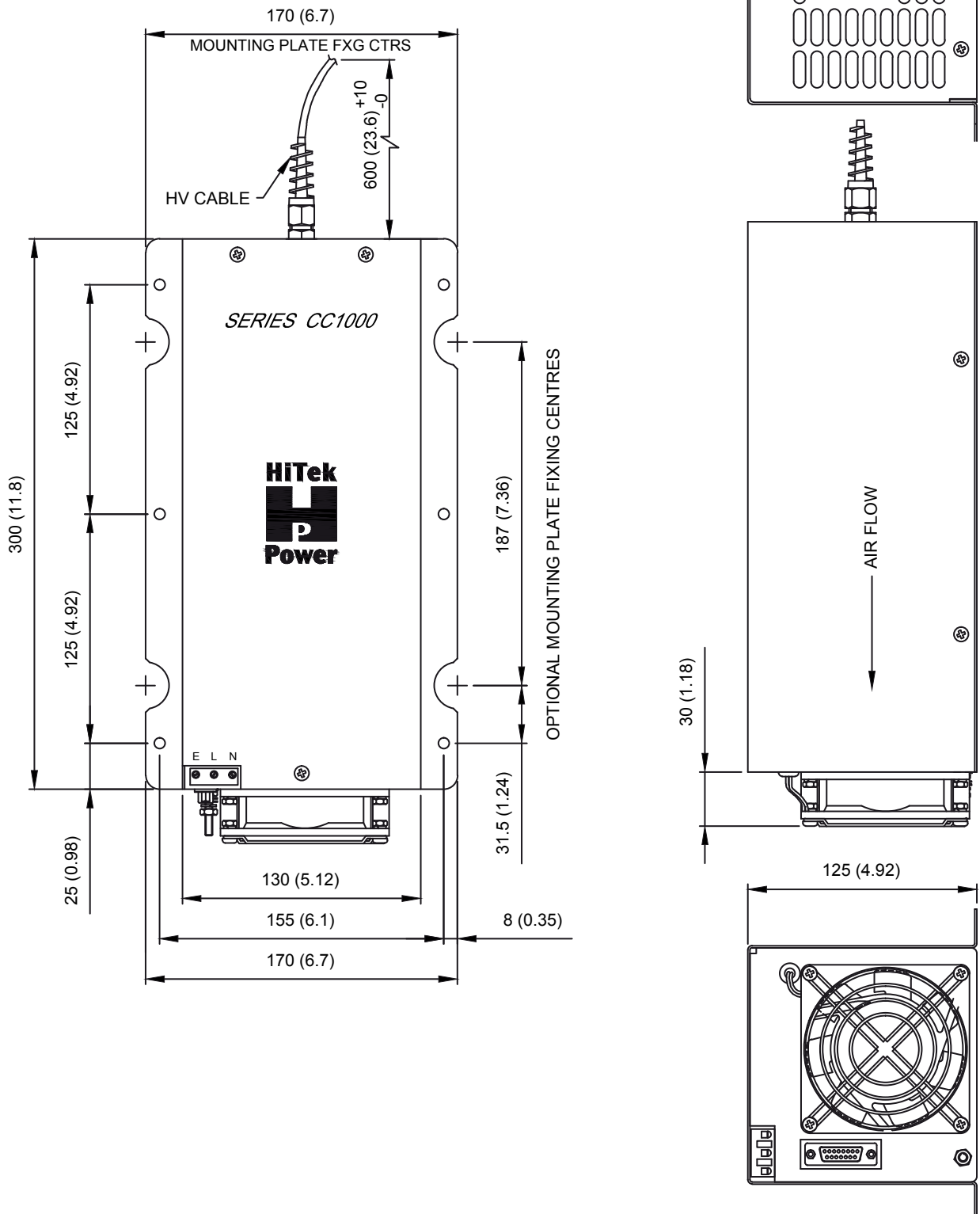
Control interface via a 15-way female D-type connector:



CE These component power supplies meet the requirements of EC Directive 2006/95/EC (LVD).

# Series CC1000

## CAPACITOR CHARGING POWER SUPPLIES



Drawing dimensions are in mm (inches)  
Design developments may result in specification changes

# HiTek



# Power

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