

# HBC1K SERIES

AC/ DC Power Supply High Voltage Output: 1000 Watts



## Features

- Designed for high voltage output 24 ~ 250vdc
- Rugged design for on-board train applications
- Fully isolated input – output 4300VDC
- Over voltage protection
- Overload and short circuit protection
- MTBF > 160,000hrs
- Specials input / output combinations on request.
- Suitable for battery charging applications - Option
- N+1 Redundancy –option
- Output DC Fail alarm -option
- Suitable for Battery Charging applications

## General Specifications

<b>Input Voltage</b>	115 / 230vac ( ±15% ) Selectable by internal link
<b>Input Protection</b>	Reverse polarity protection. Inrush current limiting Input Fuse
<b>Isolation</b>	Input - Output 4300vdc Input - Chassis 2250vdc Output - Chassis 500vdc
<b>EMI</b>	EN55022 class A
<b>Switching Freq.</b>	55KHz
<b>Output voltage</b>	See table
<b>Output Power</b>	1000 watts
<b>Voltage adjustment</b>	Customer specified
<b>Redundancy Diode</b>	Optional for N+1 Applications
<b>Regulation</b>	Line / Load : ±1% combined 10% to 100% load
<b>Dynamic Response</b>	5% voltage deviation for 10% to 50% load step with 1msec recovery
<b>Output Ripple /Noise</b>	Typically 1% pk-pk or 0.2% rms 20MHZ BW
<b>Output Protection</b>	Over voltage protection Current limiting ( Constant Current ) Short circuit protection Thermal protection
<b>Efficiency</b>	Model dependent typically 85%
<b>Operating temp.</b>	0° C to +50°C at 100% load Derate 2.5% per °C to 65°C
<b>Cooling</b>	Built-in fans
<b>Environmental protection</b>	Basic ruggedizing. Extended ruggedizing and conformal coating available as an <b>option</b>
<b>MTBF</b>	Typically 160, 000 hrs
<b>Indicators</b>	Optional LED
<b>Connector</b>	Input terminal block. Output terminal block or threaded studs Other options on request
<b>Dimensions</b>	315 x 127 x 127 mm ( U5512 )
<b>Weight</b>	5.2kg

## Description

The **HBC1K** AC/DC Power Supply is designed for high voltage applications up to 250VDC.

This rugged, industrial quality power supply uses field proven topology. It is a mature design with an excellent track record in numerous applications. It is fan cooled by two built-in fans.

An optional built-in redundancy diode allows parallel connection to achieve higher output power or N+1 redundancy, with output DC Fail alarm.

This chassis-mount design is optimized for low component count and high efficiency. The use of components with established reliability results in high MTBF.

## Options

<b>Output Voltage</b>	Special voltage outputs
<b>Terminals</b>	Customer specified connectors
<b>N+1 Redundancy</b>	Output redundancy diode & Alarm
<b>Ruggedizing</b>	Extended ruggedizing and conformal coating available.
<b>Remote Control</b>	Remote ON / OFF

Model	Input V	Outputs V	A	Power W
<b>HBC1K-125-FT</b>	115/230VAC	125V	8.0A	1000W
<b>HBC1K- 250-FT</b>	115/230VAC	250V	4.0A	1000W

- Other voltage options available from 24 ~ 250V.