

HVI500R SERIES

Rail DC/ DC Converter High Voltage: 500 Watts



Features

- Designed to rail standards EN50155 & EN50121
- Wide input range 525 ~ 975vdc
- Rugged design for on-board train applications
- Convection cooled: No fans
- Fully isolated input – output 4300VDC
- Over voltage protection
- Overload and short circuit protection
- MTBF > 130,000hrs
- Specials input / output combinations on request.
- Any output from 24vdc ~ 130vdc possible

General Specifications

Input Voltage	750VDC (525 ~ 975) • Other voltages on request
Input Protection	Reverse polarity protection. Inrush current limiting Input Fuse
Isolation	Input - Output 4300vdc (5600V type test) Input - Chassis 3000vdc
Efficiency	Model dependent , typically 80%
Output voltage	See table
Output Power	500 watts
Voltage adjustment	Customer specified
Regulation	Line: ±1% Load: ±2%
Output Protection	Over voltage protection Current limiting & short circuit protection
EMI	EN55022 class B, EN50121-3-2
Immunity	EN50155 & EN50121-3-2 EN61000-4
Shock & Vibration	Designed to meet IEC61373 Cat 1 A & B
Operating Temp.	-25°C to +55°C at full load. 70°C cold plate temperature.
Dimensions	351 x 152 x 67mm 2.2kg (FX)

Description

The **HVI500R** Series rugged, single output DC/DC converter uses field-proven double-conversion topology to generate 500W output power.

It is a mature design with a proven track record in many applications. The unit is equipped with non-destructive reverse polarity protection on the input, surge protection and high-grade input/output filtering.

The series is rated for operation over a -25 to +55°C temperature range without derating. It is cooled by natural convection. This model is ruggedized and conformal coated for immunity to shock, vibration, humidity, moisture, dust and insects.

An optional redundancy diode allows parallel connection to achieve higher output power or N+1 redundancy. This chassis-mount design is optimized for low component count and high efficiency. The use of components with established reliability results in a high demonstrated MTBF.

Options

Output Voltage	Special voltage outputs
Terminals	Customer specified connectors
N+1 Redundancy	Output redundancy diode & Alarm

Model	Input V	Outputs		Power W
		V	A	
HVI500R-24FT	750VDC	24V	20A	500W

- Other voltage options available from 24-120VDC

