

# HVI300R SERIES

Rail DC/ DC Converter High Voltage: 300 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

|                              |  |
|------------------------------|--|
| <b>Input Voltage</b>         | <b>750VDC</b> ( 525 ~ 975 )<br>• Other voltages on request             |
| <b>Input Protection</b>      | Reverse polarity protection.<br>Inrush current limiting<br>Input Fuse  |
| <b>Isolation</b>             | Input - Output 4300vdc ( 5600V type test )<br>Input - Chassis 3000vdc  |
| <b>Efficiency</b>            | Model dependent , typically 80%  |
| <b>Output voltage</b>        | See table  |
| <b>Output Power</b>          | 300 watts  |
| <b>Voltage adjustment</b>    | Customer specified   |
| <b>Regulation</b>            | Line: ±1%<br>Load: ±2%   |
| <b>Output Protection</b>     | Over voltage protection<br>Current limiting & short circuit protection |
| <b>EMI</b>                   | EN55022 class B, EN50121-3-2   |
| <b>Immunity</b>              | EN50155 & EN50121-3-2<br>EN61000-4                                     |
| <b>Shock &amp; Vibration</b> | Designed to meet IEC61373 Cat 1 A & B                                  |
| <b>Operating Temp.</b>       | -25°C to +55°C at full load.<br>70°C cold plate temperature.           |
| <b>Dimensions</b>            | 290 x 132 x 62mm 2kg ( F3 )  |

## Description

The **HVI300R** Series rugged, single output DC/DC converter uses field-proven double-conversion topology to generate 300W 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

|                       |                                 |
|-----------------------|---------------------------------|
| <b>Output Voltage</b> | Special voltage outputs         |
| <b>Terminals</b>      | Customer specified connectors   |
| <b>N+1 Redundancy</b> | Output redundancy diode & Alarm |

| Model               | Input<br>V | Outputs |     | Power<br>W |
|---------------------|------------|---------|-----|------------|
|                     |            | V       | A   |            |
| <b>HVI300R-24FT</b> | 750VDC     | 24V     | 12A | 300W       |

- Other voltage options available from 24-120VDC

