

## 150W, DC/DC, Triple Output, Plug-in (Eurocard) Converter DCE 67-EH Series

- Rugged, industrial quality
- Triple regulated and adjustable output
- Convection cooling
- 3U x 14HP x 220mm plug-in module
- Full electronic protection
- Field-proven design
- Also available in stand-alone package
- N+1 redundancy available



This rugged, industrial quality, triple output plug-in type DC/DC converter uses field-proven technology to generate 150W output power. It is a mature design with a track record in numerous applications. All three outputs are individually regulated and current limited. A built-in redundancy diode is available as an option for parallel connection or N+1 redundant operation, including hot-insertion. Cooling is by natural air convection. Heat generating components are installed on an aluminum heatsink block, which is connected to the heatsink plate on the side of the module. The unit has input and output filtering in compliance with EN 55022 EMI standards. Full electronic protection, low component count, large design headrooms, and the use of components with established reliability result in a high MTBF. It is manufactured at our plant under strict quality control.

### SPECIFICATIONS

#### Input Voltage

24Vdc (21 – 30V)  
48Vdc (42 – 60V)  
125Vdc (105 – 140V)  
Please consult factory for other voltages and ranges

#### Input Protection

Inrush current limiting  
Varistor  
Reverse polarity protection Internal safety fuse  
Lower voltage than the specified minimum input will not damage the unit

#### Isolation

1000VDC input to chassis and 1500VDC input to chassis  
500VDC output to chassis as a minimum  
Isolation voltages correspond to input/output combination

#### Standards

Designed to meet EN 60950 and corresponding UL and CSA standards

#### EMI

EN55022 Class A as a minimum

#### Switching Frequency

55kHz +/-3kHz

#### Output Voltage/Current

5V/15A, 12-15V/3A and 12-15V/3A  
150W per module  
Consult factory for other voltages

#### Redundancy Diode

None  
Installed internally as option

#### Line/Load Regulation

+/- 1% combined from 10% load to full load, including redundancy diode

#### Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

#### Output Ripple / Noise

Less than 1% peak to peak or 0.2%rms of the output voltage (20MHz BW)

#### Output Overload Protection

Rectangular current limiting with short-circuit protection (no hiccup)  
Thermal shutdown in case of insufficient cooling (self resetting)

#### Output Over-voltage Protection

Second regulator loop and transzorbs

#### Efficiency

80% typical depending on the input/output configuration

#### Operating Temperature Range

0°C to +50°C without derating  
Extended temperature range available

#### Temperature Drift

0.03% per °C over operating temperature range

#### Cooling

Natural air convection

#### Environmental Protection

Basic ruggedizing  
Full ruggedizing and conformal coating as option

#### Shock/Vibration

IEC61371 Cat 1 A&B

#### Humidity

5 - 95% non-condensing

#### MTBF

140,000 hours @ 45 °C  
Demonstrated MTBF is significantly higher

#### Indicators

Output ON LED  
Optional Test Points on front-panel

#### Control Input

Optional adjustment potentiometer on front-panel of plug-in module

#### Alarm Output

Optional optocoupler alarm on the module

#### Mechanical (H x W x D)

3U x 14HP x 220mm

#### Connections:

H15 DIN connector

#### RoHS Compliance

Fully compliant

#### Warranty

Two years subject to application within good engineering practice

**Enhancements to these general specifications and customizing can be accommodated upon request. Specifications subject to change.**

*Designer and manufacturer of quality converters, inverters, UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a ABA-approved Facility*



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