

150W, Wide Input Range, Dual Output, Rugged, Industrial DC/DC Converter DCW 162 and DCW 162-110 Series



- Rugged industrial quality
- Dual adjustable output
- Full electronic protection
- Plug-in or stand-alone packages

The DCW 162 Series rugged, industrial quality DC/DC converter uses field-proven topology to generate 150W output power. It accepts a wide input range and has two fully regulated outputs. The series is a mature design with a track record in numerous applications. Cooling is via baseplate to a heatsinking surface and by natural convection. 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

20V - 60Vdc (DCW 162)
or 65V - 160Vdc (DCW 162-110)

Input Protection

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

Isolation

1500VDC input to chassis,
3000VDC input to output,
500VDC output to chassis

Standards

Designed to meet EN 60950 and
corresponding UL and CSA standards

EMI

EN 55022 Class A as a minimum

Switching Frequency

47kHz +/- 2kHz

Output Voltage

Any voltage in the range of
12V ... 48Vdc on both outputs.
Total power 150W max.
Outputs are floating, either
terminal can be grounded

Redundancy Diode

None on standard version

Line/Load Regulation

+/- 1.5% combined from 10%
load to full load for Output 1 and
+/- 5% for Output 2
For symmetrical load, the
regulation is better.

Dynamic Response

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

Output Ripple / Noise

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

Output Overload Protection

Rectangular current limiting with
hiccup type short-circuit protection
on each output

Output Overvoltage Protection

Second regulator loop and
transzorb.

Efficiency

Typically 80% at full load
depending on output

Operating Temperature Range

0 to + 50°C for full specification
Extended temperature ranges
available

Temperature Drift

0.03% per °C over operating
temperature range

Cooling

Stand alone version: conduction via
base plate and convection Plug-in
version: convection only

Environmental Protection

Basic ruggedizing
Conformal coating as option

MTBF

150,000 hours at 45 °C
Demonstrated MTBF is
significantly higher

Indicators

LED on plug-in version only

Control Input

None

Alarm Output

None on standard version

Package/Dimensions/Connections

Enclosed case version (F1):
112 x 51 x 201 mm
(4.43" x 2" x 7.9") including terminal
block and flanges
Barrier-type terminal block or
Connector: H15 DIN
Weight: 0.8 Kg (1.8 lb)

Plug-in (Eurocard) module (E1):

3U x 160mm x 10HP
Connector: H15 DIN
Weight: 0.8 Kg (1.8 lb)

RoHS Compliance

Fully compliant

Warranty

Two years subject to application
within good engineering practice

Enhancements to these general specifications 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 BAPT-approved Facility*



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