

# DD Series

## 48Vdc – 12Vdc Voltage Converters



These units provide a simple and professional solution to operating 12Vdc equipment from a 48Vdc electrical system as used in telecommunications systems, forklift trucks, electric vehicles, trains, cranes and mechanical handling equipment. Applications include the installation of radio and communication equipment, telemetric systems, operator information systems, in vehicle entertainment and portable equipment.

These cool running products are designed using switched mode techniques and manufactured using surface mount technology.

### Two sizes available:

DD 48-12 072  
6A continuous, 8A intermittent

DD 48-12 108  
9A continuous, 11A intermittent

### Key Benefits include:

- No Quibble lifetime warranty
- Quick and easy to install
- Power rating to 108W Continuous (132W intermittent)
- Internal protection against over current over heating and transients.
- Low quiescent current (< 15mA)



<b>Characteristics</b>	
Input Voltage Range	48Vdc nominal (17-55V)
Output Voltage	13.6Vdc +15%, -20% at extremes of temperature, load, input tolerance etc.
Intermittent Current Rating	Continuous rating +25%, taken for a maximum of 2 minutes followed by 8 minutes rest.
Transient Voltage Protection	Meets ISO7637-2 International Standard for 24Vdc Commercial Vehicles.
Electro Static Voltage Protection	Meets ISO10605, ISO14982, >8kV contact, 15kV discharge.
Output Noise	<50mV pk-pk at continuous load. Meets CISPR25 and VDE0879-3..
Off load current (quiescent current)	<15mA. If connected to the battery, but not powering any equipment.
Power Conversion Efficiency	Typically 90%
Operating Temperature	-25°C to +30°C. +30°C to +80°C de-rate linearly to 0A
Storage Temperature	-25°C to +70°C
Operating Humidity	95% non-condensing.
Case Work	Anodized Aluminum, Dust, water and impact resistance IP533
Connections	4 off 6.3mm push on crimp connectors
Output Indicator	LED adjacent to output terminals
Weight and Dimensions	DD 48-12 072: Weight: 320g Dimensions: 89 (L) x 87 (W) x 50 (H) mm DD 48-12 108: Weight: 420g, dimensions: 127(L) x 87 (W) x 50 (H) mm
Mounting Method	"Click 'n' Fit" mounting clip, fitted separately using three hole fixing
Safe Area Protection:	
• Over Current	Limited by current sensing circuit
• Over Heat	Limited by temperature sensing circuit
• Transients	Protected by filters and rugged component selection
• Catastrophic failure	Protected by input and output fuses
• Reverse Connection	Input blocking diode
Approvals (pending)	89/336/EEC The General EMC Directive 95/54/EC The Automotive EMC Directive (pending) 93/68/EEC The CE Marking Directive
Markings	CE marked and e marked (e13 023033)



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