

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)



| Characteristics | |
|--------------------------------------|--|
| 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: | <ul style="list-style-type: none"> • Over Current • Over Heat • Transients • Catastrophic failure • Reverse Connection Limited by current sensing circuit Limited by temperature sensing circuit Protected by filters and rugged component selection Protected by input and output fuses 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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