

## DD SERIES 12–24 V “UP” VOLTAGE CONVERTERS

**alfatronix**  
POWER. NO COMPROMISE.

### 12 V–24 V “UP” CONVERTERS FOR A WIDE RANGE OF APPLICATIONS

If you need to fit 24 V equipment onto a 12 V electrical system, then an “Up” Converter from the DD Series offers a fast and easy way to configure your system. Now with a range from 72 w (3 A output) to 600 w (25 A output), these products offer state-of-the-art designs for fast installation, and long term reliable operation. Typical applications include the installation of 24 V equipment on 12 V vehicles and installation of specialist equipment requiring higher operating voltages.



### 400 w AND 600 w 12–24 V UNITS

The latest addition to the range includes two high current (17 and 25 Amps output) units. These use state-of-the-art designs with efficiency up to 93% and practically all components are mounted using computer-controlled, surface-mount technology (SMT). The result is a robust product with low component mass. The mechanical aspects include a brand new casing profile designed for maximum heat dissipation as well as a new design of our highly successful mounting cradle that allows the unit to be fully wired before being “clicked” into place. This provides for a faster installation time with mechanics capable of withstanding long term vibration with no risk of screws falling out.

### CASING FORMATS

12 V–24 V converters are available in two casing formats. Units from 72-240 w use the standard Alfatronix aluminium casings with polycarbonate end-caps and three-point mounting cradle. The larger 400 w and 600 w units occupy a larger heat-sink casing and utilise the heavy-duty Phoenix connector. Installation is by way of the larger four-point ‘I’ shaped mounting cradle.

### ALSO AVAILABLE IN IP65 FORMAT

The DD Series 12–24 V products are available in either standard IP53 format (like most Alfatronix converters) or the ruggedised IP65 versions. Just add -RU to the part number. These are suitable where the installation is in a particularly hostile environment and subject to increased water and dirt exposure.



### PRODUCT CODING

The product code is derived as follows, taking the DD 12-24 072-RU as an example:

<b>DD</b>	DC input and output
<b>12-24</b>	Denotes 12 V input , 24 V output
<b>072</b>	Denotes wattage
<b>-RU</b>	Denotes IP65 version

## CHOOSE YOUR DD SERIES PRODUCT

TAE Part No.	OE No.	Cont/Int Current	Nominal Voltage	Power Rating	Dimensions	Weight
T286512809	DD12-24 072	3 A/3.75 A Non-Isolated	12 VDC input, 24 VDC output	72 w	89 x 87 x 50 mm	300 g
TBA	DD12-24 168	7 A/9 A Non-Isolated	12 VDC input, 24 VDC output	168 w	167 x 87 x 50 mm	640 g
T286512817	DD12-24 240	10 A/13 A Non-Isolated	12 VDC input, 24 VDC output	240 w	217 x 87 x 50 mm	800 g
T286512824	DD12-24 400	17 A/22 A Non-Isolated	12 VDC input, 24 VDC output	408 w	233 x 125 x 74 mm	1510 g
T286512813	DD12-24 600	25 A/30 A Non-Isolated	12 VDC input, 24 VDC output	600 w	283 x 125 x 74 mm	1 800 g

Other output voltage configurations are available as special orders, please ask our sales team.

## TECHNICAL DATA

Input Voltage Range	12 VDC $\pm$ 30%
Output Voltage	27.2 VDC $\pm$ 5% at extremes of temperature, load, input tolerance, etc.
Continuous Current Rating	3 A – 25 A depending on model
Intermittent Rating	Continuous rating +20%, taken for a maximum of 2 minutes followed by 8 minutes rest
Transient Voltage Protection	Meets ISO7637-2 International standard for 12 V and 24 VDC commercial vehicles
Electrostatic Voltage Protection	Meets ISO10605
Output Noise	<100 mV pk-pk at continuous load
Off-Load Current (Quiescent Current)	<20 mA (400 w and 600 w enable off), less than 100 mA (72 – 240 w units)
Power Conversion Efficiency	Typically 93%
Operating Temperature	-25 °C to +30 °C to meet this specification table +30 °C to +80 °C de rate linearly to 0 A
Storage Temperature	-25 °C to +70 °C
Operating Humidity	95% max., non-condensing
Casework	Anodised aluminium, glass-filled polycarbonate, dust, water, and impact resistance to IP53. Ruggedised versions also available to IP65.
Connections	Four 6.3 mm push on flat blade connectors (72 w – 240 w) Five-terminal connector with screw tightening with mating half supplied (400 w and 600 w units)
Output Indicator	Green LED adjacent to output terminals
Mounting Method	"Click 'n' fit" mounting clip, fitted separately using 3-hole fixing (4-hole on 400 w and 600 w)
Safe Area Protection:	Over Current Over Heat Transients Input /Output Over Voltage-Protection Catastrophic Failure
	Limited by current-sensing circuit Limited by temperature-sensing circuit Protected by filters and rugged component selection Controlled by internal circuitry Protected by internal input and output fuses
Approvals	2014/30/EU The general EMC directive Regulation 10 The automotive directive 93/68/EEC The CE marking directive
Designed To	EN50498, ISO 7637-2
Markings	CE, UKCA and E (automotive) marked


POWER  
SUPPLY

AutoTech | RiskTech | ManTech | ServTech | FleetTech | EngTech

**Eastern Cape - Port Elizabeth**  
T: +27 (0)82 450 6596

**Free State - Bloemfontein**  
T: +27 (0)63 257 0505

**Gauteng - Bedfordview (FleetTech)**  
T: +27 (0)10 329 0932

**Gauteng - Jet Park (HQ)**  
T: +27 (0)11 823 5650

**KwaZulu Natal - Pinetown**  
T: +27 (0)31 303 4129

**Mpumalanga - Middelburg**  
T: +27 (0)13 692 8132

**Northern Cape - Kathu**  
T: +27 (0)53 723 3415

**North West - Rustenburg**  
T: +27 (0)14 596 5257

**Western Cape - Cape Town**  
T: +27 (0)21 945 1453

**Botswana - Gaborone**  
T: +267 399 4150

**Mozambique - Tete**  
T: +258 252 20666

**Zambia - Kitwe**  
T: +26 (0)21 222 5338

Call us today!  
**TRY SOME**  
AUTO-ELECTRICAL ENGINEERING  
Delivering Optimal **Uptime!**

trading@trysome.co.za • www.trysome.co.za • P.O. Box 13677, Witfield 1467

These products may not be a stock items. Please speak to our sales representative about lead times. Lead times, price, and availability can only be determined on receipt of an official quote from our supplier. This can sometimes take up to 3 days.