

# DC/DC CONVERTORS

## SMDCHD SERIES



- Up to 15000Watt- base plate & fan forced cooled
- High efficiency up to 89%
- -5 °C to +55 °C Operation
- MIL\_STD\_810F Shock & Vibration
- Remote control & monitoring (serial port)
- Input Active Power Factor Correction
- Adjustable output (5% of nominal output voltage)
- Current Share for Parallel Operation (optional)
- Over temperature Warning/Shutdown
- 1 Year guarantee

### ADVANTAGES

- Remote Control and Monitoring
- high power density
- Wide Current Voltage range
- high power factor(up to 95%)
- Low output ripple
- Low Net Weight
- High Efficiency ( Up to 89% )
- Full electronic protection
- Wide range operating temperature

SMDC series are high power density, low pro-file, DC/DC switch mode convertors in wide range variety of input and single & multi output configurations. The SMDC are ideally suited for airborne, shipboard, ground mobile and applications...

All SMDC series has been designed for use in electronic systems which need to operate in the harshest of environments.

The SMDC Convertors are designed with the heat generating components directly attached to a base plate which allows conducted heat to be easily passed from the equipment through a heat sink to the outside environment.

The addition of MIL-STD-810 shock and vibration requirements mean that the product is suitable not only for a wide range of Industrial equipment but can also be used in Military COTS applications

### COMMUNICATIONS

- Web Enabled (optional)
- RS232/RS485
- Han held controller

# DC/DC CONVERTORS

| Input voltage | Output voltage | Output current | Output power   | Model number  |
|---------------|----------------|----------------|----------------|---------------|
| 18~36 VDC*    | 12.0 VDC       | 0~150 Amp      | 1800 Watt.max  | SMDCHDW112**  |
| 18~36 VDC*    | 24.0 VDC       | 0~150 Amp      | 3600 Watt.max  | SMDCHDW124**  |
| 18~36 VDC*    | 28.0 VDC       | 0~450 Amp      | 12600 Watt.max | SMDCHDW128**  |
| 18~36 VDC*    | 48.0 VDC       | 0~250 Amp      | 12000 Watt.max | SMDCHDW148**  |
| 36~60 VDC*    | 12.0 VDC       | 0~150 Amp      | 1800 Watt.max  | SMDCHDW312**  |
| 36~60 VDC*    | 24.0 VDC       | 0~150 Amp      | 3600 Watt.max  | SMDCHDW324**  |
| 36~60 VDC*    | 28.0 VDC       | 0~450 Amp      | 12600 Watt.max | SMDCHDW328**  |
| 36~60 VDC*    | 48.0 VDC       | 0~250 Amp      | 12000 Watt.max | SMDCHDW348**  |
| 72~144 VDC*   | 12.0 VDC       | 0~150 Amp      | 1800 Watt.max  | SMDCHDW712**  |
| 72~144 VDC*   | 24.0 VDC       | 0~150 Amp      | 3600 Watt.max  | SMDCHDW724**  |
| 72~144 VDC*   | 28.0 VDC       | 0~450 Amp      | 12600 Watt.max | SMDCHDW728**  |
| 72~144 VDC*   | 36.0 VDC       | 0~150 Amp      | 5400 Watt.max  | SMDCHDW736**  |
| 72~144 VDC*   | 48.0 VDC       | 0~250 Amp      | 12000 Watt.max | SMDCHDW748**  |
| 72~144 VDC*   | 96.0 VDC       | 0~150 Amp      | 14400 Watt.max | SMDCHDW796**  |
| 72~144 VDC*   | 110.0 VDC      | 0~150 Amp      | 16500 Watt.max | SMDCHDW7110** |
| 12            | 24             | 0~150 Amp      | 3600 Watt.max  | SMDCHD124**   |
| 12            | 36             | 0~100 Amp      | 3600 Watt.max  | SMDCHD136**   |
| 12            | 48             | 0~100 Amp      | 4800 Watt.max  | SMDCHD148**   |
| 24            | 12             | 0~300 Amp      | 3600 Watt.max  | SMDCHD212**   |
| 24            | 36             | 0~150 Amp      | 3600 Watt.max  | SMDCHD236**   |
| 24            | 48             | 0~150 Amp      | 5400 Watt.max  | SMDCHD248**   |
| 36            | 12             | 0~300 Amp      | 3600 Watt.max  | SMDCHD312**   |
| 36            | 24             | 0~300 Amp      | 7200 Watt.max  | SMDCHD324**   |
| 36            | 48             | 0~150 Amp      | 7200 Watt.max  | SMDCHD348**   |
| 48            | 12             | 0~300 Amp      | 3600 Watt.max  | SMDCHD412**   |
| 48            | 24             | 0~300 Amp      | 7200 Watt.max  | SMDCHD424**   |
| 48            | 36             | 0~300 Amp      | 10800 Watt.max | SMDCHD436**   |
| 110           | 12             | 0~300 Amp      | 3600 Watt.max  | SMDCHD1112**  |
| 110           | 24             | 0~300 Amp      | 7200 Watt.max  | SMDCHD1124**  |
| 110           | 36             | 0~300 Amp      | 10800 Watt.max | SMDCHD1136**  |
| 110           | 48             | 0~250 Amp      | 12000 Watt.max | SMDCHD1148**  |
| 110           | 72             | 0~150 Amp      | 10800 Watt.max | SMDCHD1172**  |
| 110           | 96             | 0~150 Amp      | 14400 Watt.max | SMDCHD1196**  |

\* Wide input range series

\*\*desired modules current

| Output Characteristic       |         |         |         |                 |                                  |
|-----------------------------|---------|---------|---------|-----------------|----------------------------------|
| Characteristic              | Minimum | Typical | Maximum | Units           | Notes & Conditions               |
| Output voltage              | 12      |         | 110     | VDC             | See Models and Ratings table     |
| EFFECIENCY                  | 83      | 85      | 89      | %               | @full load                       |
| Operating temperature       | -5      |         | +55     | ° C             |                                  |
| Load regulation             | ±1      | ±2      | ±5      | %               | 0-100% load                      |
| Over voltage protection     | 105     |         | 120     | % Above nominal | Auto reset after fault clearance |
| Over load protection        | 105     |         | 120     | % Above nominal | Auto reset after fault clearance |
| Short circuit protection    |         |         |         |                 | Auto reset after fault clearance |
| Over temperature protection |         | 90      |         | ° C             | Auto reset after fault clearance |
| humidity                    |         |         | 90      | %RH             | Non-condensing                   |
| Shock& Vibration            |         |         |         |                 | MIL-STD 810F                     |

## TECHNICAL SUPPORT

1 year guarantee

3years after sale services

Consulting services

Installation & commissioning services

Utilization & Maintenance services

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