

General Power Adapters for Power over Ethernet (PoE):

- Supports the IEEE 802.3 af standard:
- Galvanically isolated output.
- 25kohm low voltage input resistance signature.
- Rich variety of mounting options: DIN-rail, 19" rack, wall...
- Can be adapted for any load equipment:
- Replaceable - and polarity variable - output connector.
- Wide range of output voltages.



The DCA1 series of power adapters are intended as replacements for mains (230V AC) power adapters, enabling power supply of your equipment via Power over Ethernet (PoE, 48V DC) instead. The reason for using PoE instead of normal mains power might be:

- Uninterrupted operation is required, and PoE has been chosen as the means to provide this.
- Just to save installation effort, there is no mains outlet available.

The units fulfil most aspects of the IEC802.3af standard for use of power distribution over non-signal carrying pairs. See product specifications for details.

Available versions:

| Product no | Output Power | Output Voltage | Comment                |
|------------|--------------|----------------|------------------------|
| TE10001/1  | 10W          | 6.7...13.4V    | Adjustable in 16 steps |
| TE10001/2  | 10W          | 5V             | Fix voltage            |

## Specifications

|                         |                                                                                       |
|-------------------------|---------------------------------------------------------------------------------------|
| Dimensions:             | 85x50x27 mm                                                                           |
| Operating Temp Range:   | -10C ...+60C                                                                          |
| Input Connectors:       | Two shielded RJ45 (see Note1)                                                         |
| Output Connector:       | 60cm cable and EIAJ RC-5320 class III connector, positive to centre pole (see note 2) |
| Efficiency:             | > 80%                                                                                 |
| Input Capacitance:      | < 3uF                                                                                 |
| Isolation Test Voltage: | 1500V DC                                                                              |
| Output Voltage:         | TE10001/1 see Table 1<br>TE10001/2 see Table 2                                        |
| Output Voltage Accuracy | +/- 2% initial, 5% long term on nominal values                                        |
| Output Power Continuous | 10W                                                                                   |

Note 1: All 8 pins (and shield) of the RJ45 connectors are straight through connected. Power is tapped between pins 4,5 (positive) and pins 7, 8 (negative)

Note 2: Unused output cable can be pushed into the unit. The output connector polarity is easily to reverse. The output connector can also be replaced - contact us for details.

**Table 1: TE10001/1 Output Voltage vs Switch Setting and Load**

| Pos | Output Voltage |       |       |              |       |
|-----|----------------|-------|-------|--------------|-------|
|     | open circuit   | 1W    | 2W    | 5W (nom)     | 10W   |
| 0   | 8.11           | 6.73  | 6.60  | <b>6.45</b>  | 6.16  |
| 1   | 9.52           | 8.38  | 8.30  | <b>8.15</b>  | 7.87  |
| 2   | 10.63          | 9.65  | 9.54  | <b>9.40</b>  | 9.14  |
| 3   | 11.33          | 10.43 | 10.31 | <b>10.20</b> | 9.92  |
| 4   | 11.76          | 10.90 | 10.79 | <b>10.65</b> | 10.40 |
| 5   | 12.21          | 11.40 | 11.27 | <b>11.15</b> | 10.88 |
| 6   | 12.62          | 11.87 | 11.69 | <b>11.55</b> | 11.32 |
| 7   | 12.92          | 12.14 | 12.00 | <b>11.85</b> | 11.63 |
| 8   | 12.98          | 12.22 | 12.06 | <b>11.95</b> | 11.69 |
| 9   | 13.23          | 12.48 | 12.30 | <b>12.20</b> | 11.94 |
| A   | 13.46          | 12.72 | 12.54 | <b>12.40</b> | 12.18 |
| B   | 13.63          | 12.89 | 12.72 | <b>12.60</b> | 12.36 |
| C   | 13.76          | 13.01 | 12.85 | <b>12.70</b> | 12.49 |
| D   | 13.91          | 13.18 | 12.98 | <b>12.85</b> | 12.63 |
| E   | 14.06          | 13.30 | 13.12 | <b>13.00</b> | 12.77 |
| F   | 14.17          | 13.40 | 13.24 | <b>13.15</b> | 12.88 |

**Table 2: TE10001/2 Output Voltage vs Load**

| Output Voltage |      |      |            |     |
|----------------|------|------|------------|-----|
| open circuit   | 1W   | 2W   | 5W (nom)   | 10W |
| TBD            | 5.35 | 5.25 | <b>5.1</b> | 4.8 |