

## 300W Medical/ITE Class I and II External Power Supplies

### Features

- ◆ Meets DoE Level VI Efficiency
- ◆ Medical & ITE Certifications
- ◆ Class I & II Inputs
- ◆ < 0.5W Off-load Power Draw
- ◆ Meets IEC60601-1-2 Ed4 & 60601-1-11\*
- ◆ Suitable for B & BF Rated Equipment



### Key Market Segments & Applications



| Specifications                      |         |                                                                                                                                         |  |
|-------------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------|--|
| Model                               |         | DTM300-D                                                                                                                                |  |
| Input Voltage range                 | VAC     | 90 - 264VAC (47 - 63Hz)                                                                                                                 |  |
| Inrush Current                      | A       | <70A at 230VAC input, 25°C ambient cold start                                                                                           |  |
| Input Current                       | A       | 3A at 115VAC Maximum                                                                                                                    |  |
| Touch Current                       | -       | <100uA @ 264VAC                                                                                                                         |  |
| Power Factor                        | -       | Meets EN61000-3-2, >0.9 at 230VAC full load                                                                                             |  |
| Hold Up Time (Typ)                  | ms      | 10ms at 115VAC input                                                                                                                    |  |
| Temperature Coefficient             | %/°C    | ±0.05%/°C                                                                                                                               |  |
| Adjustment Range                    | -       | None                                                                                                                                    |  |
| Minimum Load                        | A       | None                                                                                                                                    |  |
| Total Regulation                    | %       | ±5% (-20 to -30°C ±10%)                                                                                                                 |  |
| Ripple & Noise                      | mV      | 12V model: 240mV; all others 300mV                                                                                                      |  |
| Overload & Short Circuit Protection | -       | 105 - 150% - hiccup mode                                                                                                                |  |
| Overvoltage Protection              | V       | Auto-recovery                                                                                                                           |  |
| Efficiency                          | %       | >88%, average efficiency                                                                                                                |  |
| Operating Temperature               | °C      | -30 to +60°C derate linearly to 50% load from 40 to 60°C<br>Derate linearly to 70% load from 0 to -30°C                                 |  |
| Storage Temperature                 | °C      | -30 to +85°C                                                                                                                            |  |
| Humidity (non condensing)           | %RH     | 0 - 95%RH                                                                                                                               |  |
| Cooling                             | -       | Convection                                                                                                                              |  |
| Withstand Voltage                   | VAC     | Class I: Input to Ground 1.5kVAC, Input to Output 4kVAC (2xMoPP), Output to Ground: 1.5kVAC<br>Class II: Input to Output 4kVAC (2xMoPP) |  |
| Safety Agency Certification         | -       | IEC/ES/CSA/EN60601-1, IEC60601-1-11*, IEC/UL/CSA/EN60950-1, CE Mark                                                                     |  |
| Offload Power Consumption           | W       | < 0.5W                                                                                                                                  |  |
| EMC                                 | -       | EN60601-2, IEC60601-1-2 Ed4:2014, EN55011 Class B, EN55024 Class B, FCC Part 15 Class B, FCC Part 18 Class B                            |  |
| IP Rating                           | -       | IP42                                                                                                                                    |  |
| Altitude                            | m       | 5,000m maximum                                                                                                                          |  |
| Weight (Typ)                        | g       | 1570g                                                                                                                                   |  |
| Size (WxLxH)                        | in (mm) | 4.4 x 8.75 x 1.77" (112 x 222 x 45mm)                                                                                                   |  |
| Cable Length                        | mm      | 800mm                                                                                                                                   |  |
| AC Input Connector                  | -       | Class I: IEC 320-C14 (3 prong); Class II: IEC 320-C18 (2 prong)                                                                         |  |
| Output Connector                    | -       | See Output Connector on page 2                                                                                                          |  |
| Warranty                            | yrs     | Three Years                                                                                                                             |  |

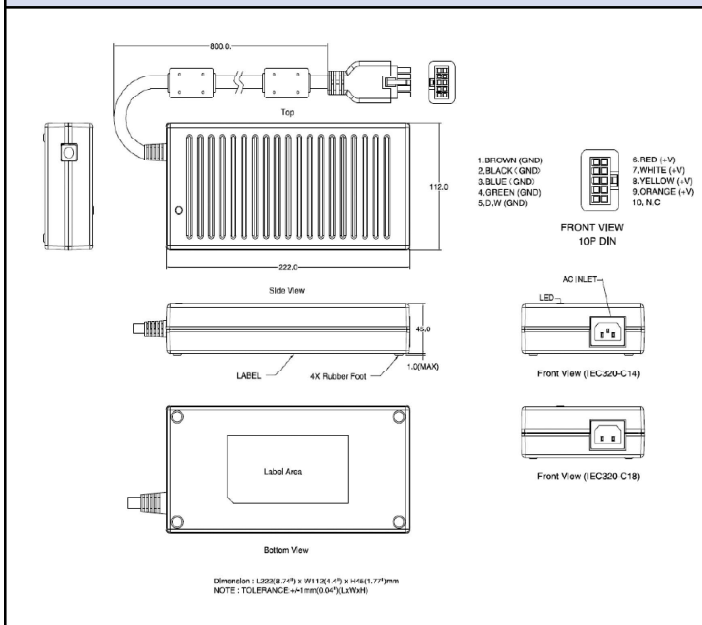
Notes:

\* Class II D2 models

## Model Selector

| Model          | Output (V) | Maximum Output (A) | Maximum Power (W) | Regulation (mV) | Ripple/Noise | Efficiency Level | Class |
|----------------|------------|--------------------|-------------------|-----------------|--------------|------------------|-------|
| DTM300PW-120D1 | 12V        | 25A                | 300W              | 240mV           | +/-5%        | VI               | I     |
| DTM300PW-150D1 | 15V        | 20A                | 300W              | 300mV           | +/-5%        | VI               | I     |
| DTM300PW-190D1 | 19V        | 15.79A             | 300W              | 300mV           | +/-5%        | VI               | I     |
| DTM300PW-240D1 | 24V        | 12.5A              | 300W              | 300mV           | +/-5%        | VI               | I     |
| DTM300PW-280D1 | 28V        | 10.71A             | 300W              | 300mV           | +/-5%        | VI               | I     |
| DTM300PW-480D1 | 48V        | 6.25A              | 300W              | 300mV           | +/-5%        | VI               | I     |
| DTM300PW-540D1 | 54V        | 5.56A              | 300W              | 300mV           | +/-5%        | VI               | I     |
| DTM300PW-120D2 | 12V        | 25A                | 300W              | 240mV           | +/-5%        | VI               | II    |
| DTM300PW-150D2 | 15V        | 20A                | 300W              | 300mV           | +/-5%        | VI               | II    |
| DTM300PW-190D2 | 19V        | 15.79A             | 300W              | 300mV           | +/-5%        | VI               | II    |
| DTM300PW-240D2 | 24V        | 12.5A              | 300W              | 300mV           | +/-5%        | VI               | II    |
| DTM300PW-280D2 | 28V        | 10.71A             | 300W              | 300mV           | +/-5%        | VI               | II    |
| DTM300PW-480D2 | 48V        | 6.25A              | 300W              | 300mV           | +/-5%        | VI               | II    |
| DTM300PW-540D2 | 54V        | 5.56A              | 300W              | 300mV           | +/-5%        | VI               | II    |

## Outline Drawing



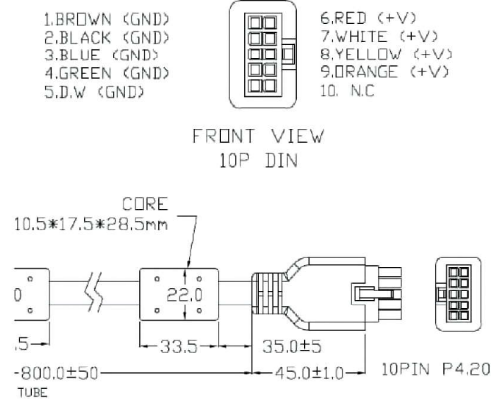
## Output Connector

### Matching connectors

#### DC Output Connector

Standard male plug (power supply side): 10 PIN Mini Fit Jr. Pitch; 4.2mm Mating Connector: Molex P/N: 39-28-1103 or equivalent.

DC output cable: 8C+1, UL2464, 16AWG, VW-1, 80°C, 300V



For Additional Information, please visit  
[us.tdk-lambda.com/lp/products/dt-c-series.htm](http://us.tdk-lambda.com/lp/products/dt-c-series.htm)

