

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 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 Class II: Input to Output 4kVAC (2xMoPP)
Safety Agency Certification	-	IEC/ES/CSA/EN60601-1, IEC60601-1-11*, IEC/UL/CSA/EN62368-1, 60950-1, 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

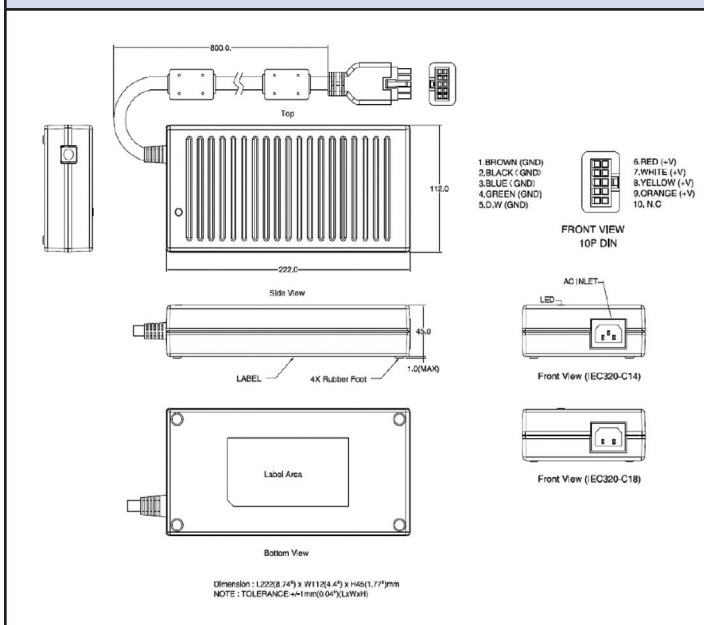
Notes:

* 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



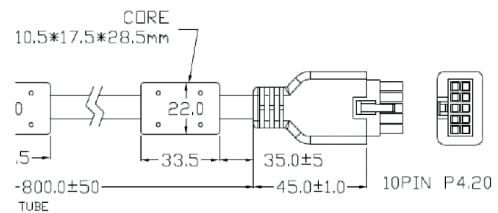
Output Connector

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

- 1.BROWN (GND)
- 2.BLACK (GND)
- 3.BLUE (GND)
- 4.GREEN (GND)
- 5.D.W (GND)
- 6.RED (+V)
- 7.WHITE (+V)
- 8.YELLOW (+V)
- 9.ORANGE (+V)
- 10. N.C

FRONT VIEW
10P DIN



For Additional Information, please visit
<https://product.tdk.com/info/en/products/power/index.html>

