

AC/DC Switching Adapter - Single Output

ITE/Medical AC/DC Power Adapter
AD-A10 Series 300Watts
DOE level VI Efficiency Compliant

FEATURES

- ITE 62368-1 & Medical 60601-1 approvals. (Class I & Class II)
- 3-prong IEC320-C14, Class I or 2-prong IEC320-C18, Class II AC inlet
- Medical safety approved (2x MOPP between primary to secondary)
Suitable for BF application with appropriate system consideration.
- Altitude during operation: ITE/Medical up to 5000m.
- Approval IP42 for without I/O switch models (PW-IM300A-1YXXXMZ)
- < 0.5W No Load Input Power
- Touch current less than 100uA
- 3 year warranty



ELECTRICAL SPECIFICATIONS

- Input range : 90 - 264VAC
- Frequency : 47 - 63Hz
- Power Factor : > 0.95 @115VAC; > 0.90 @230VAC @full load
- Inrush current : < 35A peak @115VAC; < 70A peak @230VAC cold start @25°C
- Input current (rms) : 3A @115VAC; 1.5A @230VAC max.
- Efficiency : > 88% @Average efficiency, 115/230VAC
- Touch current < 100uA @264VAC
- Maximum output power (Po) : 300 Watts convection cooling
- Hold-up time : > 10ms typical @full load, 115VAC
- Short circuit protection : Auto-recovery
- Over load protection : 105% to 150% maximum rating, Auto-recovery
- Over voltage protection : Auto-recovery
- Over Temperature Protection: Shutdown and latch off, AC recycle [Optional]

ENVIRONMENTAL

- Operating temperature : -30 to +60°C (Refer to "Derating Curve")
- Cooling: Convection-cooling
- Storage temperature: -30°C to +85°C
- Humidity: Non-condensing 0% to 95%
- MTBF : > 200,000 hours @full load and 25°C ambient temperature based on Bellcore TR-332

RoHS compliant

Dimension : L 222×W 112×H45 mm (8.74"x4.4"x1.77")

Weight : 1.57 kgs. (3.46 lbs.)

SAFETY STANDARDS

UL/cUL 60601-1 3.2 Edition
TUV EN60601-1 3.2 Edition
CB IEC60601-1 3.2 Edition
UL/cUL 62368-1
TUV EN62368-1
CB IEC 62368-1
CCC (Class I)
PSE (Class I)

EMC STANDARDS

EN60601-1-2 Ed4:2015
IEC60601-1-2 Ed4:2014
EN 55011 Class B
EN55032 Class B
EN55035 Class B
FCC Part 15 Class B
FCC Part 18 Class B
CE

Class II versions exclusive:

SGS IEC/EN60601-1-11 2nd Edition

DC OUTPUT & FEATURES

Model No.	Output Rating		Po	Output Regulation	Ripple & Noise (Vp-p)	Efficiency Level
DTMF300-12SX-F-W6	+12V	25A	300W	±5%	240mV	VI
DTMF300-15SX-F-W6	+15V	20A	300W	±5%	300mV	VI
DTMF300-19SX-F-W6	+19V	15.79A	300W	±5%	300mV	VI
DTMF300-24SX-F-W6	+24V	12.5A	300W	±5%	300mV	VI
DTMF300-28SX-F-W6	+28V	10.71A	300W	±5%	300mV	VI
DTMF300-48SX-F-W6	+48V	6.25A	300W	±5%	300mV	VI
DTMF300-54SX-F-W6	+54V	5.56A	300W	±5%	300mV	VI

Note:

1. Ripple and noise are measured at oscilloscope 20MHz bandwidth by a 47uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.
2. Z=1 : Class I, AC INLET : IEC 320-C14(3PIN), Z=2 : Class II, AC Inlet : IEC 320-C18(2PIN)
3. -30 to -20°C Output regulation is ±10%.
3. The switching frequency of this series is set within 65 to 90KHz at full load.

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SAFETY AGENCY CERTIFICATIONS

SAFETY AND EMC PERFORMANCE

Description	Safety	EMC
Medical equipment	IEC 60601-1:2005+AMD1:2012+AMD2:2020 EN 60601-1:2006/A1:2013/A12:2014/A2:2021 ANSI/AAMI ES60601-1:2005/A2:2021 CAN/CSA C22.2 NO. 60601-1:14/A2:22	EN 60601-1-2:2015+A1:2021 EN 55035:2017+A11:2020 EN 55011:2016+A1:2019+A2:2021 FCC 47 CFR Part 18
Description	Safety	EMC
Audio / Video, ITE equipment	IEC 62368-1:2018 EN IEC 62368-1:2020+A11:2020 UL 62368-1, 3rd Ed CAN/CSA C22.2 No. 62368-1:19, 3rd Ed	EN 55032:2015+A11:2020 EN 55035:2017+A11:2020 FCC 47 CFR Part 15B(*) ICES-003 Issue 7

Tests for conformance to this requirement will be performed with final system

(*) FCC PART 15 compliance information and warnings :

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions :

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

INSULATION LEVEL AND DIELECTRIC WITHSTAND (HI-POT)

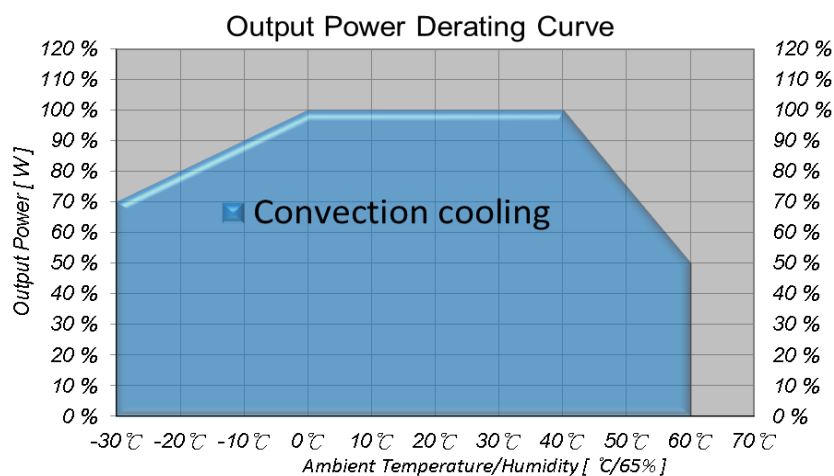
Medical equipment	Isolation voltage	Grade insulation
Primary circuits to secondary circuits	5656Vdc (4000Vac)	2 MOPP
Primary circuits to earth ground	2121Vdc (1500Vac)	1 MOPP
Secondary circuits to earth ground	2121Vdc (1500Vac)	1 MOPP

Audio / Video, ITE equipment	Isolation voltage	Grade insulation
Primary circuits to secondary circuits	4242Vdc (3000Vac)	Reinforced
Primary circuits to earth ground	2121Vdc (1500Vac)	Basic
Secondary circuits to earth ground	2121Vdc (1500Vac)	Basic

Note : Production testing use dc voltage test 4 Sec.

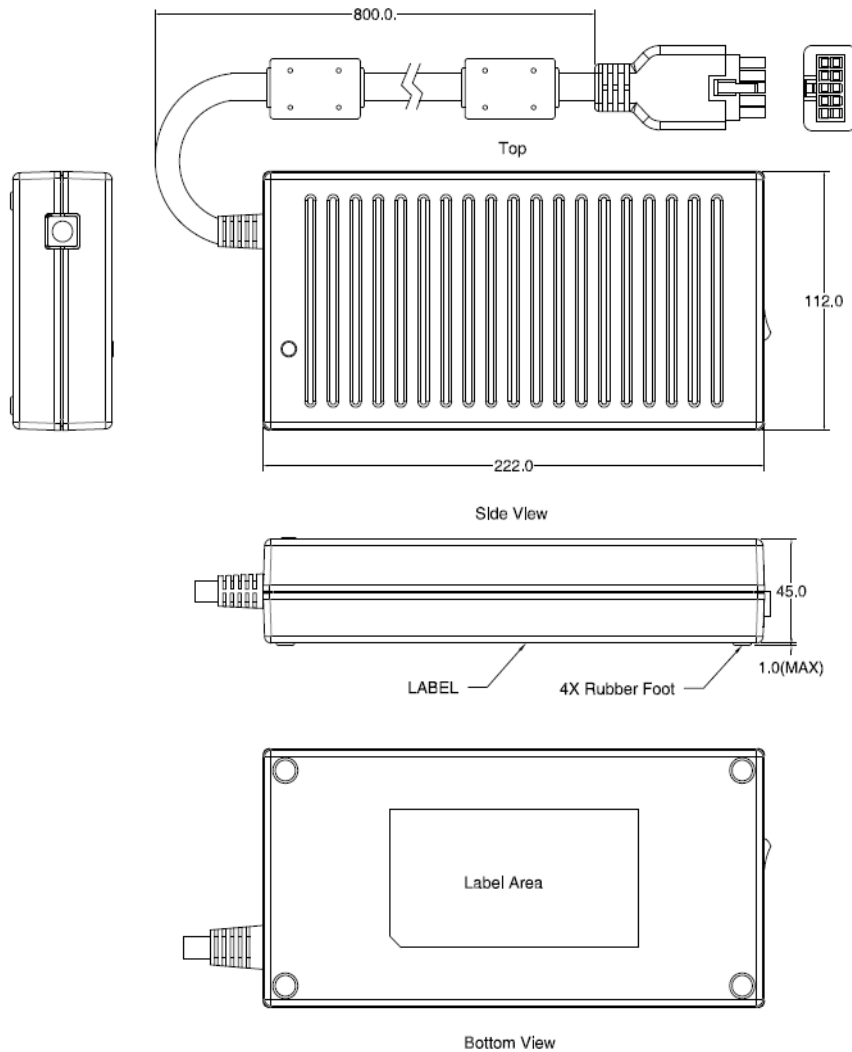
ENVIRONMENTAL

Derating Curve

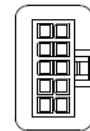


MECHANICAL SPECIFICATION

Model No. DTMF300-xxSX-F-W6
With "S" With I/O Switch

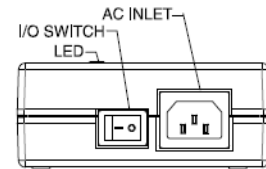


- 1.BROWN (GND)
- 2.BLACK (GND)
- 3.BLUE (GND)
- 4.GREEN (GND)
- 5.D.W (GND)

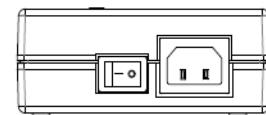


- 6.RED (+V)
- 7.WHITE (+V)
- 8.YELLOW (+V)
- 9.ORANGE (+V)
10. N.C

FRONT VIEW
10P DIN



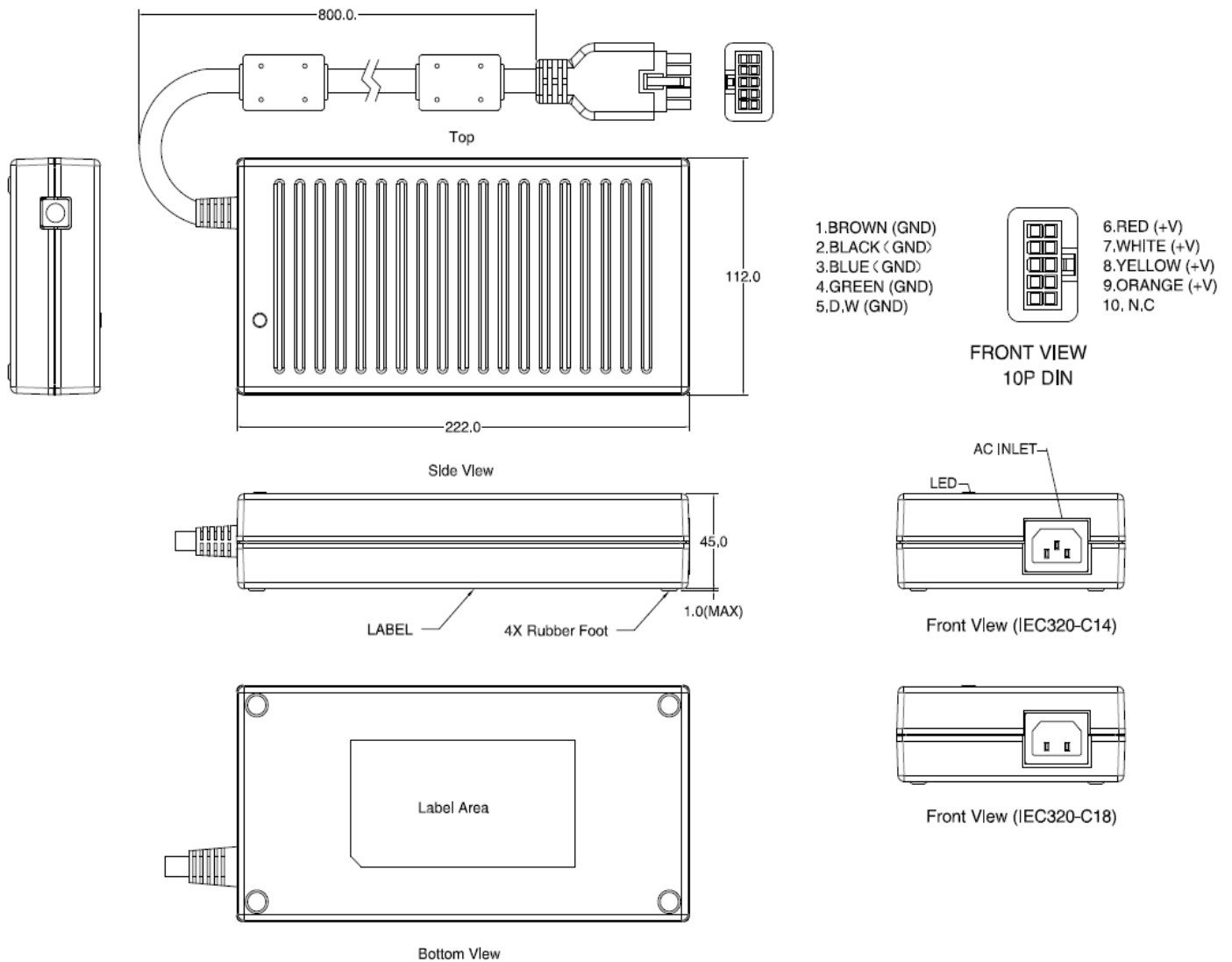
Front View (IEC320-C14)



Front View (IEC320-C18)

Dimension : L222(8.74") x W112(4.4") x H45(1.77")mm
 NOTE : TOLERANCE: +/-1mm(0.04")(LxWxH)

**Model No. DTMF300-xxSX-F-W6
Without "S" Without I/O Switch**



Dimension : L222(8.74") x W112(4.4") x H45(1.77")mm
NOTE : TOLERANCE: +/-1mm(0.04") (LxWxH)

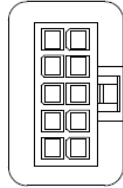
AC/DC Switching Adapter - Single Output
MATCHING CONNECTORS
DC Output Connector

Standard male plug(power supply side): 10 PIN Mini Fit 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

