

Wall Industries, Inc.

DTMPU16 SERIES

90~264VAC Input Voltage Range
15 Watts, Single Outputs
Class I for A & C Types; Class II for B Type
3rd Edition Medical Approvals
AC/DC Desktop Power Supplies



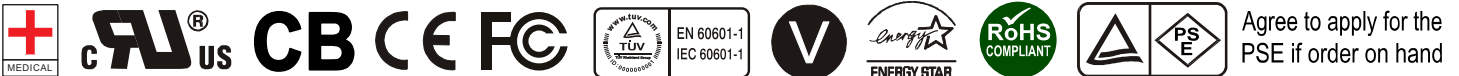
IEC-320-C14



IEC-320-C8



IEC-320-C6



Agree to apply for the
PSE if order on hand

FEATURES

- Class I for A & C Types; Class II for B Type
- RoHS Compliant
- Energy Star 2.0, Efficiency Level V Compliant
- Single Outputs
- Output Voltages Available from 5VDC to 36VDC
- Wide Input Voltage Range: 90~264VAC, 47~63Hz
- Over Voltage and Over Load Protection
- Over Temperature Detection
- Efficiency up to 85%
- IEC-320-C14, IEC-320-C8, and IEC-320-C6 Input Inlets Available
- Meets FCC Part-18 Class B and EN55022 Class B Emission Limits
- ANSI/AAMI ES 60601-1:2005 (UL/cUL 3rd Edition) and EN 60601-1:2006 (TUV/T-mark 3rd Edition) Medical Approvals

DESCRIPTION

The DTMPU16 series of medical AC/DC desktop power supplies provides up to 15 Watts of continuous output power. This series consists of single output models with a 90~264VAC input voltage range. All units are UL94V-1, RoHS, and Energy Star 2.0 Level V compliant. All models meet FCC Part-18 class B and EN55022 class B emission limits and have ANSI/AAMI ES 60601-1:2005 (UL/cUL 3rd Edition) and EN 60601-1:2006 (TUV/T-mark 3rd Edition) medical approvals. These units also meet new CE requirements and have been 100% burn-in tested. The DTMPU16 series has three types of input inlets available: IEC-320-C14 (A Type), IEC-320-C8 (B Type), and IEC-320-C6 (C Type).



SPECIFICATIONS: DTMPU16 SERIES						
<p>All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted. We reserve the right to change specifications based on technological advances.</p>						
SPECIFICATION		TEST CONDITIONS	Min	Nom	Max	Unit
INPUT SPECIFICATIONS						
Operating Voltage Range		Operating Input Voltage Range	90		264	VAC
		Safety Approvals Input Voltage Range	100		240	
Input Frequency			47		63	Hz
Input Current	Low Line	Io = Full Load, Vin = 115VAC		0.25	0.33	A
	High Line	Io = Full Load, Vin = 230VAC		0.17	0.18	A
Inrush Current	Low Line	Io = Full Load, 25°C, Cool Start, Vin = 115VAC		18	23	A
	High Line	Io = Full Load, 25°C, Cool Start, Vin = 230VAC		38	45	A
No Load Power Consumption		No Load, Vin = 230VAC	0	0.25	0.3	W
OUTPUT SPECIFICATIONS						
Output Voltage			See Table			
Load Regulation		Vin = 230VAC	1	3	5	%
Line Regulation		Io = Full Load		0.5	1	%
Output Power		Vin = 90 to 264VAC	0		15	W
Output Current Range			See Table			
Ripple & Noise (peak to peak)		Full Load, Vin = 90VAC		0.5	1	%
Transient Response Time		Io = Full Load to Half Load, Vin = 100VAC			4	ms
Hold-Up Time		Io = Full Load, Vin = 110VAC	10	16		ms
Start-Up Time		Io = Full Load, Vin = 100VAC		0.5	1	s
Temperature Coefficient			-0.04		+0.04	%/°C
PROTECTION						
Over Voltage Protection			112		132	%
Over Current Protection			110		150	%
Over Temperature Detection (<i>See Note 1</i>)		The parameter is not subject to production test-verified by design/characterization of integrated controller	-20		125	°C
GENERAL SPECIFICATIONS						
Efficiency		Io = Full Load, Vin = 230VAC	73		85	%
Dielectric Withstanding Voltage		Primary to Secondary	A, B, and C types	5656		VDC
		Primary to Ground	A and C types	2828		
Isolation Resistance		Test Voltage = 500VDC	A and C types	50		MΩ
Safety Ground Leakage Current		Io = Full Load, Vin = 240VAC			0.3	mA
ENVIRONMENTAL SPECIFICATIONS						
Operating Temperature		Derating linearly from 100% Load at 50°C to 50% load at 70°C	0	50	70	°C
Storage Temperature			-40		85	°C
Operating Humidity			0		95	%
Storage Humidity			0		95	%
MTBF		Operating Temp. at 25°C; calculated per MIL-HDBK-217F	100,000 hours			
PHYSICAL SPECIFICATIONS						
Weight		A, B, and C types	Approx. 6oz (170g)			
Dimensions (L x W x H)		A type	4.11 x 1.65 x 1.22 inches (104.4 x 42.0 x 31.0 mm)			
		B and C types	3.90 x 1.65 x 1.22 inches (99.0 x 42.0 x 31.0 mm)			
AC Inlets		A Type	IEC-320-C14			
		B Type	IEC-320-C8			
		C Type	IEC-320-C6			
SAFETY						
Safety Approvals		ANSI/AAMI ES 60601-1:2005 (UL/cUL: 3 rd Ed.), EN 60601-1:2006 (TUV/T-mark: 3 rd Ed.), CE				
EMI Requirements for EN55022		Vin = 230VAC, 50Hz	B			Class
EMI Requirements for FCC PART-18		Vin = 120VAC, 60Hz	B			Class

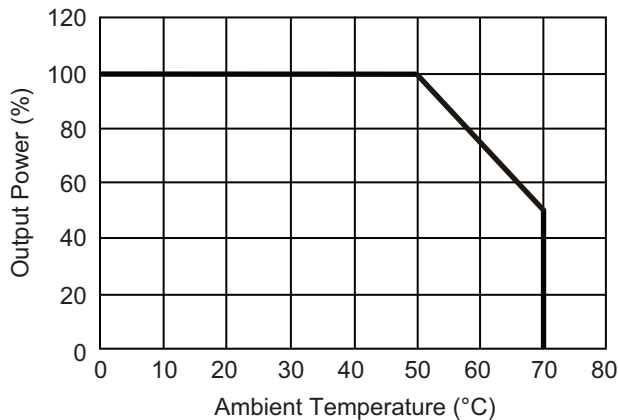
MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current	Total Regulation ⁽²⁾	Output Power	Class	AC Inlet
DTMPU16A-102	90 ~ 264 VAC	5 ~ 6 VDC	2.60 ~ 2.16 A	5%	13W	Class I	IEC-320-C14
DTMPU16A-103		6 ~ 8 VDC	2.16 ~ 1.62 A	5%	13W		
DTMPU16A-104		8 ~ 11 VDC	1.87 ~ 1.36 A	5%	15W		
DTMPU16A-105		11 ~ 13 VDC	1.36 ~ 1.15 A	5%	15W		
DTMPU16A-106		13 ~ 16 VDC	1.15 ~ 0.93 A	5%	15W		
DTMPU16A-107		16 ~ 21 VDC	0.93 ~ 0.71 A	5%	15W		
DTMPU16A-108		21 ~ 27 VDC	0.71 ~ 0.55 A	3%	15W		
DTMPU16A-109		27 ~ 33 VDC	0.55 ~ 0.45 A	3%	15W		
DTMPU16A-110		33 ~ 36 VDC	0.45 ~ 0.41 A	3%	15W		
DTMPU16B-102		90 ~ 264 VAC	5 ~ 6 VDC	2.60 ~ 2.16 A	5%		
DTMPU16B-103	6 ~ 8 VDC		2.16 ~ 1.62 A	5%	13W		
DTMPU16B-104	8 ~ 11 VDC		1.87 ~ 1.36 A	5%	15W		
DTMPU16B-105	11 ~ 13 VDC		1.36 ~ 1.15 A	5%	15W		
DTMPU16B-106	13 ~ 16 VDC		1.15 ~ 0.93 A	5%	15W		
DTMPU16B-107	16 ~ 21 VDC		0.93 ~ 0.71 A	5%	15W		
DTMPU16B-108	21 ~ 27 VDC		0.71 ~ 0.55 A	3%	15W		
DTMPU16B-109	27 ~ 33 VDC		0.55 ~ 0.45 A	3%	15W		
DTMPU16B-110	33 ~ 36 VDC		0.45 ~ 0.41 A	3%	15W		
DTMPU16C-102	90 ~ 264 VAC		5 ~ 6 VDC	2.60 ~ 2.16 A	5%	13W	Class I
DTMPU16C-103		6 ~ 8 VDC	2.16 ~ 1.62 A	5%	13W		
DTMPU16C-104		8 ~ 11 VDC	1.87 ~ 1.36 A	5%	15W		
DTMPU16C-105		11 ~ 13 VDC	1.36 ~ 1.15 A	5%	15W		
DTMPU16C-106		13 ~ 16 VDC	1.15 ~ 0.93 A	5%	15W		
DTMPU16C-107		16 ~ 21 VDC	0.93 ~ 0.71 A	5%	15W		
DTMPU16C-108		21 ~ 27 VDC	0.71 ~ 0.55 A	3%	15W		
DTMPU16C-109		27 ~ 33 VDC	0.55 ~ 0.45 A	3%	15W		
DTMPU16C-110		33 ~ 36 VDC	0.45 ~ 0.41 A	3%	15W		

NOTES

- Over Temperature Detection: Thermal shutdown by junction temperature controller. When the power system interruption is isolated, the product will re-start after recovering by hand.
- Models DTMPU16-102~103 need to use AWG#16/4FT output cable in order to meet the total regulation specified.
Models DTMPU16-105~110 need to use AWG#18/4FT output cable in order to meet the total regulation specified.
The regulation and efficiency will change if a different output cable is used.

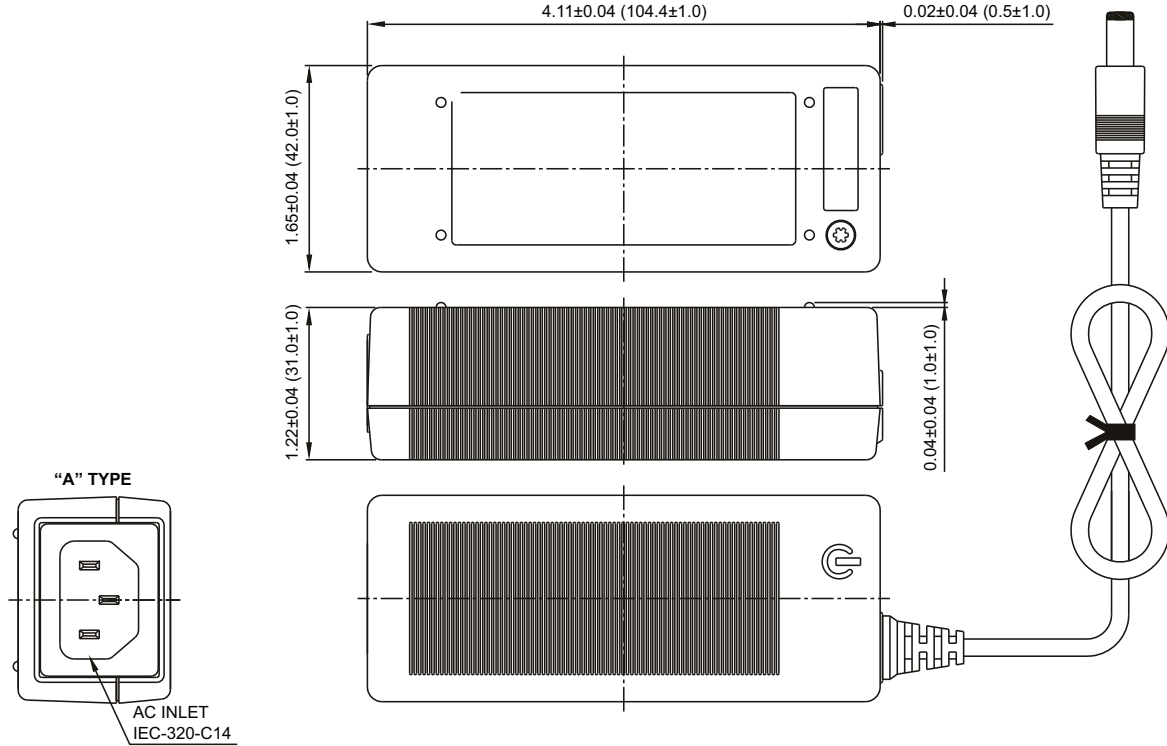
DERATING CURVE



MECHANICAL DRAWING

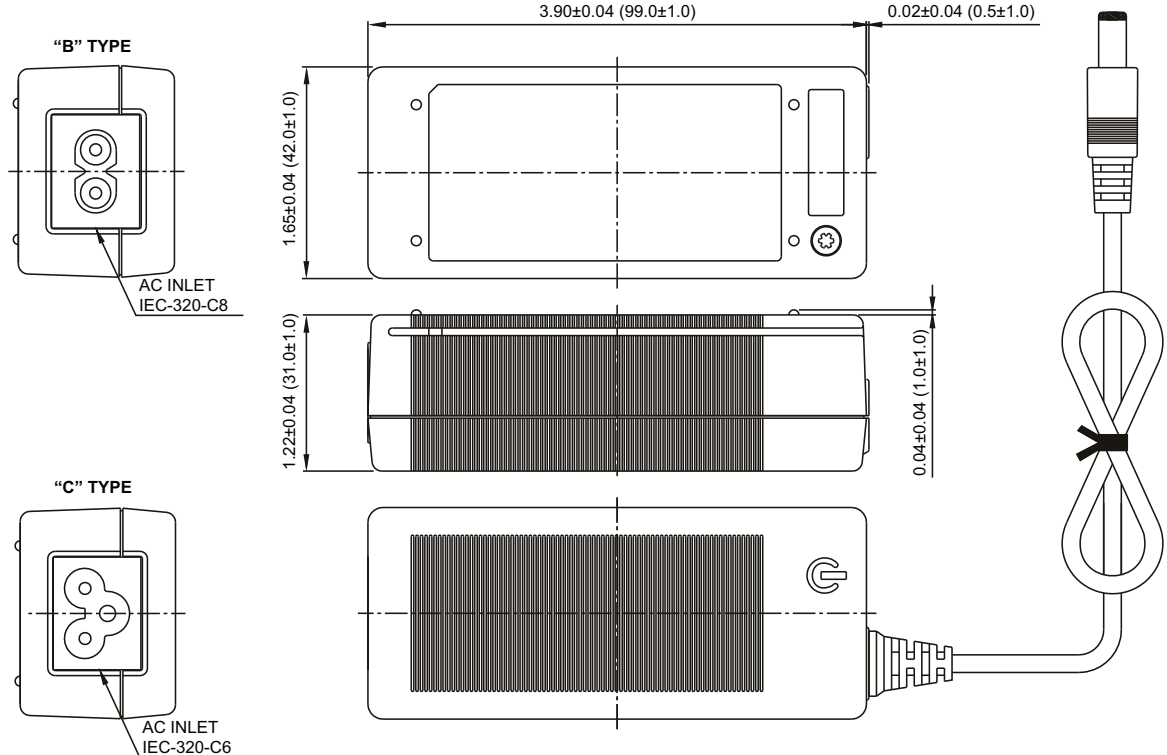
Unit: inches (mm)

TYPE A



TYPES B & C

Unit: inches (mm)



COMPANY INFORMATION

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001-2008 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

Contact **Wall Industries** for further information:

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