

Size:
7.44 x 3.52 x 1.79 inches
189.0 x 89.5 x 45.5 mm

APPLICATIONS

- Medical Touch Panel PC
- Patient Monitoring System
- Ultrasound Systems

FEATURES

- Class I
- RoHS Compliant
- Input to Output: 2MOPP
- Up to 88% High Efficiency
- IEC-320-C14 AC Inlet
- Active Power Factor Correction
- Free Air Convection Cooling
- Ultra-low Leakage Current < 0.1mA
- Up to 100 Watts Output Power
- Single, Dual, and Triple Outputs
- 90-260VAC Input Voltage Range
- Over Current and Over Voltage Protection
- ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3rd Edition), EN 60601-1:2006 (TUV/T-mark 3rd Edition)
- Optional ON/OFF Switch
- Optional Output Connectors Available

DESCRIPTION

The DTMPU101 series of class I medical AC/DC desktop power supplies provides up to 100 Watts of continuous output power in a 7.44" x 3.52" x 1.79" package. This series consists of single, dual, and triple output models with a wide input voltage range of 90~260VAC. Some features include high efficiency up to 88%, 2MOPP insulation, ultra-low leakage current < 0.1mA, and over current and over voltage protection. All models meet FCC Part-18 class B and CISPR-11 EN55011 class B emission limits. This series also has ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3rd edition) and EN 60601-1:2006 (TUV/T-mark 3rd edition) medical approvals. All models are RoHS compliant and have been 100% burn-in tested.

MODEL SELECTION TABLE

SINGLE OUTPUT MODELS

Model Number	Input Voltage Range	Output Voltage ⁽¹⁾	Output Current	Total Regulation	N.L. Power Consumption	Output Power
DTMPU101-102	90 ~ 260 VAC	5 ~ 6 VDC	14.00 ~ 11.66 A	5%	3W	70W
DTMPU101-103	90 ~ 260 VAC	6 ~ 8 VDC	13.33 ~ 10.00 A	5%	3W	80W
DTMPU101-104	90 ~ 260 VAC	8 ~ 11 VDC	11.25 ~ 8.20 A	4%	3W	90W
DTMPU101-105	90 ~ 260 VAC	11 ~ 13 VDC	8.33 ~ 7.70 A	3%	3W	100W
DTMPU101-106	90 ~ 260 VAC	13 ~ 16 VDC	7.70 ~ 6.30 A	3%	3W	100W
DTMPU101-107	90 ~ 260 VAC	16 ~ 21 VDC	6.30 ~ 4.80 A	3%	3W	100W
DTMPU101-108	90 ~ 260 VAC	21 ~ 27 VDC	4.80 ~ 3.70 A	2%	3W	100W
DTMPU101-109	90 ~ 260 VAC	27 ~ 33 VDC	3.70 ~ 3.00 A	2%	3W	100W
DTMPU101-110	90 ~ 260 VAC	33 ~ 40 VDC	3.00 ~ 2.50 A	2%	3W	100W

DUAL OUTPUT MODELS

Model Number	Input Voltage Range	Output Voltage	Output Current		Max. Regulation	No Load Power Consumption	Output Power
			Min	Max			
DTMPU101-200	90 ~ 260 VAC	+3.3 VDC	1.0A	10A	7%	3W	69W
		+12.0 VDC	0.3A	3.0A	5%		
DTMPU101-201	90 ~ 260 VAC	+5.0 VDC	1.0A	10A	5%	3W	80W
		+12.0 VDC	0.3A	3.0A	5%		
DTMPU101-202	90 ~ 260 VAC	+5.0 VDC	1.0A	10A	5%	3W	80W
		+15.0 VDC	0.3A	3.0A	6%		
DTMPU101-203	90 ~ 260 VAC	+5.0 VDC	1.0A	10A	5%	3W	80W
		+24.0 VDC	0.2A	2.0A	7%		
DTMPU101-204	90 ~ 260 VAC	+3.3 VDC	1.0A	10A	7%	3W	55W
		+5.0 VDC	0.5A	5.0A	5%		
DTMPU101-209	90 ~ 260 VAC	+12 VDC	0.7A	7.0A	5%	3W	80W
		-12 VDC	0A	1.0A	5%		
DTMPU101-210	90 ~ 260 VAC	+15 VDC	0.6A	6.0A	5%	3W	80W
		-15 VDC	0A	1.0A	5%		
DTMPU101-212	90 ~ 260 VAC	+24.0 VDC	0.3A	3.0A	5%	4W	80W
		-24.0 VDC	0A	1.0A	5%		
DTMPU101-215	90 ~ 260 VAC	+5.0 VDC	1.0A	10A	5%	3W	74W
		-24.0 VDC	0A	1.0A	5%		

MODEL SELECTION TABLE
TRIPLE OUTPUT MODELS

Model Number		Input Voltage Range	Output Voltage	Output Current		Max. Regulation	No Load Power Consumption	Output Power
				Min	Max			
DTMPU101-300	Vo ₁	90 ~ 260 VAC	+3.3 VDC	1.0A	10A	7%	3W	74W
	Vo ₂		+12 VDC	0.3A	3.0A	5%		
	Vo ₃		-12 VDC	0A	1.0A	5%		
DTMPU101-300-1	Vo ₁	90 ~ 260 VAC	+3.3 VDC	1.0A	10A	7%	3W	74W
	Vo ₂		+12 VDC	0.3A	3.0A	5%		
	Vo ₃		+12 VDC	0A	1.0A	5%		
DTMPU101-301	Vo ₁	90 ~ 260 VAC	+5 VDC	1.0A	10A	5%	4W	80W
	Vo ₂		+12 VDC	0.3A	3.0A	5%		
	Vo ₃		-5 VDC	0A	1.0A	5%		
DTMPU101-301-1	Vo ₁	90 ~ 260 VAC	+5 VDC	1.0A	10A	5%	4W	80W
	Vo ₂		+12 VDC	0.3A	3.0A	5%		
	Vo ₃		+5 VDC	0A	1.0A	5%		
DTMPU101-302	Vo ₁	90 ~ 260 VAC	+5 VDC	1.0A	10A	5%	4W	80W
	Vo ₂		+12 VDC	0.3A	3.0A	5%		
	Vo ₃		-12 VDC	0A	1.0A	5%		
DTMPU101-302-1	Vo ₁	90 ~ 260 VAC	+5 VDC	1.0A	10A	5%	4W	80W
	Vo ₂		+12 VDC	0.3A	3.0A	5%		
	Vo ₃		+12 VDC	0A	1.0A	5%		
DTMPU101-303	Vo ₁	90 ~ 260 VAC	+5 VDC	1.0A	10A	5%	4W	80W
	Vo ₂		+15 VDC	0.3A	3.0A	6%		
	Vo ₃		-15 VDC	0A	1.0A	5%		
DTMPU101-303-1	Vo ₁	90 ~ 260 VAC	+5 VDC	1.0A	10A	5%	4W	80W
	Vo ₂		+15 VDC	0.3A	3.0A	6%		
	Vo ₃		+15 VDC	0A	1.0A	5%		
DTMPU101-304	Vo ₁	90 ~ 260 VAC	+5 VDC	1.0A	10A	5%	3W	80W
	Vo ₂		+24 VDC	0.3A	3.0A	5%		
	Vo ₃		-24 VDC	0A	1.0A	5%		
DTMPU101-304-1	Vo ₁	90 ~ 260 VAC	+5 VDC	1.0A	10A	5%	3W	80W
	Vo ₂		+24 VDC	0.3A	3.0A	5%		
	Vo ₃		+24 VDC	0A	1.0A	5%		
DTMPU101-305	Vo ₁	90 ~ 260 VAC	+5 VDC	1.0A	10A	5%	4W	80W
	Vo ₂		+24 VDC	0.3A	3.0A	5%		
	Vo ₃		-12 VDC	0A	1.0A	5%		
DTMPU101-305-1	Vo ₁	90 ~ 260 VAC	+5 VDC	1.0A	10A	5%	4W	80W
	Vo ₂		+24 VDC	0.3A	3.0A	5%		
	Vo ₃		+12 VDC	0A	1.0A	5%		
DTMPU101-306	Vo ₁	90 ~ 260 VAC	+3.3 VDC	1.0A	10A	7%	3W	74W
	Vo ₂		+12 VDC	0.3A	3.0A	5%		
	Vo ₃		-5 VDC	0A	1.0A	5%		
DTMPU101-306-1	Vo ₁	90 ~ 260 VAC	+3.3 VDC	1.0A	10A	7%	3W	74W
	Vo ₂		+12 VDC	0.3A	3.0A	5%		
	Vo ₃		+5 VDC	0A	1.0A	5%		
DTMPU101-308	Vo ₁	90 ~ 260 VAC	+3.3 VDC	1.0A	10A	7%	3W	60W
	Vo ₂		+5 VDC	0.3A	3.0A	5%		
	Vo ₃		-12 VDC	0A	1.0A	5%		
DTMPU101-308-1	Vo ₁	90 ~ 260 VAC	+3.3 VDC	1.0A	10A	7%	3W	60W
	Vo ₂		+5 VDC	0.3A	3.0A	5%		
	Vo ₃		+12 VDC	0A	1.0A	5%		

NOTES

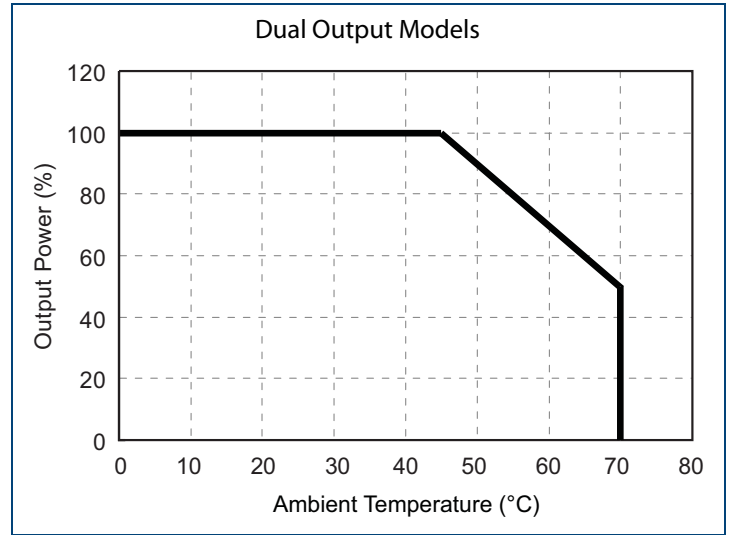
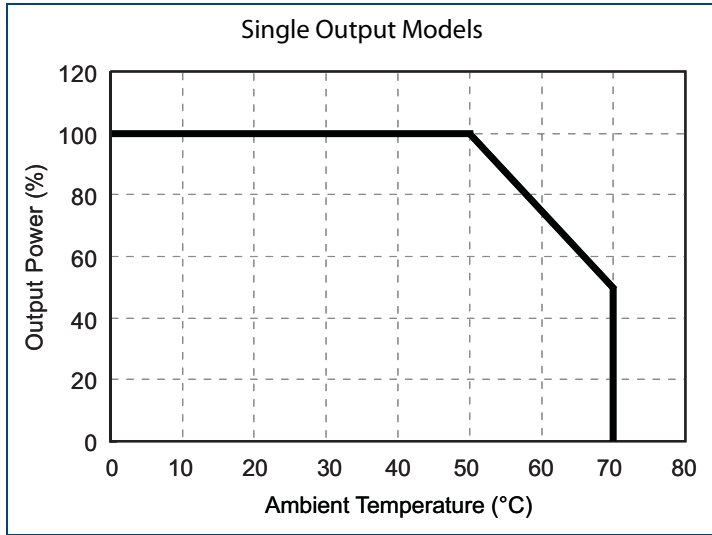
1. For single output models the output voltage is specified as a range (ex: 33~40VDC); the customer must specify what they would like the output voltage set at.
2. Optional ON/OFF switch is available for this series. Please call factory for ordering details.
3. Optional output connectors available. Please call factory for ordering details.

SPECIFICATIONS: DTMPU101 SERIES

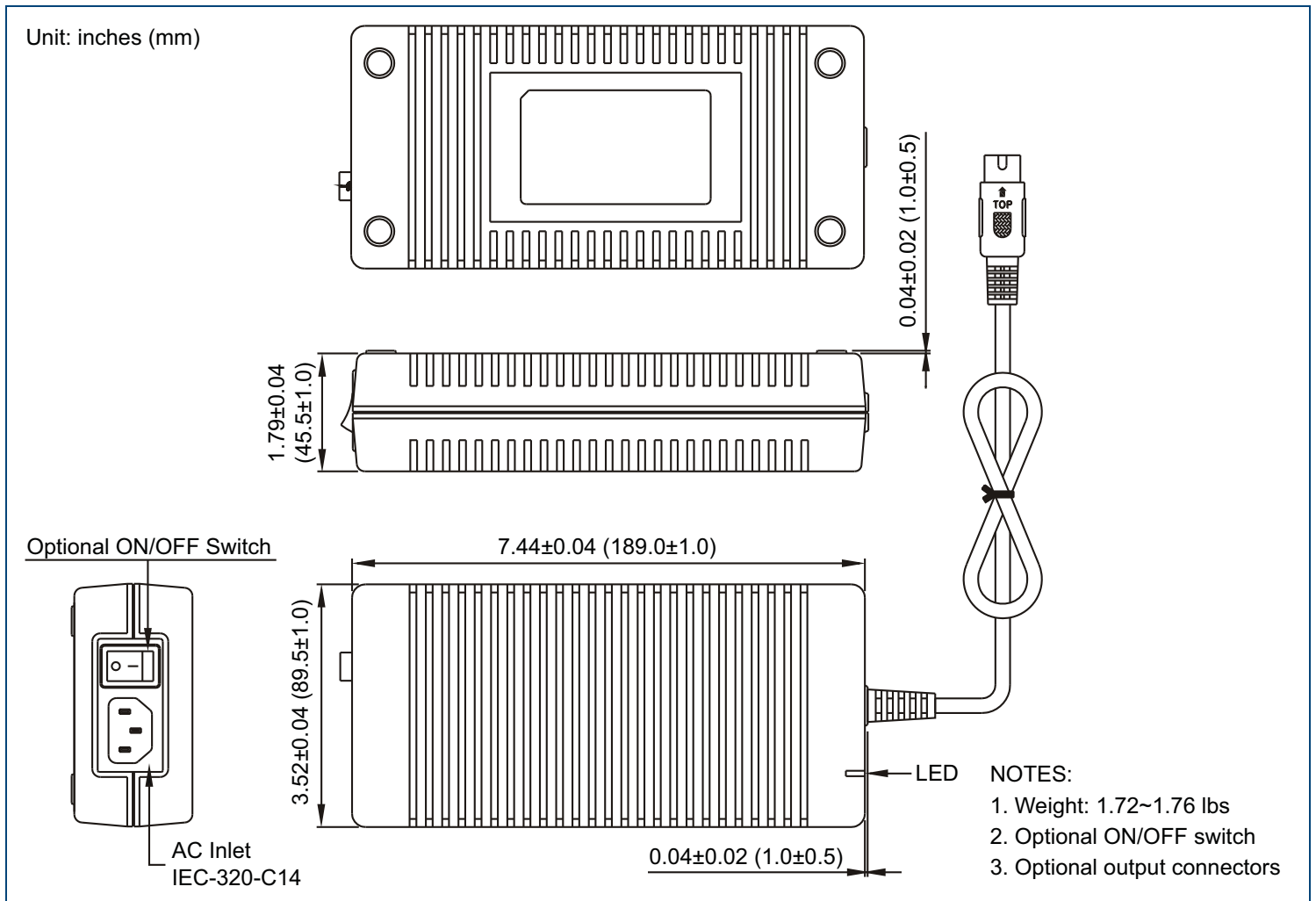
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
 We reserve the right to change specifications based on technological advances.

SPECIFICATION		TEST CONDITIONS		Min	Typ	Max	Unit
INPUT SPECIFICATIONS							
Input Voltage		Safety Approvals Input Voltage Range		100		240	VAC
		Operating Input Voltage Range		90		260	
Input Frequency				47		63	Hz
Input Current		100VAC, full load			1.25		A
		240VAC, full load			0.5		
Inrush Current		115VAC, full load, 25°C, cold start				50	A
		230VAC, full load, 25°C, cold start				100	
No Load Power Consumption		230VAC, no load		See Table			
Power Factor Correction		230VAC, full load		0.95		1	
OUTPUT SPECIFICATIONS							
Output Voltage				See Table			
Line Regulation		LL to HL, full load		0.5		1	%
Load Regulation		230VAC		3		7	%
Output Power				See Table			
Output Current				See Table			
Ripple & Noise (peak to peak)		90VAC, full load		Outputs under 3.3VDC Others		2	%
						1	
Hold-up Time		110VAC, full load		16			ms
Start-up Time		100VAC, full load		0.3		2	s
Transient Response Time		100VAC, Full load to half load				4	ms
Temperature Coefficient				-0.04		+0.04	%/°C
PROTECTION							
Over Voltage Protection				112		132	%
Over Current Protection				110		150	%
GENERAL SPECIFICATIONS							
Efficiency		230 VAC, full load		75		88	%
Dielectric Withstanding Voltage		Primary to Secondary (2MOPP Insulation)		6932			VDC
		Primary to PE		2121			
Isolation Resistance		Test Voltage = 500VDC		50			MΩ
Leakage Current		240VAC/60Hz				0.1	mA
ENVIRONMENTAL SPECIFICATIONS							
Operating Temperature	Single	Derating linearly from 100% Load at 50°C to 50% load at 70°C		0		+70	°C
	Dual & Triple	Derating linearly from 100% Load at 45°C to 50% load at 70°C		0		+70	
Storage Temperature				-40		+85	°C
Operating Humidity				0		95	%
Storage Humidity				0		95	%
Operating Altitude				Up to 3000m			
Cooling				Free air convection			
MTBF		MIL-HDBK-217F, 25°C		100,000			hours
PHYSICAL SPECIFICATIONS							
Weight				1.72~1.76 lbs (778~800g)			
Dimensions (L x W x H)		7.44 x 3.52 x 1.79 inches (189.0 x 89.5 x 45.5 mm)					
SAFETY & EMC							
Safety Approvals		ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3rd edition); EN 60601-1:2006 (TUV/T-mark 3rd edition); CE, CB, FCC					
EMI Requirements for CISPR-11		220VAC		B			Class
EMI Requirements for FCC PART-18		110VAC		B			Class

DERATING CURVES



MECHANICAL DRAWING



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.

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