

Type A- IEC-320-C14



Type B- IEC-320-C8



Type C- IEC-320-C9



Type D- Cord A



Type E- Cord B



**Economy Version**

Size: Size: 3.58in x 1.5in x 1.42in (91mm x 38mm x 36mm)

**OPTIONS**

- Output Connector
- AC Input Inlet

**FEATURES**

- Wide Operating Input Voltage Range of 90~264VAC
- Optional Output Connectors Available
- Optional AC Input Inlets Available: IEC-320-C14, C8, and C6
- Class I (Type A, Type C, and Type E), Class II (Type B and Type D)
- Useful in Multiple Applications
- Short Circuit and Over Load Protection
- UL/cUL (UL 60950-1: 2<sup>nd</sup> Edition) and TUV/GS (EN 60950-1: 2<sup>nd</sup> Edition) Safety Approvals
- Single Outputs
- Level VI and RoHS Compliant
- 1 Year Warranty

**APPLICATIONS**

- Ethernet Hub
- Portable Devices
- Charger
- Monitor
- Set-Top Box
- AV Equipment

**DESCRIPTION**

The DTEPU16 AC DC desktop power supplies offers up to 15 watts of output power in a 3.58" x 1.5" x 1.42" package. This series is useful in a variety of applications such as portable devices, chargers, and monitors, among others. It consists of single output models in which three AC input inlets are available: IEC-320-C14, C8, and C6, and two types of cords are available, both 2 prong and 3 prong. This series is both Energy Efficiency Level VI and RoHS compliant and has UL/cUL(UL 60950-1: 2<sup>nd</sup> Edition) and TUV/GS (EN 60950-1: 2<sup>nd</sup> Edition) safety approvals. Please call factory for order details.

**MODEL SELECTION TABLE**

Model Number <sup>(1)</sup>	Input Voltage Range	Output Voltage	Output Current		Ripple & Noise <sup>(7)</sup>	No Load Power Consumption	Output Power	Efficiency
			Min.	Max.				
DTEPU16x-102	90~264VAC	5~5.99VDC	2.00	2.50	100mVp-p	0.1W	12W	80%
DTEPU16x-103		6.5~8VDC	1.50	1.84	100mVp-p		12W	83%
DTEPU16x-104		8~11VDC	1.22	1.68	100mVp-p		13.5W	83.6%
DTEPU16x-105		11~13VDC	1.15	1.36	100mVp-p		15W	81.13%
DTEPU16x-106		13~16VDC	0.94	1.15	100mVp-p		15W	81.13%
DTEPU16x-107		16~21VDC	0.72	0.94	100mVp-p		15W	81.13%
DTEPU16x-108		21~27VDC	0.55	0.72	100mVp-p		15W	81.13%
DTEPU16x-109		27~33VDC	0.45	0.55	100mVp-p		15W	85%
DTEPU16x-110		33~40VDC	0.37	0.45	100mVp-p		15W	86%
DTEPU16x-111		40~48VDC	0.31	0.37	100mVp-p		15W	86%

**SPECIFICATIONS**

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.

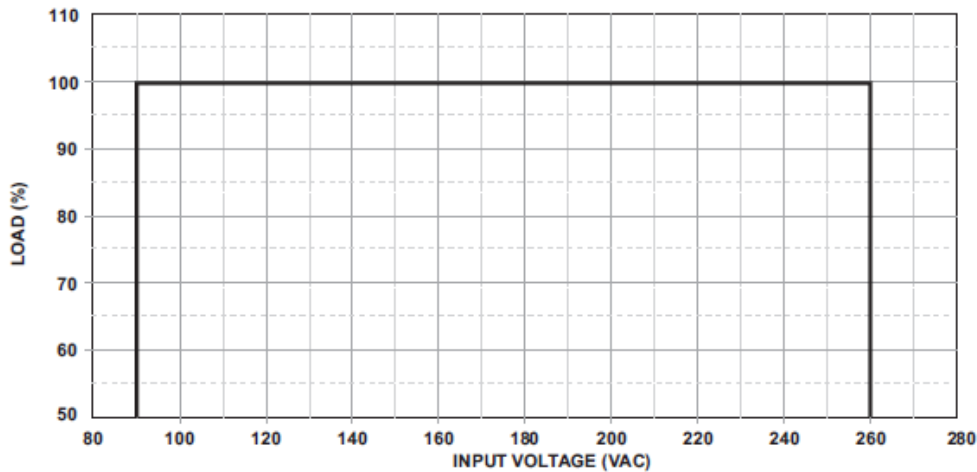
SPECIFICATION		TEST CONDITIONS	Min	Typ	Max	Unit
<b>INPUT SPECIFICATIONS</b>						
Input Voltage Range	Safety Approvals Input Voltage Range		100		240	VAC
	Operating Voltage Range		90		264	
Input Frequency	Sine Wave		47		63	Hz
Input Current	Low Line	Io=Full Load, Vin=100VAC			0.4	A
	High Line	Io=Full Load, Vin=240VAC			0.20	
Inrush Current	Low Line	Io=Full Load, 25°C, Cool Start, Vin=115VAC	35		45	A
	High Line	Io=Full Load, 25°C, Cool Start, Vin=230VAC	70		90	
<b>OUTPUT SPECIFICATIONS</b>						
Output Voltage			See Table			
Line Regulation <sup>(5)</sup>	Io=Full Load		0.5		1	%
Load Regulation <sup>(6)</sup>	Vin=230VAC		4		5	%
Output Power			See Table			
Output Current			See Table			
Ripple & Noise (20MHz BW) <sup>(7)</sup>				100		mVp-p
Transient Response Time	Full Load, Vin=100VAC				4	mS
Hold-Up Time <sup>(8)</sup>	Io=Full Load, Vin=110VAC		8			mS
Start-Up Time	Io=Full Load, Vin=100VAC				3	S
Temperature Coefficient	All Outputs			±0.04		%/°C
<b>PROTECTION</b>						
Short Circuit Protection			Automatic Recovery			
Over Load Protection			None, but output is protected against short circuit conditions.			
<b>ENVIRONMENTAL SPECIFICATIONS</b>						
Operating Temperature	Derate linearly from 100% load at 40°C to 50% load at 70°C		0		70	°C
Storage Temperature	10~95%RH		-40		85	°C
Operating Humidity	Non-Condensing		0		95	%
Storage Humidity			0		95	%
Electro Static Discharge	Air Discharge, IEC61000-4-2				8	kV
	Contact Discharge, IEC61000-4-2				6	
Operating Altitude (Elevation)	All Conditions				3000	M
Vibration	10~500Hz, 10min./1cycle, 60min. each along X,Y,Z axes				5	H
Surge Voltage	Line-Neutral				1	kV
	Line-PE & Neutral-PE					
Cooling			Free Air Convection			
Flammability Rating			UL94V-1			
MTBF	Operating temperature at 25°C, Calculated per MIL-HDBK-217F		100,000			Hrs
<b>GENERAL SPECIFICATIONS</b>						
Efficiency	Rated load and nominal line		See Table			
Dielectric Withstanding Voltage	Type A, Type C, Type E	Primary to PE			2594	VDC
	All Outputs	Primary to Secondary			4242	
Safety Ground Leakage Current	Vin=240VAC/60Hz	Type A, Type C, Type E			0.75	mA
		Type B, Type D			0.25	
<b>PHYSICAL SPECIFICATIONS</b>						
Weight			5.82oz (165g)			
Dimensions (L x W x H)			3.58in x 1.50in x 1.42in (91mm x 38.0mm x 36.0mm)			
<b>SAFETY</b>						
Safety Approvals <sup>(2)</sup>	All Outputs		UL/c-UL (UL 60950-1: 2 <sup>nd</sup> Edition) TUV/GS (EN 60950-1: 2 <sup>nd</sup> Edition)			
	Type A, Type C, Type E					
	DTEPU16A					
	DTEPU16B					
	DTEPU16C					
	DTEPU16E					
Protection Classes	Type A, Type C, Type E		Class I			
	Type B, Type D		Double Insulated, Class II			
EMC Emission			Compliance to EN55022 (CISPR)			

**NOTES**

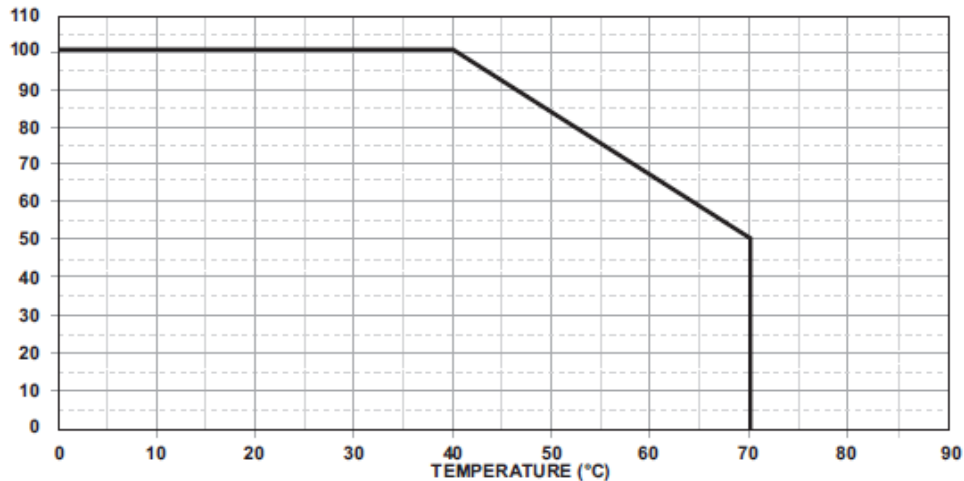
- (1) The "x" in the model number represents options for models. When "A"=IEC-320-C14, "B"=IEC-320-C8, "C"=IEC-320-C6, "D"=2-Prong Power Cord, and "E"=3-Prong Power Cord  
DTEPU16x-102~107 are required to use AWG#18/4FT output cable.  
DTEPU16x-108~111 are required to use AWG#20/4FT output cable.  
Electrical characteristics will be changed by modified output cable.
- (2) DTEPU16A-104, 105, 108 are available on NRCan mark.  
DTEPU16C-104, 105, 108 are available on NRCan mark.  
DTEPU16E-104, 105, 108 are available on NRCan mark.
- (3) Output can provide up to peak load when the power supply starts up. Staying in more than rated load continuously is not allowed.
- (4) In 60% rated load condition, each output is checked to be within voltage accuracy.
- (5) Line regulation is defined by changing  $\pm 10\%$  of input voltage from nominal line at rated load.
- (6) Load regulation is defined by changing  $\pm 40\%$  of measured output load from 60% rated load.
- (7) Ripple & Noise is measured by using 20MHz bandwidth limited oscilloscope and terminated each output with a  $0.47\mu\text{F}$  capacitor at rated load and nominal line.
- (8) Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line.

**DERATING CURVES**

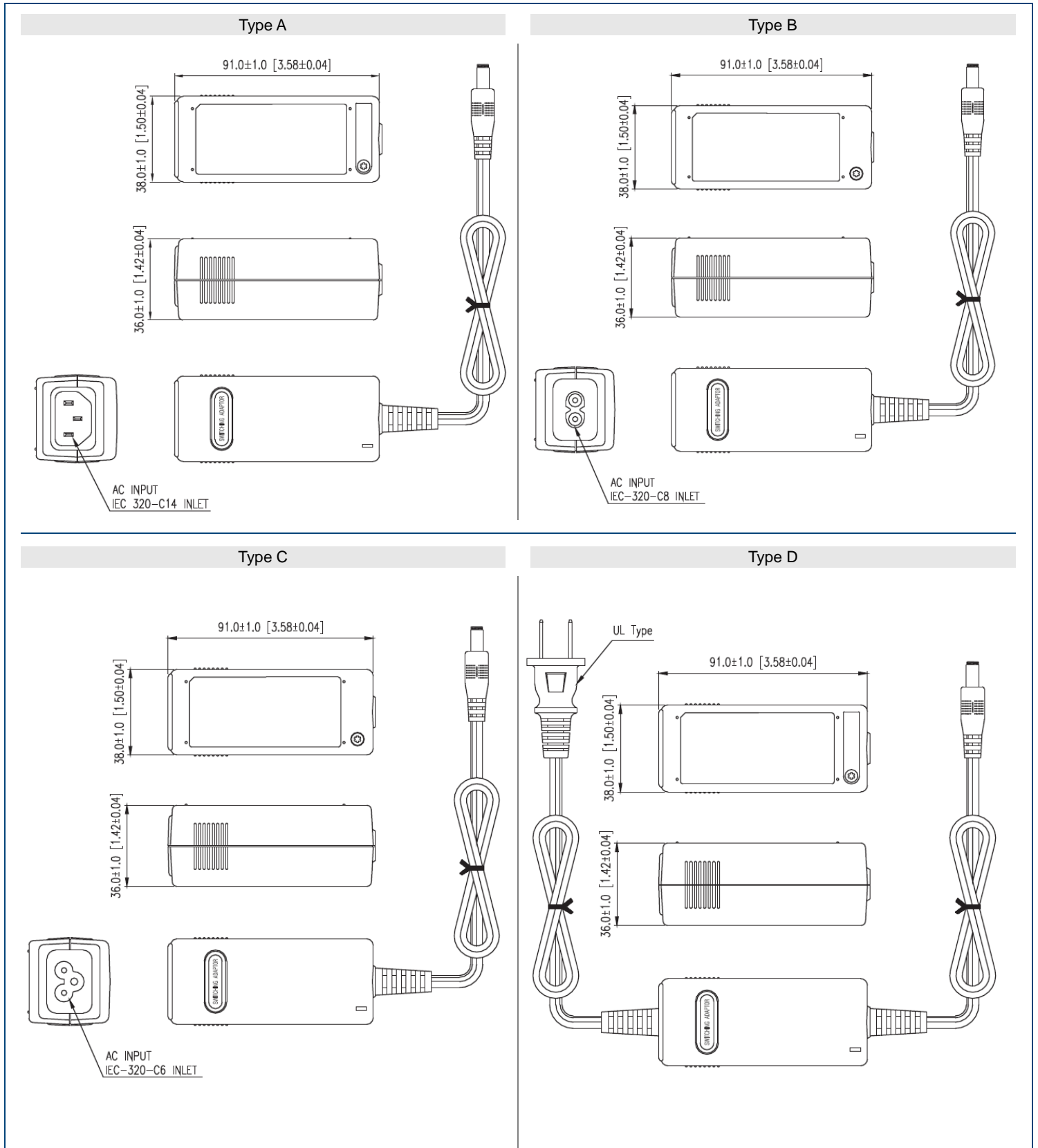
Input Voltage Derating Curve



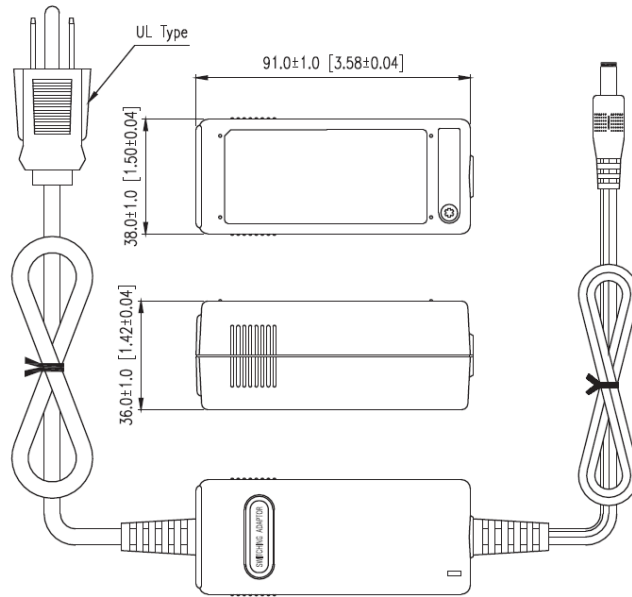
Temperature Derating Curve



MECHANICAL DRAWINGS



Type E



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:

Phone: ☎ (603) 778-2300  
Toll Free: ☎ (888) 597-9255  
Fax: ☎ (603) 778-9797  
E-mail: [sales@wallindustries.com](mailto:sales@wallindustries.com)  
Web: [www.wallindustries.com](http://www.wallindustries.com)  
Address: 37 Industrial Drive  
Exeter, NH 03833