Type A: IEC-320-C14

Size: 3.58in x 1.50in x 1.42in

Type B: IEC-320-C8

Size: 3.58in x 1.50in x 1.42in

Type C: IEC-320-C6

Size: 3.58in x 1.50in x 1.42in

Type D: Cable In

Size: 3.58in x 1.50in x 1.42in

Type E: Cable In

Size: 3.58in x 1.50in x 1.42in

OPTIONS

- Output Connectors
- AC Inlet
  -IEC-320-C14
  -IEC-320-C8
  -IEC-320-C6

APPLICATIONS

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

FEATURES

- Splash Proof
- Single Outputs
- Energy Star Level VI Compliant (Except for 3~5V Models)
- Optional Output Connectors
- Cooling by Free Air Convection
- A, C, & E Types: Class I Insulation; B & D Types: Class II System
- 3 Types of Inlet Connectors and 2 Cord Types Available
- RoHS2 Compliant
- Wide Input Range of 90 to 264VAC, 47~63Hz
- UL60950-1:2nd Edition, IEC 60950-1:2005/A2:2013 Safety Approvals for All Models

DESCRIPTION

The DTSPU16 series of AC DC desktop single output power supplies provides up to 15 watts of continuous output power and is well-suited for a variety of applications. This series has three types of AC inlet connectors to choose from: Type A (IEC-320-C14), Type B (IEC-320-C8), and Type C (IEC-320-C6) and 2 types of power cords are available (Type D and Type E). All supplies are UL 94V-1 compliant and models above 3~5V are Energy Star Level VI compliant. All models meet FCC Part-15 Class B and CISPR-22 Class B emission limits and are designed to comply with UL60950-1:2nd Edition, IEC 60950-1:2005/A2:2013 and new CE requirements. All units are 100% burn-in tested. Please call factory for order details.

MODEL SELECTION TABLE

Model Number(1)	Input Voltage Range	Output Voltage	Output Current		Ripple & Noise(6)	Typ. No Load Consumption	Output Power	Total Regulation	Efficiency
			Min.	Max					
DTSPU16x-101	90-264VAC	3~5VDC	2.50A		50mVp-p	0.5W	12W	±7%	69%
DTSPU16x-102		5~5.99VDC	2.00A	2.50A	50mVp-p	0.1W	12W	±5%	80%
DTSPU16x-103		6~8VDC	1.50A	1.84A	60mVp-p	0.1W	12W	±5%	83%
DTSPU16x-104		8~11VDC	1.36A	1.87A	80mVp-p	0.1W	15W	±5%	84.2%
DTSPU16x-105		11~13VDC	1.15A	1.36A	100mVp-p	0.1W	15W	±5%	84.2%
DTSPU16x-106		13~16VDC	0.94A	1.15A	100mVp-p	0.1W	15W	±5%	84.2%
DTSPU16x-107		16~21VDC	0.72A	0.94A	100mVp-p	0.1W	15W	±5%	84.2%
DTSPU16x-108		21~27VDC	0.55A	0.72A	100mVp-p	0.1W	15W	±5%	84.2%
DTSPU16x-109		27~33VDC	0.45A	0.55A	100mVp-p	0.1W	15W	±5%	85%
DTSPU16x-110		33~40VDC	0.37A	0.45A	100mVp-p	0.1W	15W	±3%	86%
DTSPU16x-111		40~48VDC	0.31A	0.37A	100mVp-p	0.1W	15W	±3%	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
INPUT SPECIFICATIONS							
Input Voltage Range		Safety Approval Input Voltage Range		100		240	VAC
		Operate Voltage Range		90		264	
Input Frequency				47		63	Hz
Input Current	Low Line	Io=Full Load, Vin=100VAC			0.4		A
	High Line	Io=Full Load, Vin=240VAC			0.26		
Inrush Current	Low Line	Io=Full Load, 25ºC, Cool Start, Vin=115VAC				15	A
	High Line	Io=Full Load, 25ºC, Cool Start, Vin=230VAC				30	
Safety Ground Leakage Current		Vin=240VAC, Fi=60Hz	Type A, C, & E			0.75	mA
			Type B & D			0.25	
OUTPUT SPECIFICATIONS							
Output Voltage					See Table		
Line Regulation[4]		Full Load, Vin=100VAC		0.5		1	%
Load Regulation[5]		Full Load, Vin=230VAC		3		7	%
Output Power					See Table		
Output Current					See Table		
Ripple & Noise[6]					See Table		
Transient Response Time		Full Load, Vin=110VAC				4	mS
Start-Up Time		Full Load, Vin=100~240VAC				2	S
Hold-Up Time[7]		Full Load, Vin=110VAC		8			mS
Transient Response Time		Io=Full Load to Half Load, Vin=100VAC				4	mS
PROTECTION							
Short Circuit Protection					Automatic Recovery		
ENVIRONMENTAL SPECIFICATIONS							
Operating Temperature		Derate linearly from 100% load at 40ºC to 50% load at 70ºC		0		70	ºC
Storage Temperature				-40		85	ºC
Operating Humidity				0		95	%
Storage Humidity				0		95	%
Operating Altitude		All Conditions				2000	m
Vibration		10~500Hz, 10min./cycle, 60min. each along X, Y, Z axes				5	G
Temperature Coefficient		Full Load, Vin=100~240VAC				±0.04	%/ºC
MTBF		Operating Temperature at 25ºC, Calculated per MIL-HDBK-217F		100,000			Hours
GENERAL SPECIFICATIONS							
Efficiency		Io=Full Load, Vin=230VAC		72		85	%
Isolation Resistance		Test Voltage=500VDC		50			MΩ
Dielectric Withstanding Voltage		Primary to Secondary		4242			VDC
		Primary to PE (Only Type A, C, & E)		2594			
PHYSICAL SPECIFICATIONS							
Weight					5.82oz (165g)		
Dimensions (L x W x H)					3.58in x 1.50in x 1.42in (91mm x 38mm x 36mm)		
Cooling					Free Air Convection		
Flammability Rating					UL94V-1		
SAFETY							
Safety Approvals		All types	UL 60950-1:2nd Edition[8], IEC 60950-1:2005/A2:2013				
		Type A, B, & C	EN60950-1:2005/A2:2013				
EMC Emission			Compliance to EN55022 (CISPR)				Class B
Protection Class			Type A, C, & E				Class I
			Type B & D				Double Insulated, Class II
Surge Voltage			Line-Neutral			1	kV
			Line-PE & Neutral-PE			2	

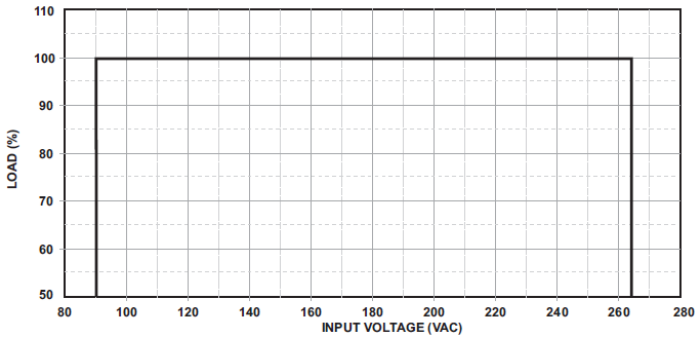
NOTES

(1) "x" in model number represents type of case for model. Can either be "A" for IEC-320-C-14, "B" for IEC-320-C8, "C" for IEC-320-C6, "D" for 2-Prong Cable In, or "E" for 3-Prong Cable in.
(2) Output can provide up to a peak load when the power supply starts up. Staying in rated load continually is not allowed
(3) At factory, each output is checked to be within voltage accuracy in 60% rated load condition.
(4) Line regulation is defined by changing ±10% of input voltage form nominal line at rated load.
(5) Load regulation is defined by changing ±40% of measured output load from 60% rated load.
(6) Ripple & Noise is measured by using 20MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line.
(7) 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.
(8) This product is Listed to applicable standards and requirements by UL.

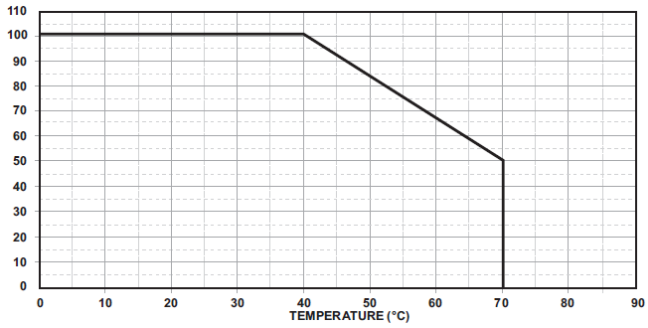
**Due to advances in technology, specifications subject to change without notice.*

DERATING CURVES

Input Voltage Derating Curve

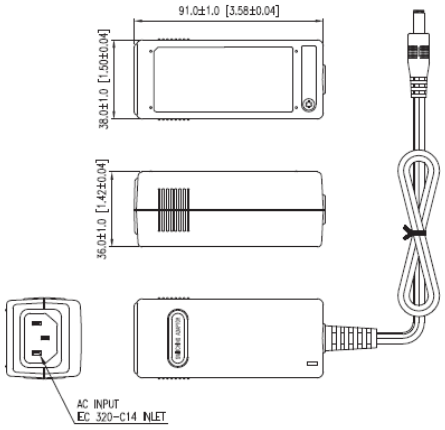


Temperature Derating Curve

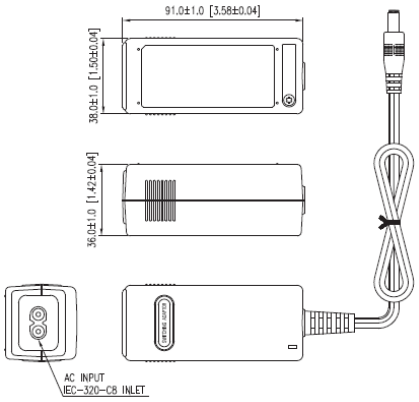


MECHANICAL DRAWINGS

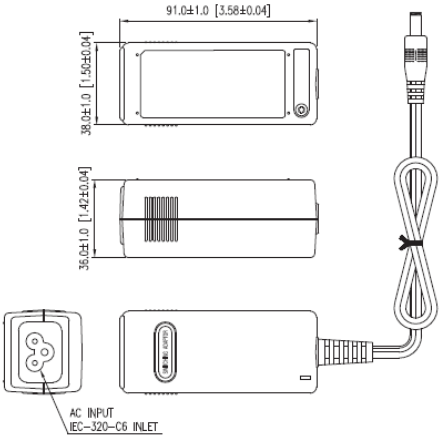
Type A



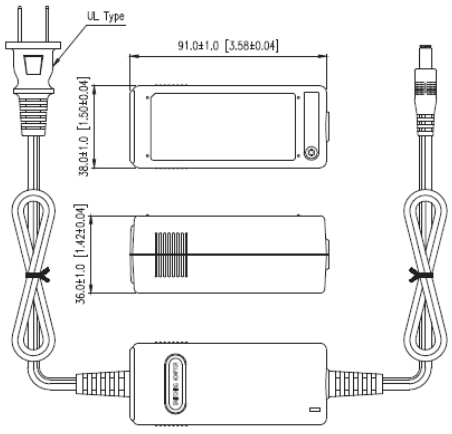
Type B



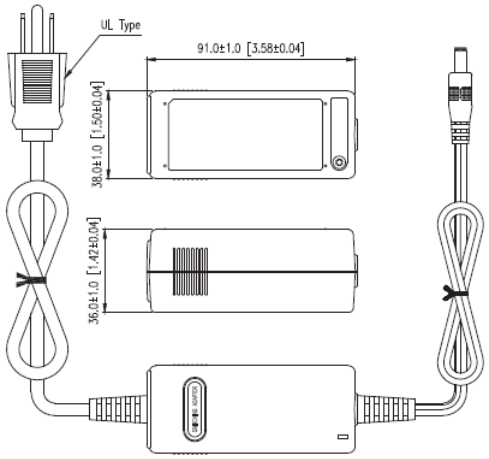
Type C



Type D



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: 2015 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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