"A" Type

Size: 4.11 x 1.65 x 1.22 inches

"B" Type

Size: 3.90 x 1.65 x 1.22 inches

"C" Type

Size: 3.90 x 1.65 x 1.22 inches

FEATURES

- RoHS Compliant
- 20 Watts Output Power
- Single Outputs
- Up to 85% High Efficiency
- Free Air Convection Cooling
- Energy Star 2.0, Efficiency Level VI
- 90-264VAC Input Voltage Range
- 100% Burn-In Tested
- Short Circuit Protection
- < 0.3W No Load Power Consumption
- Class I (A & C Types); Class II (B Type)
- Approved as Limited Power Source (LPS)
- UL/cUL (UL 60950-1: 2nd ed.) & TUV/GS (EN 60950-1: 2nd ed.) Safety Approvals
- Meets FCC Part-15 Class B & CISPR-22 Class B Emission Limits
- IEC-320-C14, C8, & C6 AC Inlet Connectors Available
- Optional Output Connectors Available

SAFETY APPROVALS

DESCRIPTION

The DTSPU21 series of AC/DC desktop power supplies provides up to 20 Watts of continuous output power. This series consists of single output models ranging from 5VDC to 50VDC with a 90~264VAC input voltage range. All units are UL 94V-1, RoHS, and CEC & Energy Star Level VI compliant. This series also meets FCC Part-15 class B and CISPR-22 class B emission limits. All models meet new CE requirements and have UL/cUL (UL 60950-1: 2nd edition) and TUV/GS (EN 60950-1: 2nd edition) safety approvals. The DTSPU21 series has three types of AC inlets available: IEC-320-C14 (Type "A"), IEC-320-C8 (Type "B"), and IEC-320-C6 (Type "C"). All units have been 100% burn-in tested.

MODEL SELECTION TABLE

Model Number (1)	Input Voltage Range	Output Voltage (2)	Output Current	Total Regulation	Output Power
DTSPU21**x**-102	90~264 VAC	5~6 VDC	3.00 ~ 2.50 A	±5%	15W
DTSPU21**x**-103		6 ~ 8 VDC	2.30 ~ 1.87A	±5%	15W
DTSPU21**x**-104		8 ~ 11 VDC	2.50 ~ 1.81 A	±5%	20W
DTSPU21**x**-105		11 ~ 13 VDC	1.81 ~ 1.53 A	±5%	20W
DTSPU21**x**-106		13 ~ 16 VDC	1.53 ~ 1.25 A	±5%	20W
DTSPU21**x**-107		16 ~ 21 VDC	1.25 ~ 0.95 A	±4%	20W
DTSPU21**x**-108		21 ~ 27 VDC	0.95 ~ 0.74 A	±4%	20W
DTSPU21**x**-109		27 ~ 33 VDC	0.74 ~ 0.60 A	±3%	20W
DTSPU21**x**-110		33 ~ 40 VDC	0.60 ~ 0.50 A	±3%	20W
DTSPU21**x**-111		40 ~ 50 VDC	0.50 ~ 0.40 A	±3%	20W

NOTES

*1. The "**x**" in the model represents the type of AC inlet connector. It can be "**A**" for IEC-320-C14 type, "**B**" for IEC-320-C8 type, or "**C**" for IEC-320-C6 type.*

2. The output voltage is specified as a range (ex: 33~40VDC); the customer must specify what they would like the output voltage set at.

SPECIFICATIONS: DTSPU21 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		264	
Input Frequency			47		63	Hz
Input Current	Low Line	100VAC, full load			0.5	A
	High Line	240VAC, full load			0.3	
Inrush Current	Low Line	115VAC, full load, 25°C, cold start	25		50	A
	High Line	230VAC, full load, 25°C, cold start	50		100	
No Load Power Consumption	230VAC, no load				0.3	W
OUTPUT SPECIFICATIONS						
Output Voltage			See Table			
Line Regulation	LL to HL, full load		0.5		1	%
Load Regulation	230VAC		3		5	%
Output Power			See Table			
Output Current			See Table			
Ripple & Noise (peak to peak)	90VAC, full load			100		mVp-p
Hold-up Time	110VAC, full load		8			ms
Start-up Time	100VAC, full load				3	s
Transient Response Time	100VAC, Full load to half load				4	ms
Temperature Coefficient	0~50°C				±0.04	%/°C
PROTECTION						
Short Circuit Protection			Automatic Recovery			
GENERAL SPECIFICATIONS						
Efficiency	230 VAC, full load		76		85	%
Dielectric Withstanding Voltage	Primary to Secondary		4242			VDC
	Primary to PE (Type A and Type C only)		2550			
Isolation Resistance	Test Voltage = 500VDC		50			MΩ
Leakage Current	240VAC/60Hz	Type A, Type C			0.75	mA
		Type B			0.25	
ENVIRONMENTAL SPECIFICATIONS						
Operating Temperature	Derating 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	%
Operating Altitude (Elevation)	All conditions				2000	M
Vibration	10~500Hz, 10min/1cycle, 60 min. each along X, Y, Z axes				5	G
Electro Static Discharge	Air Discharge, IEC61000-4-2				8	kV
	Contact Discharge, IEC61000-4-2				6	
Cooling			Free air convection			
Flammability Rating			UL94V-1			
MTBF	MIL-HDBK-217F, 25°C		100,000			hours
PHYSICAL SPECIFICATIONS						
Weight			6oz (170g)			
Dimensions (L x W x H)	A type		4.11 x 1.65 x 1.22 in (104.4 x 42.0 x 31.0 mm)			
	B & C types		3.90 x 1.65 x 1.22 in (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, EMC, & COMPLIANCE						
Safety Approvals	UL/cUL (UL60950-1: 2nd edition.)(1), TUV/GS (EN60950-1: 2nd edition), CE					
EMI Requirements for CISPR-22	220VAC		B			Class
EMI Requirements for FCC PART-15	110VAC		B			Class
Compliance			RoHS and UL 94V-1			
CEC & Energy Star			CEC and Energy Star 2.0, Efficiency Level VI			

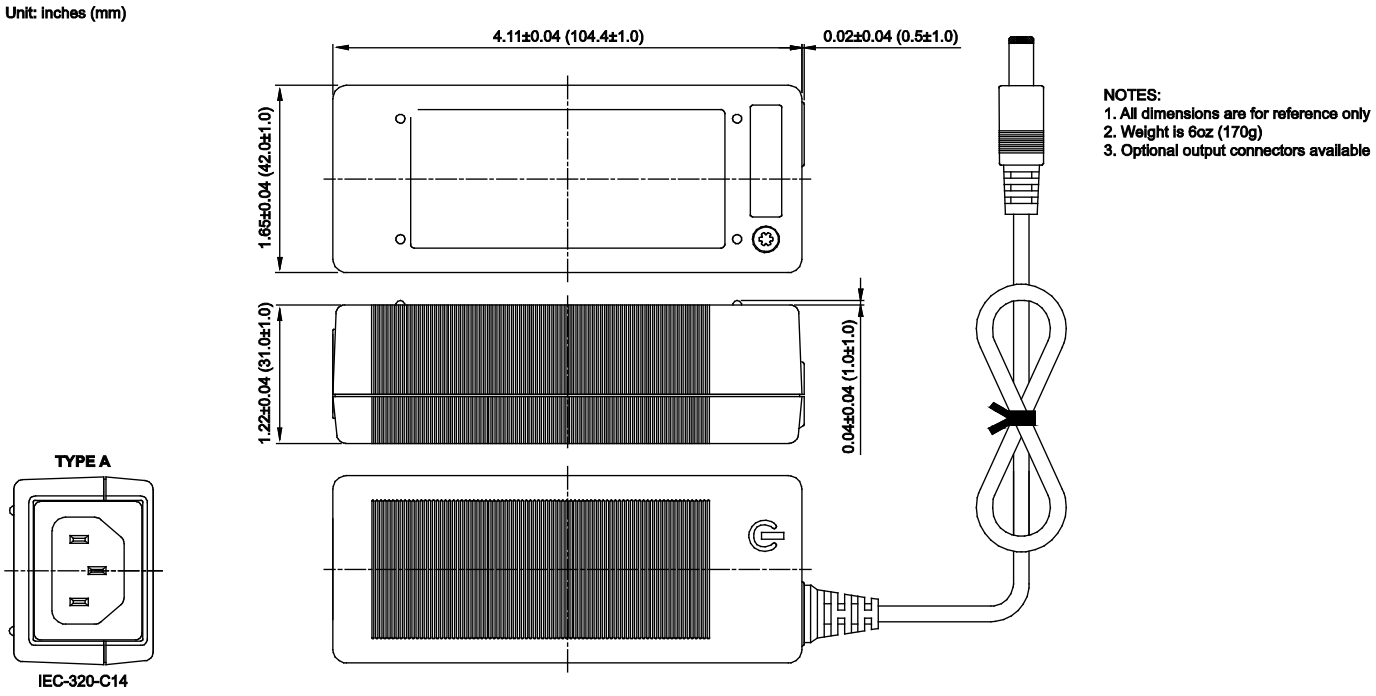
NOTES

1. This product is Listed to applicable standards and requirements by UL.

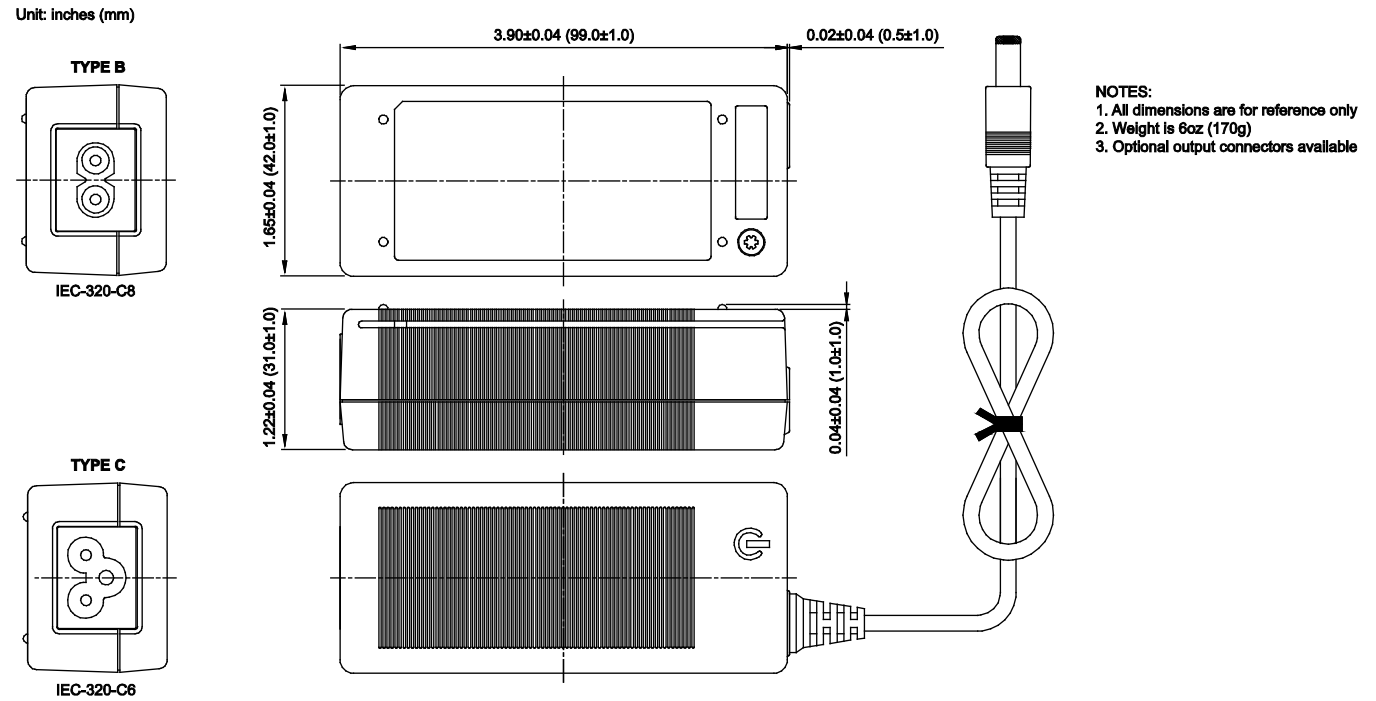
**Due to advances in technology, specifications subject to change without notice.*

MECHANICAL DRAWINGS

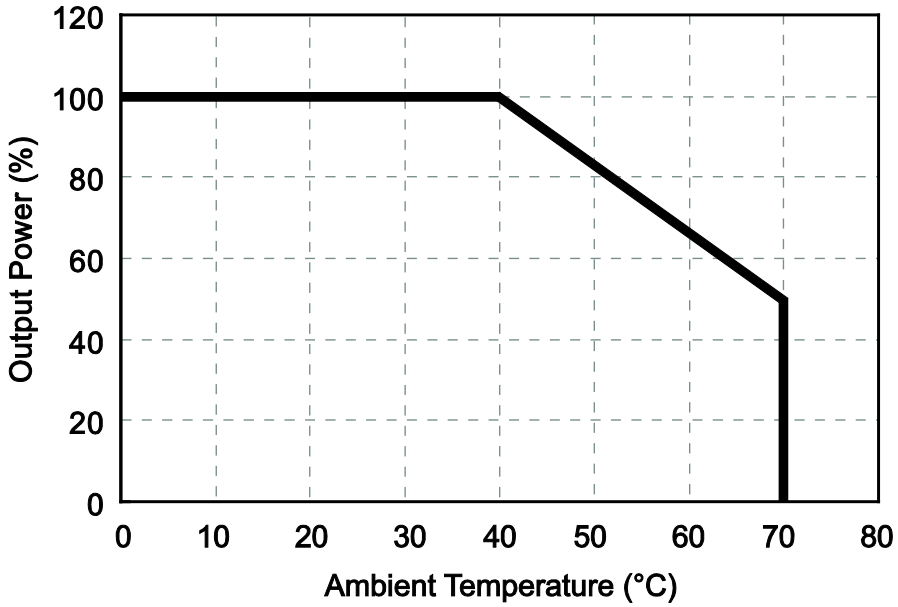
"A" TYPE MODELS



"B" & "C" TYPE MODELS



DERATING



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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