

"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
DTSPU21x-102	90~264 VAC	5~6 VDC	3.00 ~ 2.50 A	±5%	15W
DTSPU21x-103		6 ~ 8 VDC	2.30 ~ 1.87A	±5%	15W
DTSPU21x-104		8 ~ 11 VDC	2.50 ~ 1.81 A	±5%	20W
DTSPU21x-105		11 ~ 13 VDC	1.81 ~ 1.53 A	±5%	20W
DTSPU21x-106		13 ~ 16 VDC	1.53 ~ 1.25 A	±5%	20W
DTSPU21x-107		16 ~ 21 VDC	1.25 ~ 0.95 A	±4%	20W
DTSPU21x-108		21 ~ 27 VDC	0.95 ~ 0.74 A	±4%	20W
DTSPU21x-109		27 ~ 33 VDC	0.74 ~ 0.60 A	±3%	20W
DTSPU21x-110		33 ~ 40 VDC	0.60 ~ 0.50 A	±3%	20W
DTSPU21x-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

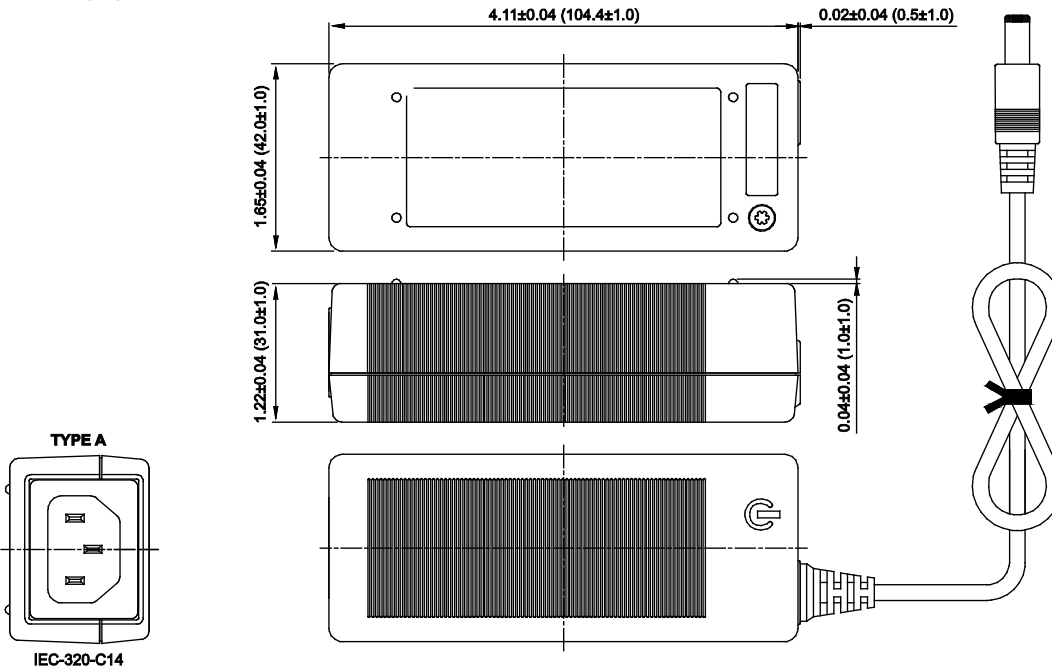
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
We reserve the right to change specifications based on technological advances.

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: 2 nd edition.), TUV/GS (EN60950-1: 2 nd 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			

MECHANICAL DRAWINGS

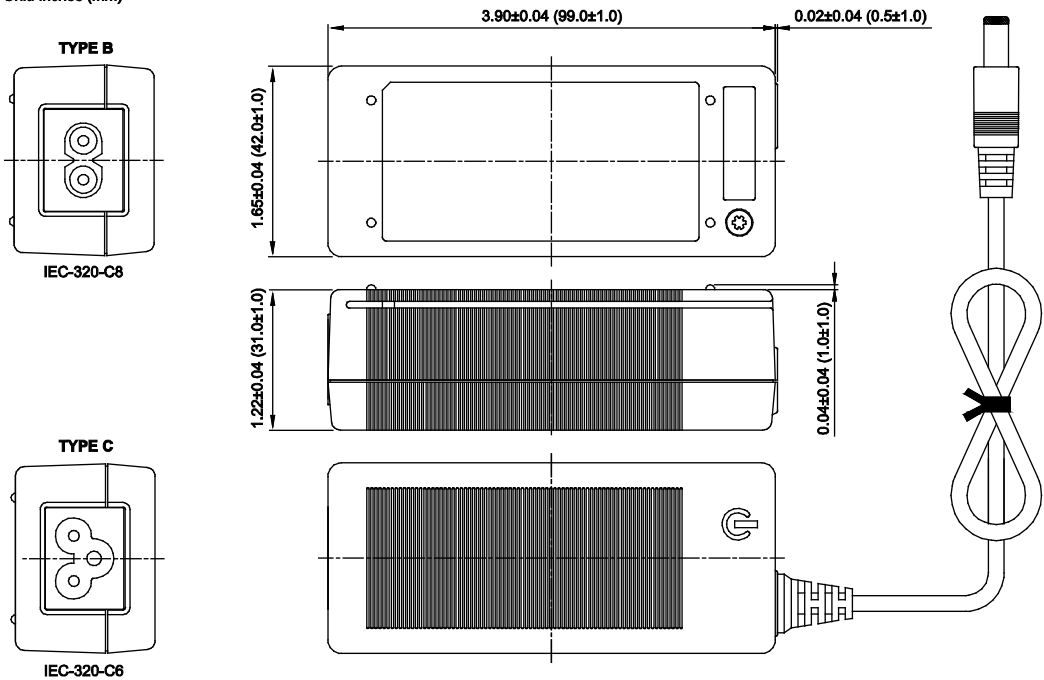
"A" TYPE MODELS

Unit: inches (mm)

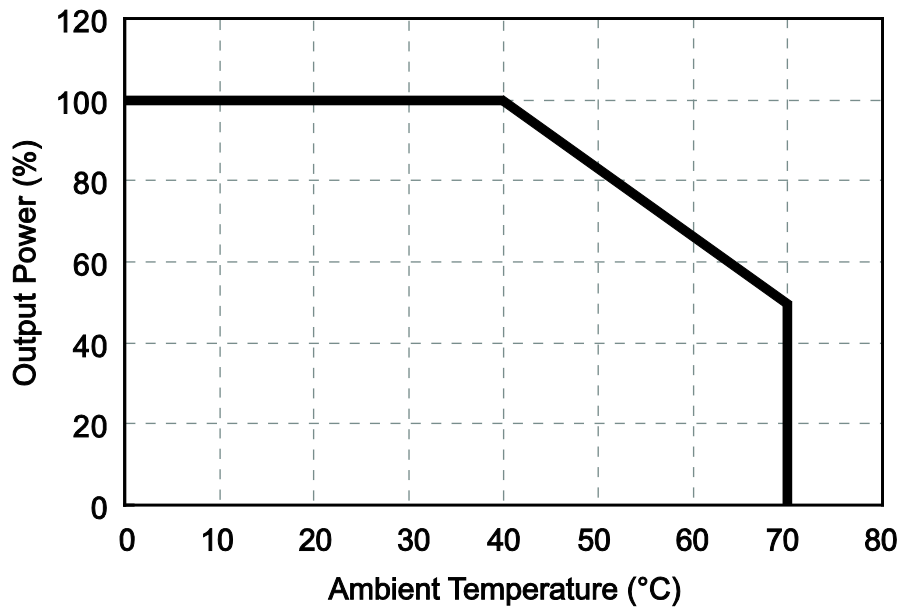


"B" & "C" TYPE MODELS

Unit: inches (mm)



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 ISO9001-2008 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
Web: www.wallindustries.com
Address: 5 Watson Brook Rd.
Exeter, NH 03833