



Size: 4.65in x 1.85in x 1.19in (118mm x 47mm x 30.3mm)

OPTIONS

- Output Cable
- Output Voltage

FEATURES

- Wide Operating Voltage of 90-264VAC
- IEC-320-C14 Input Inlet
- Optional Output Connectors Available
- Single Output
- RoHS2 Compliant
- Approved as Limited Power Source
- Class I
- Energy Star Efficiency Level VI, CoC V5 Tier 2
- Short Circuit and Over Load Protection
- UL60950-1: 2nd Edition, IEC 60950-1:2005/A2:2013, and EN695-1:2006/A2:2013 Safety Approvals

APPLICATIONS

- POS System
- AV Equipment
- Industrial PC
- Note PC
- Charger
- LED Lighting

DESCRIPTION

The DTSPU61A series of AC DC desktop power supplies offers 60 watts of output power. This series consists of single output models with a wide input operating voltage of 90-264VAC and output voltages ranging from 12VDC to 48VDC. Each model is Efficiency Level VI as well as RoHS compliant and have UL60950-1: 2nd Edition, IEC 60950-1:2005/A2:2013, and EN695-1:2006/A2:2013 safety approvals. Models are protected against short circuit and over load conditions and optional output connectors are available upon request. Please call factory for ordering details.

MODEL SELECTION TABLE

Model Number ⁽¹⁾	Input Voltage Range	Output Voltage	Output Current		Ripple & Noise	Total Regulation	Output Power	No Load Power Consumption	Efficiency
			Min.	Max.					
DTSPU61A-105	90-264VAC	12~13VDC	4.61A	5.00A	100mVp-p	±5%	60W	0.21W	87.7%
DTSPU61A-106		13~16VDC	3.75A	4.61A		±5%			87.7%
DTSPU61A-107		16~21VDC	2.85A	3.75A		±5%			87.7%
DTSPU61A-108		21~27VDC	2.22A	2.85A		±3%			88%
DTSPU61A-109		27~33VDC	1.81A	2.22A		±3%			88%
DTSPU61A-110		33~40VDC	1.50A	1.81A		±3%			88%
DTSPU61A-111		40~48VDC	1.25A	1.50A		±3%			88%

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.

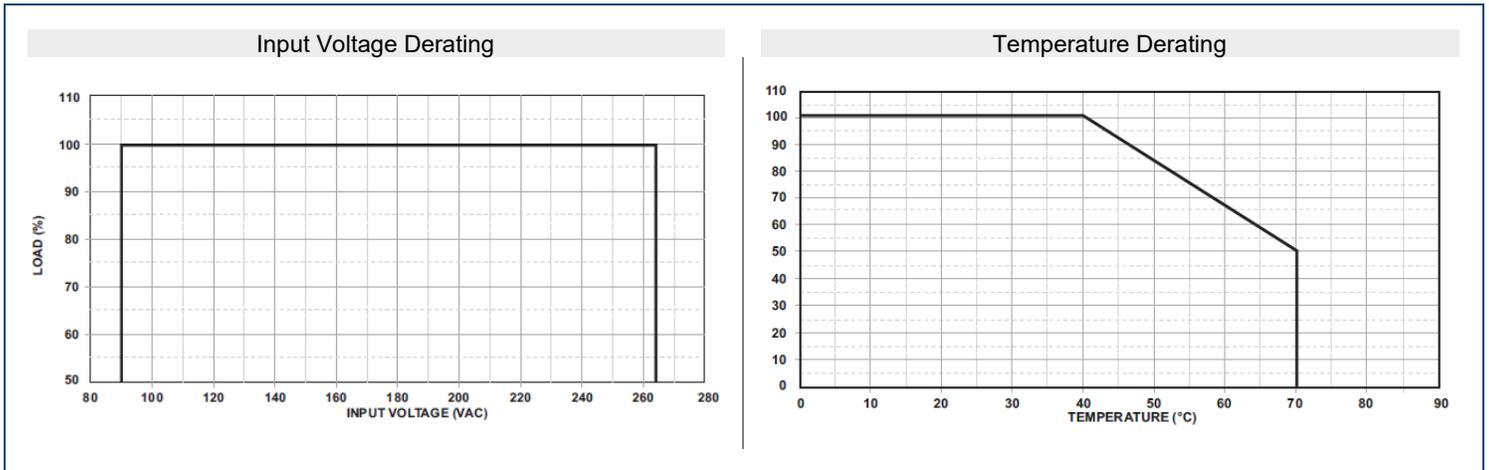
SPECIFICATION		TEST CONDITIONS	Min	Typ	Max	Unit
INPUT SPECIFICATIONS						
Input Voltage Range	Safety Approvals Input Voltage Range		100		240	VAC
	Operate Voltage Range		90		264	
Input Frequency	Sine Wave		47		63	Hz
Input Current	Low Line	Io=Full Load, Vin=100VAC		1.45		A
	High Line	Io=Full Load, Vin=240VAC		1.45		
High Line Inrush Current	Io=Full Load, 25°C, Cool Start, Vin=240VAC				105	A
OUTPUT SPECIFICATIONS						
Output Voltage			See Table			
Line Regulation ⁽⁴⁾	Io=Full Load, 100~120VAC		0.5		1	%
Load Regulation ⁽⁵⁾	Vin=230VAC, 10~90% Load Change at Condition		3		5	%
Output Power			See Table			
Output Current			See Table			
Ripple & Noise ⁽⁶⁾	Full Load, Vin=90VAC			100		mVp-p
Transient Response Time	Io=Full Load to Half Load, Vin=100VAC				4	mS
Start-Up Time	Io=Full Load, Vin=100~240VAC				3	S
Hold-Up Time ⁽⁷⁾	Io=Full Load, Vin=110VAC		10			mS
Temperature Coefficient	Full Load, Vin=100~240VAC				±0.04	%/°C
No Load Power Consumption	No Load, Vin=230VAC				0.21	W
PROTECTION						
Over Load Protection	Recovers automatically after fault condition is removed		110		150	%
Short Circuit Protection			Automatic Recovery			
ENVIRONMENTAL SPECIFICATIONS						
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	All Conditions				3000	m
Vibration	10~500Hz, 10min./1cycle, 60min. each along X, Y, Z axes				5	G
Surge Voltage	Line-Neutral				1	kV
	Line-PE & Neutral-PE				2	
MTBF	Operating temperature at 25°C, calculated per MIL-HDBK-217F		100,000			Hours
GENERAL SPECIFICATIONS						
Efficiency ⁽⁸⁾	Io=Full Load, Vin=230VAC		87		88	%
Isolation Resistance	Test Voltage=500VDC		50			MΩ
Dielectric Withstanding Voltage	Primary to Secondary				4242	VDC
	Primary to PE				2652	
Safety Ground Leakage Current	Vin=240VAC/60Hz				0.75	mA
PHYSICAL SPECIFICATIONS						
Weight			11.99oz (340g)			
Dimensions (L x W x H)			4.65in x 1.85in x 1.19in (118mm x 47mm x 30.3mm)			
SAFETY & EMC CHARACTERISTICS						
Safety Approvals	UL60950-1: 2 nd Edition ⁽⁸⁾ , IEC 60950-1:2005/A2:2013, EN695-1:2006/A2:2013					
Protection Classes			Class I			
Flammability Rating			UL94V-1			
EMC Emission	Compliance to EN55022 (CISPR22)		Class B			

NOTES

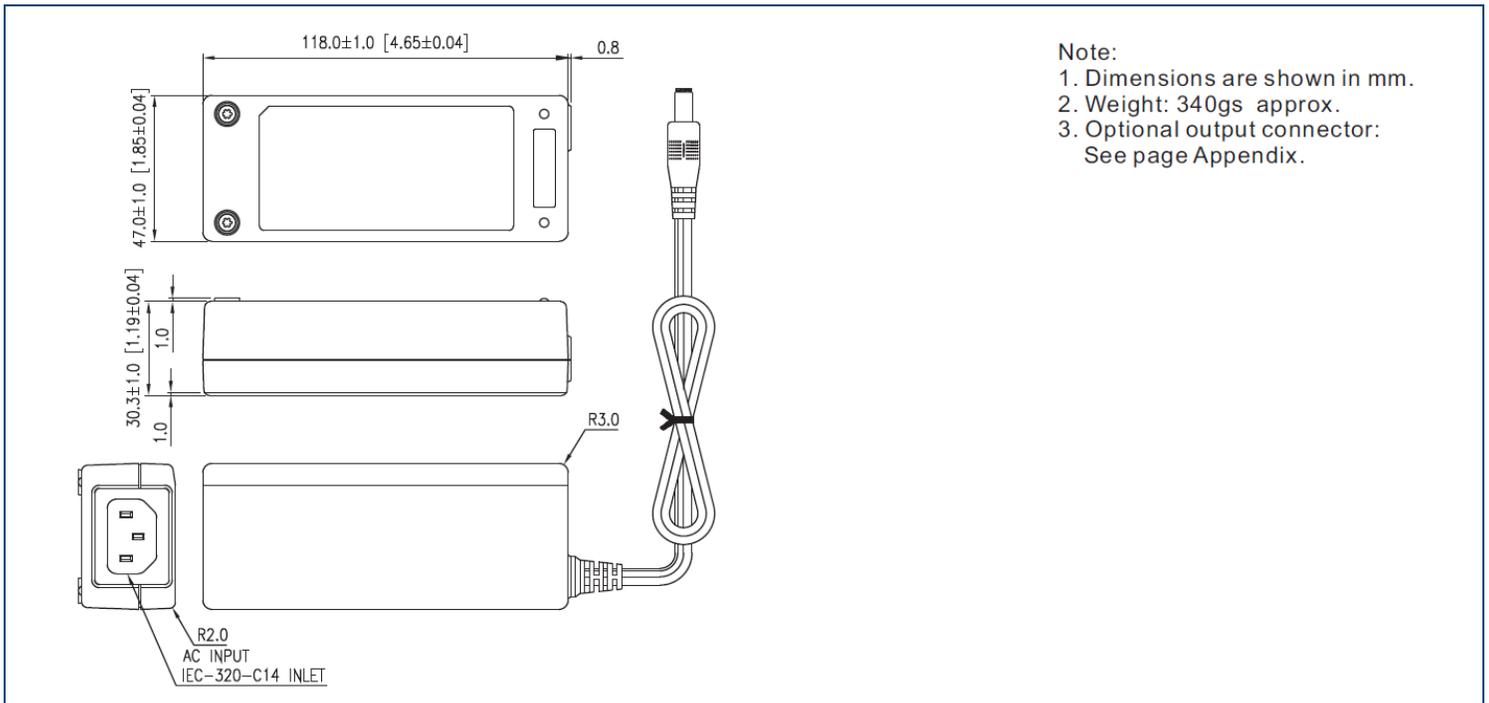
- (1) DTSPU61A-105 is required to use AWG#16/4FT output cable.
DTSPU61A-106~111 are required to use AWG#18/4FT output cable.
The electrical characteristics will be changed by modified output cable.
- (2) Output can provide up to peak load when the power supply starts up. Continuous staying in more than rated load is not allowed.
- (3) Each output is checked to be within voltage accuracy in 60% rated load condition.
- (4) Line Regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
- (5) Load Regulation is defined by changing $\pm 40\%$ of measured output load from 60% rated load.
- (6) Ripple & Noise measured by using 20MHz BW limited oscilloscope & each output terminated with $0.47\mu\text{F}$ capacitor at rated load and nominal line.
- (7) Hold up time is measured from end of last charging pulse to time which the main output drops 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 are subject to change without notice.

DERATING CURVES



MECHANICAL DRAWINGS



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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