



**FEATURES**

- Wide Operating Voltage Range of 90 to 260VAC
- IEC-320-C14 Input Inlet
- Active Power Correction
- Optional ON/OFF Switch
- UL94V-1 min. Compliant
- Short Circuit, Over Voltage, and Over Load Protection
- RoHS2 Compliant and DoE Level VI Compliant
- UL 60905-1:2<sup>nd</sup> Edition, CSA C22.2 No.60950-1-07, EN60905-1:2005/A2:2013, and IEC 60950-1:2005/A2:2013 Safety Approvals

**DESCRIPTION**

The DTSPU150 series of AC/DC desktop power supplies offers up to 150 watts of output power in a 7.44" x 3.52" x 1.79" package. This series consists of single output models with a wide operating voltage range from 90 to 260VAC and an IEC-320-C14 input inlet. There is short circuit, over voltage, and over load protection available for each model as well as active power correction and optional on/off switch. This series has UL 60905-1:2<sup>nd</sup> Edition, CSA C22.2 No.60950-1-07, EN60905-1:2005/A2:2013, and IEC 60950-1:2005/A2:2013 safety approvals.



Size: 7.44in x 3.52in x 1.79in (189mm x 89.5mm x 45.5mm)

**MODEL SELECTION TABLE**

Model Number	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise	Output Power	Efficiency
DTSPU150-108	90-260VAC	24VDC	6.25A	120mVp-p	150W	89%

**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 Approval Input Voltage Range	100		240	VAC
	Operate Voltage Range	90		260	
Input Frequency		47		63	Hz
Power Factor Correction	Io=Full Load, Vin=240VAC	0.95		1	
Input Current	Low Line, Full Load, Vin=100VAC		1.89		A
	High Line, Full Load, Vin=240VAC		0.78		
Inrush Current	Low Line, Full Load, 25°C, Cool Start, Vin=100VAC			30	A
	High Line, Full Load, 25°C, Cool Start, Vin=240VAC			75	
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.75	mA
<b>OUTPUT SPECIFICATIONS</b>					
Output Voltage		See Table			
Line Regulation <sup>(3)</sup>	Full Load, Vin=100~120VAC			1	%
Load Regulation <sup>(4)</sup>	Vin=230VAC, 10~90% Load Change at Condition		5		%
Output Power		See Table			
Output Current		See Table			
Ripple & Noise <sup>(5)</sup>			120		mVp-p
Transient Response Time	Io=Full Load to Half Load, Vin=110			4	mS
Hold-Up Time <sup>(6)</sup>	Full Load, Vin=100VAC		20		mS
Start-Up Time	Full Load, Vin=100~240VAC			2	S
Temperature Coefficient	Full Load, Vin=100~240VAC			±0.04	%/°C
<b>PROTECTION</b>					
Short Circuit Protection		Automatic Recovery			
Over Load Protection	Recovers automatically after fault condition is removed	110		150	%
Over Voltage Protection		112		132	%
<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	%RH
Storage Humidity		0		95	%RH
Operating Altitude	All conditions			2000	m
Vibration	10~500Hz, 10min./cycle, 60min. each along X, Y, Z axes			5	G
MTBF	Operating temperature at 25°C, per MIL-HDBK-217F	100,000			Hours

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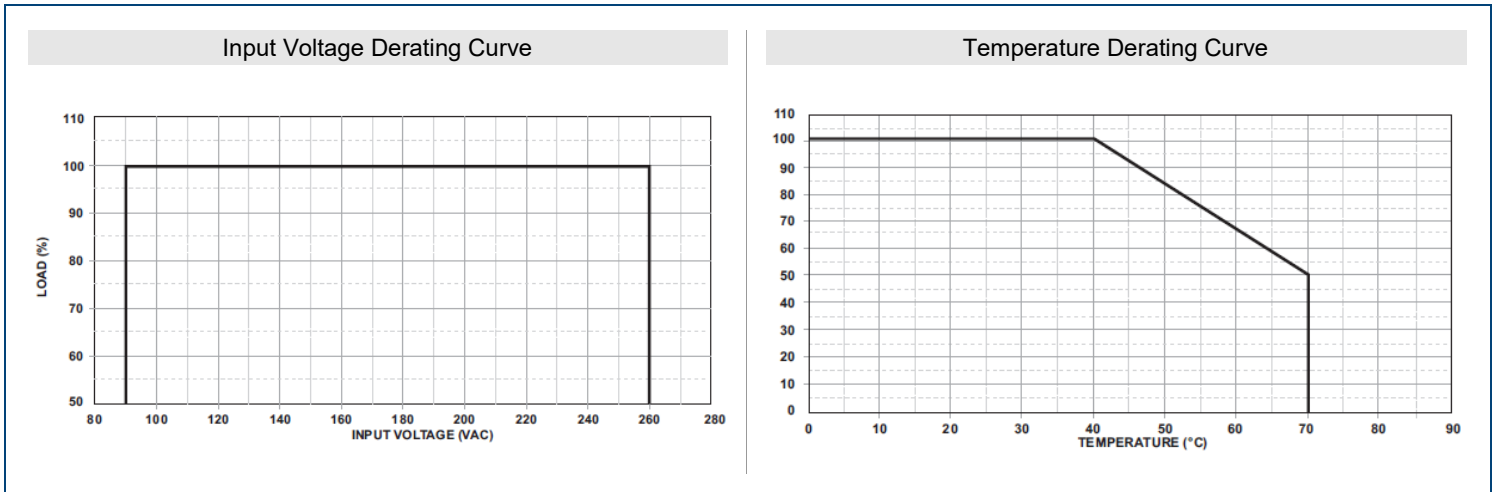
SPECIFICATION	TEST CONDITIONS		Min	Typ	Max	Unit
<b>GENERAL SPECIFICATIONS</b>						
Efficiency			See Table			
Dielectric Withstanding Voltage	Primary to Secondary				4242	VDC
	Primary to PE				2121	
Surge Voltage	Line-Neutral				1	kV
	Line-PE & Neutral-PE				2	
<b>PHYSICAL SPECIFICATIONS</b>						
Weight			27.44~28.22oz (778~800g)			
Dimensions (L x W x H)			7.44in x 3.52in x 1.79in (189mm x 89.5mm x 45.5mm)			
Output Cable			AWG#16*2C/4FT			
Cooling			Free Air Convection			
Flammability Rating			UL94V-1			
<b>SAFETY CHARACTERISTICS</b>						
Safety Approvals			UL 60950-1:2 <sup>nd</sup> Edition <sup>(9)</sup> CSA C22.2 No.60950-1-07 EN60950-1:2006/A2:2013 IEC 60950-1:2005/A2:2013			
EMC Emission			Compliance to EN55022 (CISPR22) FCC Part-15			
Protection Classes			Class B Class B Class I			
Electro Static Discharge	IEC61000-4-2	Air Discharge			8	kV
		Contact Discharge			4	

**NOTES**

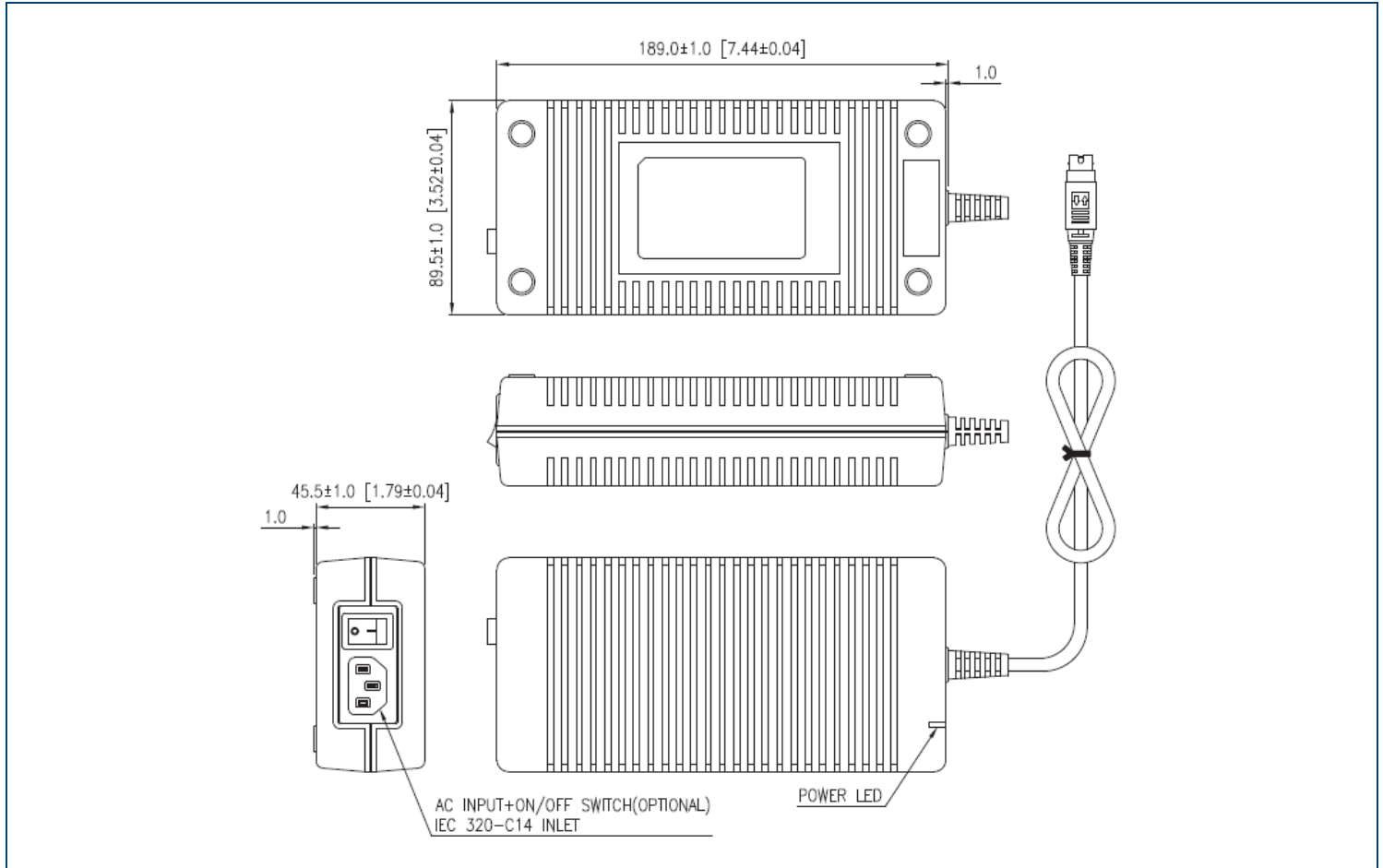
- Output can provide up to peak load when power supply starts up. Staying in more than rated load continually is not allowed.
- At factory, each output is checked to be within voltage accuracy in 60% rated load condition.
- Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
- Load regulation is defined by changing ±40% of measured output load from 60% rated load.
- 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.
- 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.
- This series is required to use AWG#16\*2C/4FT output cable. Regulation and efficiency will be changed by modified output cable.
- Optional output connectors are available, please contact factory for more details.
- This product is Listed to applicable standards and requirements by UL.

*\*Due to advances in technology, specifications 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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