



Size: 6.61in x 3.06in x 1.78in
 (168mm x 77.6mm x 45.2mm)

FEATURES

- Wide Operating Input Voltage Range of 90~260VAC
- Active Power Factor Correction
- IEC-320-C14 Input Inlet
- Cooling by Free Air Convection
- RoHS2 Compliant
- DoE Level VI Compliant
- Over Voltage (Latch Off) and Short Circuit Protection
- Protection Class I
- CAN/CSA C22.2 No. 62368-1-1, EN62368-1:2014+A11:2017, IEC62368-1, UL62368-1: 2nd, EN60950-1:2006/A2:2013, and IEC 60950-1:2005/A2:2013 Safety Approvals

APPLICATIONS

- Industrial PC
- Power Tools
- Audio & Video Equipment
- Inspection Analyzer

DESCRIPTION

The DTSPU151A series of AC/DC desktop power supplies offers up to 150 watts of output power in a 6.61" x 3.06" x 1.78" package with an IEC-320-C14 input inlet. This series consists of single output models with wide operating input voltage range of 90~260VAC. Each model in this series has active power factor correction, is RoHS2 and Level VI compliant, and is cooled by free air convection. This series has CAN/CSA C22.2 No. 62368-1-1, EN62368-1:2014+A11:2017, IEC62368-1, UL62368-1: 2nd, EN60950-1:2006/A2:2013, and IEC 60950-1:2005/A2:2013 safety approvals.

MODEL SELECTION TABLE

Model Number	Operating Input Voltage Range	Output Voltage	Output Current	Ripple & Noise ⁽⁵⁾	Total Regulation	Efficiency ⁽⁷⁾	Output Power
DTSPU151A-105	90~260VAC	12VDC	12.5A	120mVp-p	±5%	88%	150W
DTSPU151A-106		15VDC	10.0A	150mVp-p	±5%	88%	
DTSPU151A-107		19VDC	7.89A	190mVp-p	±5%	89%	
DTSPU151A-108		24VDC	6.25A	240mVp-p	±4%	89%	
DTSPU151A-109		30VDC	5.00A	300mVp-p	±3%	90%	
DTSPU151A-110		36VDC	4.16A	300mVp-p	±3%	90%	
DTSPU151A-111		48VDC	3.12A	300mVp-p	±3%	91%	

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 & Specification in Label	100		240	VAC
	Input Operating Voltage Range, See Input Voltage Derating Curve	90		260	
Input Frequency	Sine Wave	47		63	Hz
Input Current	Low Line	Full Load, Vin=100VAC		2	A
	High Line	Full Load, Vin=240VAC			
Inrush Current	Low Line	Full Load, 25°C, Cool Start, Vin=100VAC		60	A
	High Line	Full Load, 25°C, Cool Start, Vin=240VAC		120	
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.75	mA
Power Factor Correction		0.95		1	
OUTPUT SPECIFICATIONS					
Output Voltage				See Table	
Line Regulation ⁽³⁾	Full Load, Vin=100~120VAC or 200~240VAC			1	%
Total Regulation				See Table	
Output Power				See Table	
Output Current				See Table	
Ripple & Noise ⁽⁵⁾				See Table	
Time of Transient Response	Io=Full Load to Half Load, Vin=110VAC			4	ms
No Load Consumption			0.21		W
Hold-Up Time ⁽⁶⁾	Full Load, Vin=110VAC		16		ms
Start-Up Time	Full Load, Vin=100~240VAC			2	S
Temperature Coefficient	All Conditions			±0.04	%/°C

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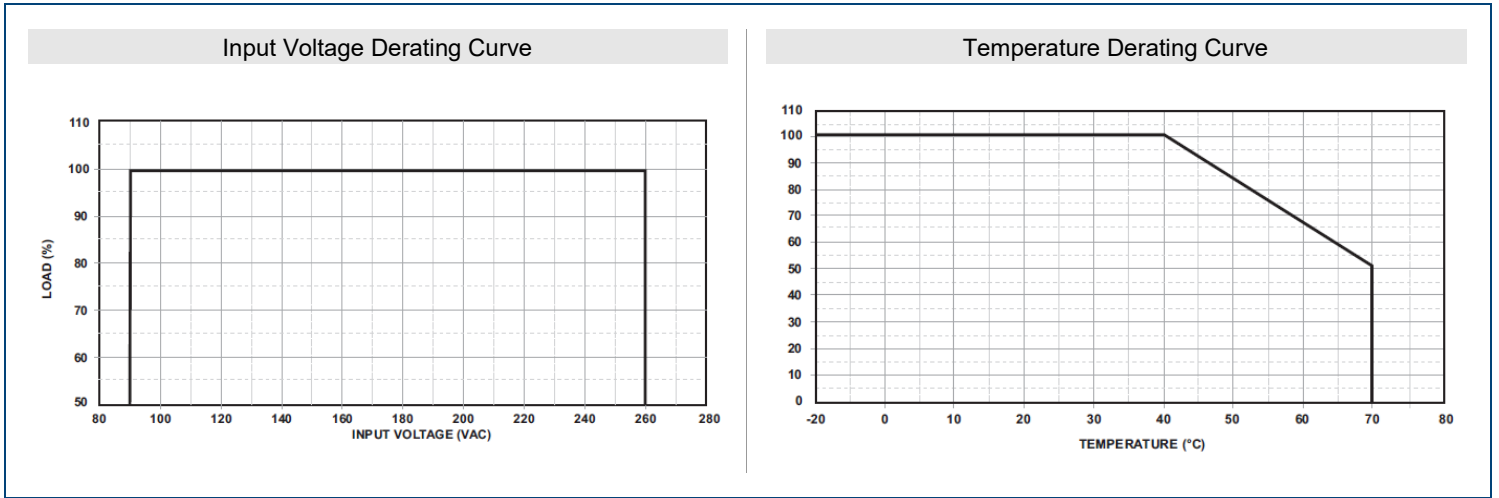
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
PROTECTION					
Short Circuit Protection		Automatic Recovery			
Over Voltage Protection	Latch Off, Recycle Input to Reset	112		132	%
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature	See Derating Curve, Derate linearly from 100% load at 40°C to 50% load at 70°C	-20		70	°C
Storage Temperature	10~95%RH	-40		85	°C
Operating Humidity	Non-Condensing	0		95	%RH
Storage Humidity		0		95	%RH
Operating Altitude (Elevation)	All Conditions			5000	m
Vibration	10~500Hz, 10min./1cycle, 60min. each along X,Y,Z axes			5	G
Operating Altitude			5000		m
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	100,000			Hours
GENERAL SPECIFICATIONS					
Efficiency ⁽⁷⁾	Full Load, Vin=230VAC	See Table			
Insulation Resistance	Primary to Secondary, 500VDC, 25°C/70%RH	50			MΩ
Dielectric Withstanding Voltage	Primary to Secondary, Limit Current <10mA			4242	VDC
	Primary to PE, Limit Current <10mA			2121	
PHYSICAL SPECIFICATIONS					
Weight		Approx. 1.59lb~1.65lb (720~750g)			
Dimensions (L x W x H)		6.61in x 3.06in x 1.78in (168mm x 77.6mm x 45.2mm)			
Cooling		Free Air Convection			
SAFETY CHARACTERISTICS					
Safety Approvals ⁽⁹⁾		CAN/CSA C22.2 No. 62368-1-1 EN62368-1:2014+A11:2017 IEC62368-1 UL62368-1:2 nd EN60950-1:2006/A2:2013 IEC 60950-1:2005/A2:2013			
EMC Emission		Compliance to EN55032 (CISPR32) EN55035			
Electro Static Discharge	Air Discharge, IEC61000-4-2			8	kV
	Contact Discharge, IEC61000-4-2			4	
Surge Voltage	Line-Neutral			1	kV
	Line-PE & Neutral-PE			2	
Protection Class		Class I			

NOTES

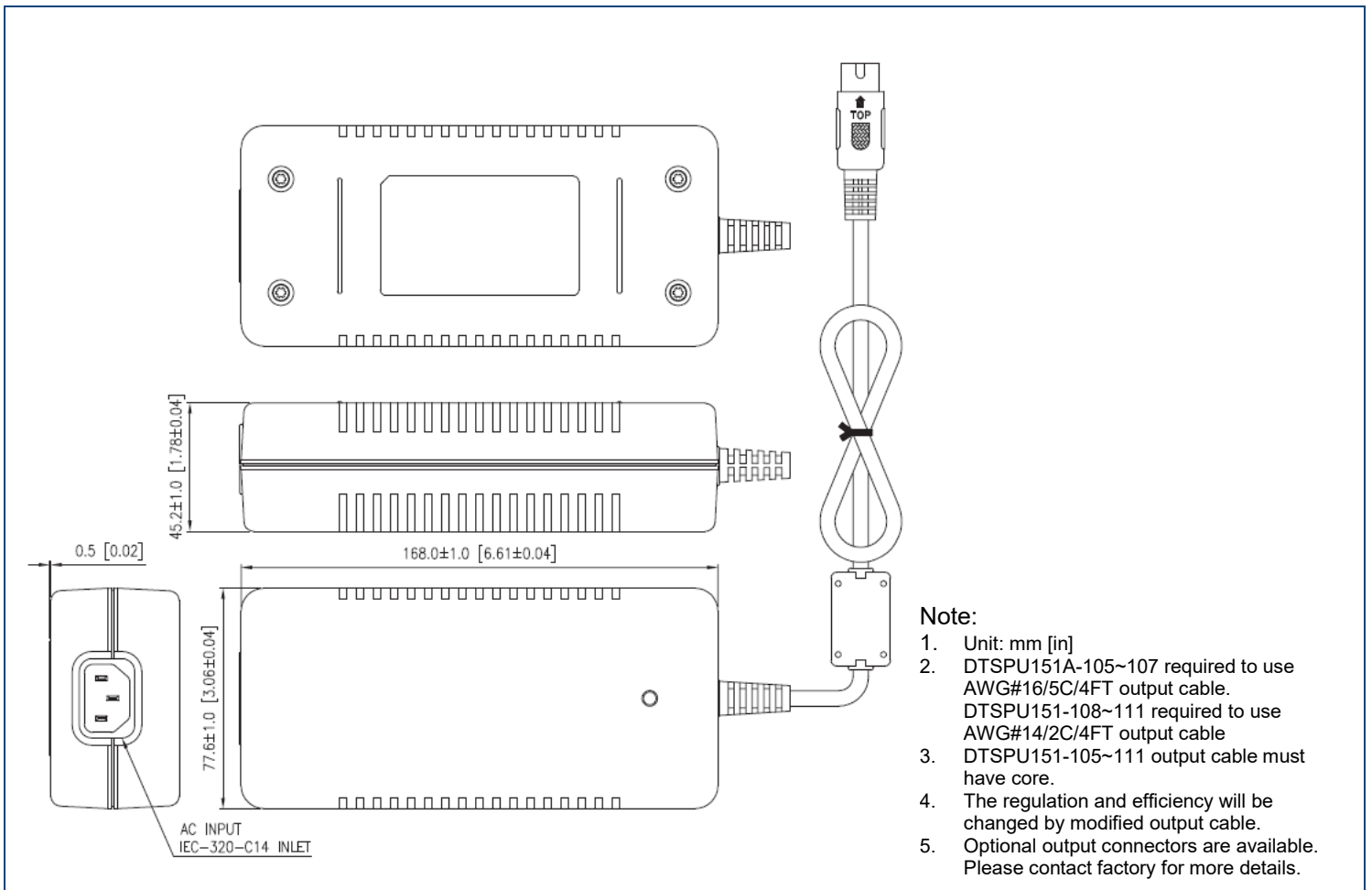
- Output can provide up to peak load when the power supply starts up. Continually staying in more than rated load is not allowed.
- Each output is checked to be within voltage accuracy at factory in 60% rated load condition.
- Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
- Load regulation is defined by changing ±40% of measured output load from 60% rated load.
- Ripple is measured from peak to peak with a bandwidth-limit of 20MHz (measured at the output connector with a 0.1uF ceramic capacitor and a 47uF electrolytic capacitor).
- 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.
- Efficiency is measured at rated load and nominal line.
- Output Cables:
 DTSPU151A-105~107 required to use AWG#16/5C/4FT output cable.
 DTSPU151-108~111 required to use AWG#14/2C/4FT output cable
 DTSPU151-105~111 output cable must have core.
 The 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.

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