



Size: 6.61in x 3.06in x 1.77in (168mm x 77.6mm x 45mm)

OPTIONS

- Output Voltage
- Output Cable

FEATURES

- Wide Operating Voltage Range of 90-264VAC
- IEC-320-C14 Input Inlet
- Single to Quad Outputs Available
- Optional Output Connectors Available
- Useful in Various Applications
- Low Ripple and Noise
- Class I
- Efficiency Level VI Compliant (Except DTSPU65-101 and DTSPU65-403)
- RoHS Compliant
- Short Circuit, Over Voltage and Over Load Protection
- UL 60950-1:2nd Edition, IEC 60950-1:2005/A2:2013, EN60950-1:2006/A2:2013 Safety Approvals

APPLICATIONS

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

DESCRIPTION

The DTSPU65 series of AC DC desktop power supplies offers up to 80 watts of continuous output power. This series consists of models ranging from single to quad outputs with input voltage range of 90~264VAC and various output voltages. Models are equipped with an input inlet of IEC-320-C14 and multiple output cables are available. All models are protected against short circuit, over voltage and over current conditions, and have UL 60950-1:2nd Edition, IEC 60950-1:2005/A2:2013, EN60950-1:2006/A2:2013 safety approvals. All models are RoHS compliant and are Efficiency Level VI compliant (excluding DTSPU65-101 and DTSPU65-403 models). Please call factory for ordering details.

MODEL SELECTION TABLE

Single Output Models

Model Number ⁽¹⁾	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise	No Load Power Consumption	Output Power	Total Regulation	Avg. Efficiency	Efficiency Level
DTSPU65-101	90~264VAC	3~5VDC	16.60~10.00A	50mVp-p	3W	50W	±7%	65%	-
DTSPU65-102		5~6VDC	13.00~10.80A	50mVp-p	0.21W	65W	±7%	87%	Level VI
DTSPU65-103		6~8VDC	11.60~8.70A	60mVp-p	0.21W	69.6W	±5%	88%	Level VI
DTSPU65-104		8~11VDC	9.37~6.81A	80mVp-p	0.21W	75W	±5%	88%	Level VI
DTSPU65-105		11~13VDC	6.66~6.15A	100mVp-p	0.21W	80W	±5%	88%	Level VI
DTSPU65-106		13~16VDC	6.15~5.00A	100mVp-p	0.21W	80W	±5%	88%	Level VI
DTSPU65-107		16~21VDC	5.00~3.80A	100mVp-p	0.21W	80W	±5%	88%	Level VI
DTSPU65-108		21~27VDC	3.80~2.96A	100mVp-p	0.21W	80W	±5%	88%	Level VI
DTSPU65-109		27~33VDC	2.96~2.42A	100mVp-p	0.21W	80W	±3%	88%	Level VI
DTSPU65-110		33~40VDC	2.42~2.00A	100mVp-p	0.21W	80W	±3%	90%	Level VI
DTSPU65-111		40~48VDC	2.00~1.66A	100mVp-p	0.21W	80W	±3%	90%	Level VI

MODEL SELECTION TABLE

Multiple Output Models

Model Number	Output	Input Voltage Range	Output Voltage	Output Current Min.	Output Current Max.	Ripple & Noise	No Load Power Consumption	Output Power	Regulation Max.	Avg. Efficiency	Efficiency Level
DTSPU65-200	Output #1	90~264VAC	+3.3V	1.4A	7A	50mVp-p	0.3W	56.1W	±7%	86%	Level VI
	Output #2		+12V	0.55A	2.75A	120mVp-p			±5%		
DTSPU65-201	Output #1	90~264VAC	+5V	0.7A	7A	50mVp-p	0.3W	65W	±5%	86%	Level VI
	Output #2		+12V	0.7A	3A	120mVp-p			±5%		
DTSPU65-202	Output #1	90~264VAC	+5V	1.4A	7A	50mVp-p	0.3W	65W	±5%	86%	Level VI
	Output #2		+15V	0.6A	3A	150mVp-p			±6%		
DTSPU65-203	Output #1	90~264VAC	+5V	1.4A	7A	50mVp-p	0.3W	65W	±5%	86%	Level VI
	Output #2		+24V	0.4A	2A	240mVp-p			±5%		
DTSPU65-204	Output #1	90~264VAC	+3.3V	1.4A	7A	50mVp-p	0.3W	38.1W	±7%	83.4%	Level VI
	Output #2		+5V	0.6A	3A	50mVp-p			±5%		
DTSPU65-215	Output #1	90~264VAC	+5V	1.4A	7A	50mVp-p	0.3W	59W	±5%	86%	Level VI
	Output #3		-24V	0.4A	1A	100mVp-p			±5%		
DTSPU65-300	Output #1	90~264VAC	+3.3V	1.4A	7A	50mVp-p	0.3W	65W	±7%	86%	Level VI
	Output #2		+12V	0.6A	3A	120mVp-p			±5%		
	Output #3		-12V	0.16A	0.8A	120mVp-p			±7%		
DTSPU65-301	Output #1	90~264VAC	+5V	0.6A	6A	50mVp-p	0.3W	65W	±5%	86%	Level VI
	Output #2		+12V	0.3A	3A	100mVp-p			±5%		
	Output #3		-5V	0A	0.8A	50mVp-p			±5%		
DTSPU65-302	Output #1	90~264VAC	+5V	0.6A	6A	50mVp-p	0.3W	65W	±5%	86%	Level VI
	Output #2		+12V	0.6A	3A	120mVp-p			±5%		
	Output #3		-12V	0A	0.8A	120mVp-p			±5%		
DTSPU65-303	Output #1	90~264VAC	+5V	0.6A	6A	50mVp-p	0.3W	65W	±5%	86%	Level VI
	Output #2		+15V	0.6A	3A	150mVp-p			±5%		
	Output #3		-15V	0A	0.8A	150mVp-p			±5%		
DTSPU65-304	Output #1	90~264VAC	+5V	0.7A	7A	50mVp-p	0.3W	65W	±5%	86%	Level VI
	Output #2		+24V	0.2A	2A	240mVp-p			±5%		
	Output #3		-24V	0A	0.8A	240mVp-p			±5%		
DTSPU65-305	Output #1	90~264VAC	+5V	0.6A	6A	50mVp-p	0.3W	65W	±5%	86%	Level VI
	Output #2		+24V	0.2A	2A	240mVp-p			±5%		
	Output #3		-12V	0A	0.8A	120mVp-p			±5%		
DTSPU65-306	Output #1	90~264VAC	+3.3V	0.7A	7A	50mVp-p	0.3W	63.1W	±7%	86%	Level VI
	Output #2		+12V	0.6A	3A	120mVp-p			±5%		
	Output #3		-5V	0A	0.8A	50mVp-p			±5%		
DTSPU65-403	Output #1	90~264VAC	+5V	0.6A	3.5A	50mVp-p	0.3W	65W	±5%	86%	-
	Output #2		+24V	0.1A	1.5A	240mVp-p			±5%		
	Output #3		+12V	0A	0.25A	120mVp-p			±5%		
	Output #4		-12V	0A	0.15A	120mVp-p			±5%		

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.

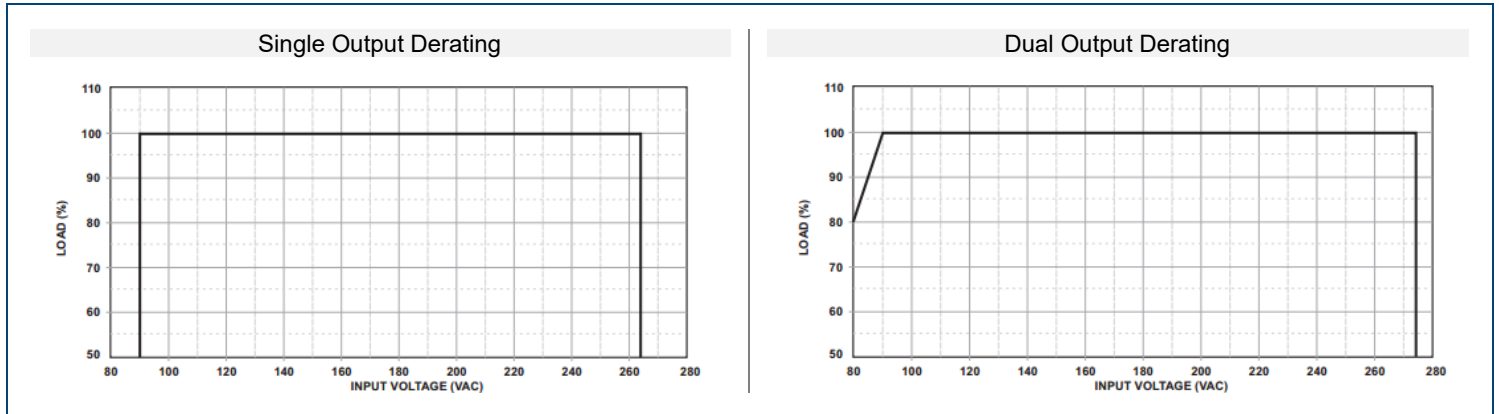
SPECIFICATION		TEST CONDITIONS	Min	Typ	Max	Unit
INPUT SPECIFICATIONS						
Input Voltage Range	Safety Approvals Input Voltage Range		100		240	VAC
	Operate Voltage Range		90		264	
Input Frequency			47		63	Hz
Input Current	Low Line	Io=Full Load, Vin=100VAC			1.9	A
	High Line	Io=Full Load, Vin=240VAC			1.9	
Inrush Current	Low Line	Io=Full Load, 25°C, Cool Start, Vin=115VAC			30	A
	High Line	Io=Full Load, 25°C, Cool Start, Vin=230VAC			65	
OUTPUT SPECIFICATIONS						
Output Voltage			See Table			
Line Regulation ⁽⁴⁾	Io=Full Load		0.5		1	%
Load Regulation ⁽⁵⁾	Vin=230VAC		3		7	%
Output Power			See Table			
Output Current			See Table			
Ripple & Noise ⁽⁶⁾			See Table			
Transient Response Time	Io=Full Load to Half Load, Vin=100VAC				4	mS
Start-Up Time	Io=Full Load, Vin=100VAC				2	S
Hold-Up Time ⁽⁷⁾	Io=Full Load, Vin=110VAC		12			mS
Temperature Coefficient	All Outputs				±0.04	%/°C
PROTECTION						
Over Load Protection			110		150	%
Over Voltage Protection			112		132	%
Short Circuit Protection			Automatic Recovery			
ENVIRONMENTAL SPECIFICATIONS						
Operating Temperature			0		70	°C
Storage Temperature			-40		85	°C
Operating Humidity	Non-Condensing		0		95	%
Storage Humidity			0		95	%
Altitude					5000	m
Cooling			Free Air Convection			
Power Derating			Derate linearly from 100% load at 40°C to 50% load at 70°C			
MTBF	Operating temperature at 25°C, calculated per MIL-HDBK-217F		100,000			Hours
GENERAL SPECIFICATIONS						
Efficiency	Io=Full Load, Vin=230VAC		75		90	%
Safety Ground Leakage Current	Vin=240VAC/60Hz				0.75	mA
Dielectric Withstanding Voltage	Primary to Secondary				4242	VDC
	Primary to PE				2414	
Isolation Resistance			50			MΩ
Operating Altitude					5000	m
Vibration	10~500Hz, 10min./1cycle, 60 min. each along X, Y, Z axes				5	G
Surge Voltage	Line-Neutral				1	kV
	Line-PE & Neutral-PE				2	
Flammability Rating			UL94V-1			
PHYSICAL SPECIFICATIONS						
Weight			Approx. 15.87~24.69oz (450-700g)			
Dimensions (L x W x H)			6.61in x 3.06in x 1.77in (168mm x 77.6mm x 45mm)			
SAFETY						
Safety Approvals ⁽²⁾			UL 60950-1:2 nd Edition IEC 60950-1:2005/A2:2013 EN60950-1:2006/A2:2013			
Protection Class			Class I			
EMC Emission			B Class			
Electro Static Discharge	Air Discharge, IEC61000-4-2				8	kV
	Contact Discharge, IEC61000-4-2				6	kV

NOTES

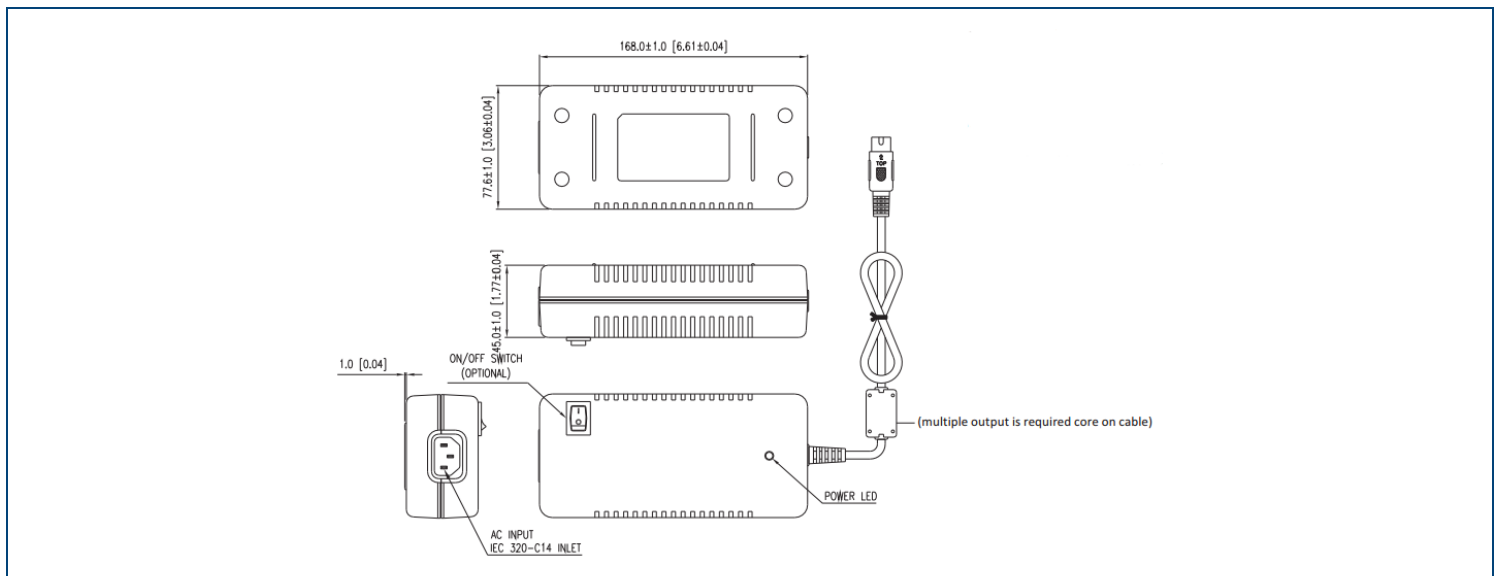
- (1) The DTSPU65-105-11V: 73.26W (max.)
DTSPU65-101~106 are required to use AWG#16X5C/4FT output cable.
DTSPU65-107 is required to use AWG#16X2C/4FT output cable.
DTSPU65-108~109 are required to use AWG#18X2C/6FT output cable.
DTSPU65-110~111 are required to use AWG#20X2C/6FT output cable.
DTSPU65-2XX, 3XX are required to use AWG#16X5C/4FT+core output cable.
DTSPU65-200, 204, 300, 306 are required to use AWG#16X5C/2FT+core output cable.
Regulation and efficiency will be changed by modified output cable.
Electrical characteristics will be changed by modified output cable.
- (2) The DTSPU65-105(12V), DTSPU65-107(16V), and DTSPU-201 are available on KC mark (Korea Certification).
The DTSPU65-109 is available on NRCAN mark.
- (3) Output can provide up to peak load when power supply starts up. Staying in rated load continuously is not allowed.
- (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 is measured by using 20MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line.
- (7) Hold up time is measured from 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.
- (8) Efficiency is measured at rated load and nominal line.
- (9) 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.

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: 37 Industrial Drive
Exeter, NH 03833

©2019 Wall Industries, Inc. Specifications subject to change without notice. Wall Industries is not responsible for typographical errors. The information contained herein is for informational purposes only. This information is provided by Wall Industries and we make no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or availability with respect to the information contained in this document for any purpose. All product and manufacturer names are trademarks or registered trademarks of their respective companies.