



Size: 5.75in x 2.99in x 1.69in (146mm x 76mm x 43mm)

FEATURES

- Wide Operating Voltage 80~275VAC
- Input Frequency 47 to 63Hz
- IEC-320-C14 Input Inlet
- Optional Output Connectors Available
- Single, Dual, and Triple Outputs Available
- Level VI Approval For Dual and Triple
- RoHS Compliant
- Over Voltage, Short Circuit and Over Load Protection
- Class I
- High Efficiency up to 84.2%
- UL 60950-1: 2nd Edition, CSA C22.2 No. 60950-1-07, IEC 60950-1:2005/A2:2013, EN60950-1:2006/A2:2013 Safety Approvals

APPLICATIONS

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

DESCRIPTION

The DTIPU45 series of AC DC desktop power supplies offers up to 50 watts of output power. This series consists of single, dual, and triple output models with a wide operating voltage of 80 to 275VAC. Each model has been burn-in tested and is equipped with an IEC-320-C14 input inlet while optional output connectors are available. This series also has UL 60950-1: 2nd Edition, CSA C22.2 No. 60950-1-07, IEC 60950-1:2005/A2:2013, and EN60950-1:2006/A2:2013 safety approvals.

MODEL SELECTION TABLE

Single Output Models

Model Number ⁽¹⁾	Input Voltage Range	Output Voltage	Output Current		Total Regulation	Output Power	Efficiency	Ripple & Noise	No Load Consumption
			Min Load	Max Load					
*DTIPU45-101	80~275VAC	3~5VDC	-	8.00A	±7%	40W	65%	50mVp-p	4W
*DTIPU45-102		5~6VDC	6.66A	8.00A	±5%	42W	70%	50mVp-p	
*DTIPU45-103		6~8VDC	5.25A	7.00A	±5%	42W	70%	65mVp-p	
*DTIPU45-104		8~11VDC	4.00A	5.63A	±5%	45W	70%	80mVp-p	
*DTIPU45-105		11~13VDC	3.46A	4.00A	±5%	45W	70%	100mVp-p	
*DTIPU45-106		13~16VDC	2.81A	3.46A	±5%	45W	70%	100mVp-p	
*DTIPU45-107		16~21VDC	2.38A	2.75A	±5%	50W	70%	100mVp-p	
DTIPU45-108		21~27VDC	1.85A	2.30A	±3%	50W	70%	100mVp-p	
*DTIPU45-109		27~33VDC	1.51A	1.85A	±3%	50W	70%	100mVp-p	
*DTIPU45-110		33~40VDC	1.25A	1.51A	±3%	50W	70%	100mVp-p	
*DTIPU45-111		40~50VDC	1.00A	1.25A	±3%	50W	70%	100mVp-p	

*MOQ Required, please contact sales.

MODEL SELECTION TABLE

Dual Output Models

Model Number	Input Voltage Range	Output Voltage	Output Current		Total Regulation	Output Power	Efficiency	Ripple & Noise	No Load Consumption
			Min Load	Max Load					
*DTIPU45-200	80~275VAC	+3.3VDC	0.5A	5A	±7%	40W	83.8%	66mVp-p	0.3W
		+12VDC	0.3A	2A	±5%			120mVp-p	
*DTIPU45-201		+5VDC	0.5A	5A	±5%	42W	84.2%	50mVp-p	
		+12VDC	0.3A	2A	±5%			120mVp-p	
*DTIPU45-202		+5VDC	0.8A	5A	±7%	42W	84.2%	50mVp-p	
		+15VDC	0.3A	1.5A	±5%			150mVp-p	
DTIPU45-203		+5VDC	0.5A	5A	±5%	42W	84.2%	50mVp-p	
		+24VDC	0.1A	1A	±5%			240mVp-p	
*DTIPU45-204		+3.3VDC	0.5A	5A	±7%	26.5W	80.7%	66mVp-p	
		5VDC	0.2A	2A	±5%			50mVp-p	
DTIPU45-209		+12VDC	0.3A	3A	±5%	42W	84.2%	120mVp-p	
		-12VDC	0.1A	1A	±10%			120mVp-p	
DTIPU45-210		+15VDC	0.2A	2A	±5%	42W	84.2%	150mVp-p	
		-15VDC	0.1A	1A	±10%			150mVp-p	
*DTIPU45-215		+5VDC	0.5A	5A	±5%	42W	84.2%	50mVp-p	
		-24VDC	0.1A	1A	±10%			240mVp-p	
*DTIPU45-216		+5.1VDC	0A	1A	±5%	23.82W	79.9%	50mVp-p	
		+7.2VDC	0.2A	2.6A	±5%			72mVp-p	

*MOQ Required, please contact sales.

MODEL SELECTION TABLE

Triple Output Models

Model Number	Input Voltage Range	Output Voltage	Output Current		Total Regulation	Output Power	Efficiency	Ripple & Noise	No Load Consumption
			Min Load	Max Load					
DTIPU45-300	80~275VAC	+3.3VDC	1.0A	5A	±7%	42W	84.2%	66mVp-p	0.3W
		+12VDC	0.3A	2A	±5%			120mVp-p	
		-12VDC	0.1A	0.8A	±5%			120mVp-p	
DTIPU45-301		+5VDC	0.5A	5A	±5%	42W	84.2%	50mVp-p	
		+12VDC	0.2A	2A	±5%			120mVp-p	
		-5VDC	0A	0.8A	±5%			50mVp-p	
DTIPU45-302		+5VDC	0.5A	5A	±5%	42W	84.2%	50mVp-p	
		+12VDC	0.2A	2A	±5%			120mVp-p	
		-12VDC	0A	0.8A	±5%			120mVp-p	
DTIPU45-303		+5VDC	0.5A	5A	±5%	42W	84.2%	50mVp-p	
		+15VDC	0.4A	2A	±6%			150mVp-p	
		-15VDC	0A	0.8A	±5%			150mVp-p	
DTIPU45-304	+5VDC	0.5A	5A	±5%	42W	84.2%	50mVp-p		
	+24VDC	0.2A	1A	±5%			240mVp-p		
	-24VDC	0A	0.5A	±5%			240mVp-p		
DTIPU45-305	+5VDC	0.5A	5A	±5%	42W	84.2%	50mVp-p		
	+24VDC	0.1A	1A	±5%			240mVp-p		
	-12VDC	0A	0.8A	±5%			120mVp-p		
DTIPU45-306	+3.3VDC	0.5A	5A	±7%	40W	84.2%	66mVp-p		
	+12VDC	0.4A	2A	±5%			120mVp-p		
	-5VDC	0A	0.8A	±5%			50mVp-p		

*MOQ Required, please contact sales.

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 & Specification in Label	100		240	VAC
	Operate Voltage Range	80		275	
Input Frequency		47		63	Hz
Input Current	Low Line	Full Load, 100VAC		1.35	A
	High Line	Full Load, 240VAC		0.56	
Inrush Current	Low Line	Full Load, Cool Start @25°C, 100VAC		20	A
	High Line	Full Load, Cool Start @25°C, 240VAC		48	
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Line Regulation	Full Load, 100~120VAC	0.5		1	%
Load Regulation	Vin=230VAC, Fi=60Hz	3		7	%
Output Power		See Table			
Output Current		See Table			
Ripple & Noise (Peak to Peak) ⁽²⁾		See Table			
Transient Response Time	Io=Full Load to Half Load, Vin=110VAC			4	mS
Start-Up Time	Full Load, 100~240VAC			3	S
Hold-Up Time	Full Load, 110VAC		12		mS
Temperature Coefficient	Full Load, Vin=100~240VAC			±0.04	%/°C
PROTECTION					
Short Circuit Protection		Automatic Recovery			
Over Current Protection	Recovers automatically after fault conditions is removed	110		150	%
Over Voltage Protection		112		132	%
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature	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	%
Storage Humidity		0		95	%
Operating Elevation	All conditions			5000	m
Vibration	10~500Hz 10min/1cycle, 60min. each along X, Y, Z axes			5	G
MTBF	MIL-HDBK-217F, operating temperature at 25°C	100,000			Hours

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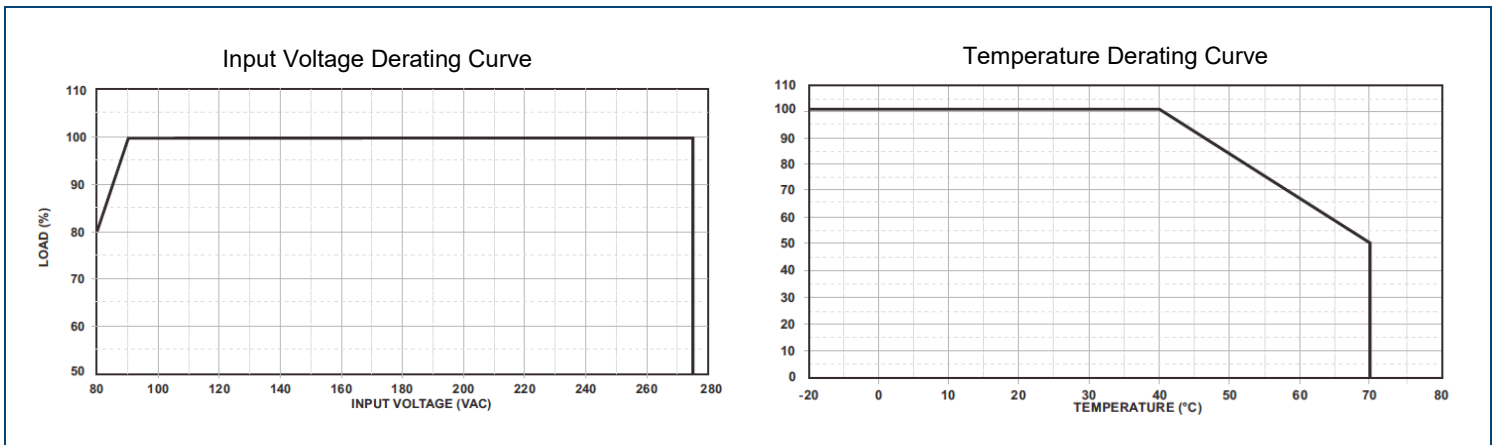
SPECIFICATION	TEST CONDITIONS		Min	Typ	Max	Unit
GENERAL SPECIFICATIONS						
Efficiency	At rated load and nominal line		See Table			
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz				0.75	mA
No Load Power Consumption	No Load, 230VAC		See Table			
Surge Voltage	Line-Neutral				1	kV
	Line-PE & Neutral-PE				2	
Dielectric Withstanding Voltage	Primary to Secondary				4242	VDC
	Primary to PE				2121	
PHYSICAL SPECIFICATIONS						
Weight			1.17~1.23lbs (535~560g)			
Dimensions (L x W x H)			5.75in x 2.99in x 1.69in (146mm x 76mm x 43mm)			
Flammability Rating			UL94V-1			
Cooling			Free Air Convection			
SAFETY & EMC CHARACTERISTICS						
Safety Approvals			UL 60950-1:2 nd Edition ⁽⁶⁾ CSA C22.2 No.60950-1-07 IEC 60950-1:2005/A2:2013 EN60905-1:2006/A2:2013			
EMC Emission			B Class			
Electro Static Discharge	IEC61000-4-2	Air Discharge Contact Discharge			8kV 4kV	
Protection Class			Class I			

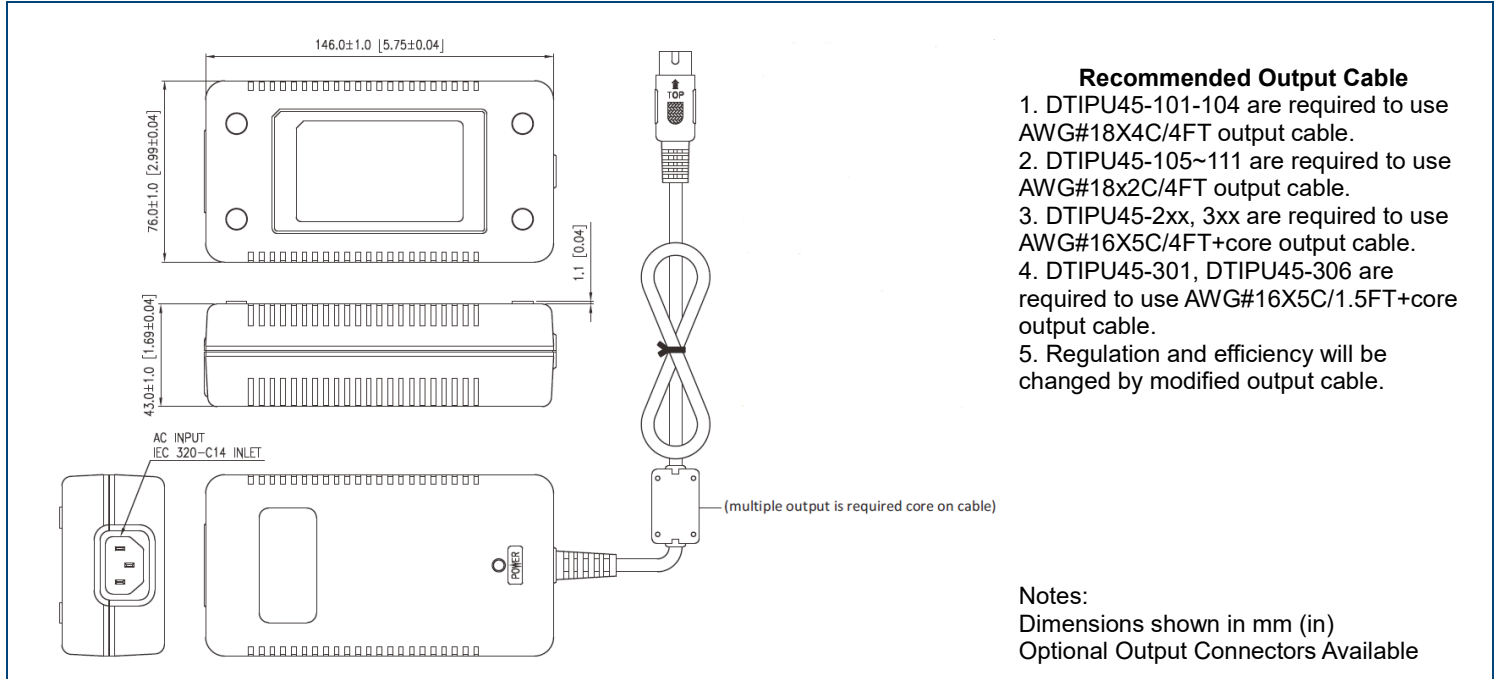
NOTES

- (1) Single output models are not compliant with DoE VI.
- (2) 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).
- (3) Output can provide up to peak load when the power supply starts up. Staying in more than rated load continually is not allowed.
- (4) At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- (5) Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
- (6) Load regulation is defined by changing $\pm 40\%$ of measured output load from 60% rated load.
- (7) 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.
- (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**Recommended Output Cable**

1. DTIPU45-101-104 are required to use AWG#18X4C/4FT output cable.
2. DTIPU45-105~111 are required to use AWG#18x2C/4FT output cable.
3. DTIPU45-2xx, 3xx are required to use AWG#16X5C/4FT+core output cable.
4. DTIPU45-301, DTIPU45-306 are required to use AWG#16X5C/1.5FT+core output cable.
5. Regulation and efficiency will be changed by modified output cable.

Notes:

Dimensions shown in mm (in)
Optional Output Connectors Available

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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