Type A | Type B | Type C | Type D | Type E

Size: 3.58in x 1.50in x 1.42in (91mm x 38mm x 36mm)

OPTIONS

- AC Inlet
  -IEC-320-C14
  -IEC-320-C8
  -IEC-320-C6
- AC Power Cord
  -2 Prong
  -3 Prong
- Output Connectors

APPLICATIONS

- Ethernet Hub
- Portable Devices
- Charger
- Monitor
- Set-Top Box
- AV Equipment

FEATURES

- 100% Burn-In Tested
- RoHS2 Compliant
- UL 94V-1 Compliant
- Energy Star 2.0, Efficiency Level VI Compliant (Excluding 3~5V Models)
- Wide Input Voltage Range: 87~275VAC
- Short Circuit Protection
- Class II System for Types A, C, and E, and Class I System for Types B and D
- High Efficiency up to 86%
- Optional Output Connectors Available
- IEC-320-C14, IEC-320-C8, and IEC-320-C6 AC Inlets Available
- 2 Prong and 3 Prong A Stand and Mains AC Power Cords Available
- Meets FCC Part-15 Class B and CISPR-22 Class B Emission Limits
- UL 60950-1:2nd Edition and IEC 60905-1:2005/A2:2013 Safety Approvals for All Models

DESCRIPTION

The DTIPU16 series of AC/DC desktop power supplies provides up to 15 Watts of continuous output power. This series consists of single output models with a 90~264VAC input voltage range. All units are UL 94V-1, RoHS2, CEC and Energy Star Level VI compliant and meet FCC Part-15 class B and CISPR-22 class B emission limits. The DTIPU16 series also meets new CE requirements and has UL 60950-1:2nd Edition, IEC 60905-1:2005/A2:2013 safety approvals. The DTIPU16 series has three types of AC inlets available: IEC-320-C14 (Type A), IEC-320-C8 (Type B), and IEC-320-C6 (Type C). 2 prong (Type D) and 3 prong (Type A) A Stand and Mains AC Power Cords also available. All units have been 100% burn-in tested.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage[1]	Output Current		Ripple & Noise	Total Regulation	Output Power	Efficiency	Efficiency Level	Class	AC Inlet
			Min Load	Max Load							
DTIPU16A-101	80~275VAC	3~5VDC	2.50A		50mVp-p	±7%	12W	69%	V	Class I	IEC-320-C14
DTIPU16A-102		5~5.99VDC	2.00A	2.50A	50mVp-p	±5%	12W	80%	VI		
DTIPU16A-103		6.5~8VDC	1.50A	1.84A	60mVp-p	±5%	12W	83%	VI		
DTIPU16A-104		8~11VDC	1.36A	1.87A	80mVp-p	±5%	15W	84.2%	VI		
DTIPU16A-105		11~13VDC	1.15A	1.36A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16A-106		13~16VDC	0.94A	1.15A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16A-107		16~21VDC	0.72A	0.94A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16A-108		21~27VDC	0.55A	0.72A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16A-109		27~33VDC	0.45A	0.55A	100mVp-p	±5%	15W	85%	VI		
DTIPU16A-110		33~40VDC	0.37A	0.45A	100mVp-p	±3%	15W	86%	VI		
DTIPU16A-111		40~48VDC	0.31A	0.37A	100mVp-p	±3%	15W	86%	VI		
DTIPU16B-101	80~275VAC	3~5VDC	2.50A		50mVp-p	±7%	12W	69%	V	Class II	IEC-320-C8
DTIPU16B-102		5~5.99VDC	2.00A	2.50A	50mVp-p	±5%	12W	80%	VI		
DTIPU16B-103		6.5~8VDC	1.50A	1.84A	60mVp-p	±5%	12W	83%	VI		
DTIPU16B-104		8~11VDC	1.36A	1.87A	80mVp-p	±5%	15W	84.2%	VI		
DTIPU16B-105		11~13VDC	1.15A	1.36A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16B-106		13~16VDC	0.94A	1.15A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16B-107		16~21VDC	0.72A	0.94A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16B-108		21~27VDC	0.55A	0.72A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16B-109		27~33VDC	0.45A	0.55A	100mVp-p	±5%	15W	85%	VI		
DTIPU16B-110		33~40VDC	0.37A	0.45A	100mVp-p	±3%	15W	86%	VI		
DTIPU16B-111		40~48VDC	0.31A	0.37A	100mVp-p	±3%	15W	86%	VI		
DTIPU16C-101	80~275VAC	3~5VDC	2.50A		50mVp-p	±7%	12W	69%	V	Class I	IEC-320-C6
DTIPU16C-102		5~5.99VDC	2.00A	2.50A	50mVp-p	±5%	12W	80%	VI		
DTIPU16C-103		6.5~8VDC	1.50A	1.84A	60mVp-p	±5%	12W	83%	VI		
DTIPU16C-104		8~11VDC	1.36A	1.87A	80mVp-p	±5%	15W	84.2%	VI		
DTIPU16C-105		11~13VDC	1.15A	1.36A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16C-106		13~16VDC	0.94A	1.15A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16C-107		16~21VDC	0.72A	0.94A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16C-108		21~27VDC	0.55A	0.72A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16C-109		27~33VDC	0.45A	0.55A	100mVp-p	±5%	15W	85%	VI		
DTIPU16C-110		33~40VDC	0.37A	0.45A	100mVp-p	±3%	15W	86%	VI		
DTIPU16C-111		40~48VDC	0.31A	0.37A	100mVp-p	±3%	15W	86%	VI		
DTIPU16D-101	80~275VAC	3~5VDC	2.50A		50mVp-p	±7%	12W	69%	V	Class II	2 Prong A Stand and Mains Power Cord
DTIPU16D-102		5~5.99VDC	2.00A	2.50A	50mVp-p	±5%	12W	80%	VI		
DTIPU16D-103		6.5~8VDC	1.50A	1.84A	60mVp-p	±5%	12W	83%	VI		
DTIPU16D-104		8~11VDC	1.36A	1.87A	80mVp-p	±5%	15W	84.2%	VI		
DTIPU16D-105		11~13VDC	1.15A	1.36A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16D-106		13~16VDC	0.94A	1.15A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16D-107		16~21VDC	0.72A	0.94A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16D-108		21~27VDC	0.55A	0.72A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16D-109		27~33VDC	0.45A	0.55A	100mVp-p	±5%	15W	85%	VI		
DTIPU16D-110		33~40VDC	0.37A	0.45A	100mVp-p	±3%	15W	86%	VI		
DTIPU16D-111		40~48VDC	0.31A	0.37A	100mVp-p	±3%	15W	86%	VI		
DTIPU16E-101	80~275VAC	3~5VDC	2.50A		50mVp-p	±7%	12W	69%	V	Class I	3 Prong A Stand and Mains Power Cord
DTIPU16E-102		5~5.99VDC	2.00A	2.50A	50mVp-p	±5%	12W	80%	VI		
DTIPU16E-103		6.5~8VDC	1.50A	1.84A	60mVp-p	±5%	12W	83%	VI		
DTIPU16E-104		8~11VDC	1.36A	1.87A	80mVp-p	±5%	15W	84.2%	VI		
DTIPU16E-105		11~13VDC	1.15A	1.36A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16E-106		13~16VDC	0.94A	1.15A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16E-107		16~21VDC	0.72A	0.94A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16E-108		21~27VDC	0.55A	0.72A	100mVp-p	±5%	15W	84.2%	VI		
DTIPU16E-109		27~33VDC	0.45A	0.55A	100mVp-p	±5%	15W	85%	VI		
DTIPU16E-110		33~40VDC	0.37A	0.45A	100mVp-p	±3%	15W	86%	VI		
DTIPU16E-111		40~48VDC	0.31A	0.37A	100mVp-p	±3%	15W	86%	VI		

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
	Operate Range		80		275	
Input Frequency	Sine Wave		47		63	Hz
Input Current	Low Line, Full Load, Vin=100VAC			0.4		A
	High Line, Full Load, Vin=240VAC			0.26		
Inrush Current	Low Line, Full Load, 25ºC, Cool Start, Vin=100VAC				15	A
	High Line, Full Load, 25ºC, Cool Start, Vin=240VAC				30	
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz				0.75	mA
OUTPUT SPECIFICATIONS						
Output Voltage			See Table			
Line Regulation	Full Load, Vin=100~120VAC		0.5		1	%
Load Regulation	Vin=230VAC, 10~90% Load Change at Condition		3		7	%
Output Power			See Table			
Output Current			See Table			
Ripple & Noise			See Table			
Transient Response Time	Full Load, Vin=110VAC				4	ms
Start-Up Time	Full Load, Vin=100~240VAC				2	S
Hold-Up Time	Full Load, Vin=100VAC			8		S
Temperature Coefficient	Full Load, Vin=100~240VAC				±0.04	%/ºC
PROTECTION						
Short Circuit Protection			Automatic Recovery			
ENVIRONMENTAL SPECIFICATIONS						
Operating Temperature			-20		70	ºC
Storage Temperature	10~95%RH		-40		85	ºC
Operating Humidity	Non-Condensing		0		95	%RH
Storage Humidity			0		95	%RH
Operating Altitude (Elevation)	All Conditions				2000	M
Vibration	10~500Hz, 10min./1cycle, 60min. Each along X, Y, Z axes				5	G
MTBF	Operating Temperature at 25ºC, calculated per MIL-HDBK-217F		100,000			Hour
GENERAL SPECIFICATIONS						
Efficiency			See Table			
Dielectric Withstanding Voltage	All Models	Primary to Secondary		4242		VDC
	A, C, and E Models	Primary to PE		2594		
Surge Voltage	Line-Neutral				1	kV
	Line-PE & Neutral-PE				2	
PHYSICAL SPECIFICATIONS						
Weight			Approx. 5.82oz (165g)			
Dimensions (L x W x H)			3.58in x 1.50in x 1.42in (91mm x 38mm x 36mm)			
Cooling			Free Air Convection			
Flammability Rating			UL94V-1			
SAFETY CHARACTERISTICS						
Safety Approvals	All Models	UL 60950-1:2nd Edition, IEC-60950-1:2005/A2:2013				
	A, B, C Models	EN60950-1:2006/A2:2013				
EMC Emission	Compliance to EN55022 (CISPR)					Class B
Safety Class	A, C, and E Models					Class I
	B and D Models					Double Insulated, Class II

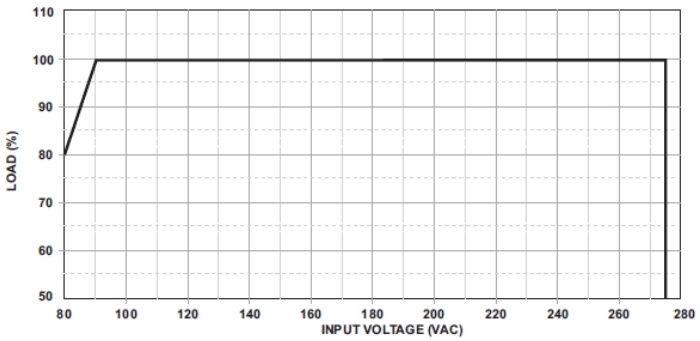
NOTES

1. Output voltage is specified as a range. Customer must specify what output they would like the voltage set at.
2. DTIPU16x-102~107 are required to use AWG#18/4FT output cable.
   DTIPU16x-108~111 are required to use AWG#20/4FT output cable.
   Regulation and Efficiency will be changed by a modified output cable.
3. Output can provide up to peak load when power supply starts up. Continually staying in rated load is not allowed.
4. Each output is checked to be within voltage accuracy in 60% rated load condition.
5. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
6. Load regulation is defined by changing ±40% of measured output load from 60% rated load.
7. 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.
8. 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.

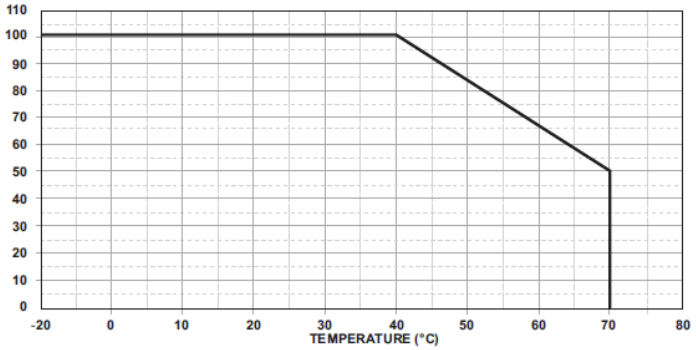
**Due to advances in technology, specifications subject to change without notice.*

DERATING CURVES

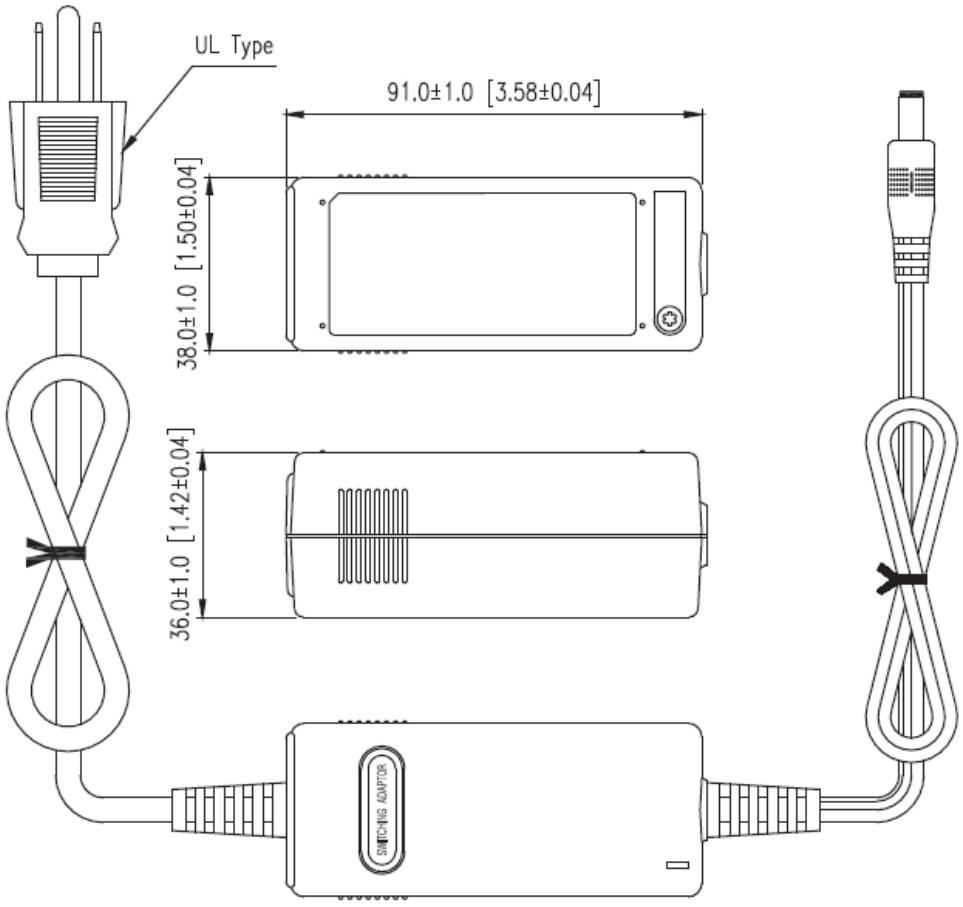
Input Voltage Derating Curve



Temperature Derating Curve



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 eAceeds your performance requirements on-time and on budget. Our ISO9001-2008 certification is just one eAample 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 eAceeds 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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