



**FEATURES**

- Wide Operating Voltage 80 to 275VAC
- Class I System
- Level VI Compliant
- RoHS2 Compliant
- Short Circuit and Over Load Protection
- IEC-320-C14 Input Inlet
- UL6095-1:2<sup>nd</sup> Edition, IEC60950-1:2005/A2:2013, EN60950-1:2006/A2:2013, CB, CE, FCC, and PSE Safety Approvals

**APPLICATIONS**

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

**DESCRIPTION**

The DTIPU41 series of AC/DC desktop power supplies offers up to 40 watts of output power in a 4.21" x 1.85" x 1.19" package. This series consists of single output models with a wide operating voltage range of 80~275VAC. Each model in this series has an IEC-320-C14 input inlet, short circuit protection, and is Level VI and RoHS2 compliant. This series has UL6095-1:2<sup>nd</sup> Edition, IEC60950-1:2005/A2:2013, EN60950-1:2006/A2:2013, CB, CE, FCC, and PSE safety approvals. Please call factory for order details.



**MODEL SELECTION TABLE**

Model Number	Input Voltage Range	Output Voltage	Output Current		Ripple & Noise	Total Regulation	Output Power	Efficiency
			Min Load	Max Load				
DTIPU41-102	80~275VAC	5~5.99VDC	5.00A		50mVp-p	±5%	30W	85%
DTIPU41-103		6.5~8VDC	3.75A	4.61A	65mVp-p	±5%	30W	87%
DTIPU41-104		8~11VDC	3.18A	4.38A	80mVp-p	±5%	35W	87.4%
DTIPU41-105		11~13VDC	3.07A	3.64A	100mVp-p	±5%	40W	87.6%
DTIPU41-106		13~16VDC	2.50A	3.07A	100mVp-p	±5%	40W	87.6%
DTIPU41-107		16~21VDC	1.90A	2.50A	100mVp-p	±5%	40W	88%
DTIPU41-108		21~27VDC	1.48A	1.90A	100mVp-p	±3%	40W	90%
DTIPU41-109		27~33VDC	1.21A	1.48A	100mVp-p	±3%	40W	90%
DTIPU41-110		33~40VDC	1.00A	1.21A	100mVp-p	±3%	40W	90%
DTIPU41-111		40~48VDC	0.83A	1.00A	100mVp-p	±2%	40W	90%

**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 Range	100		240	VAC
	Operate Voltage Range	80		275	
Input Frequency		47		63	Hz
Input Current	Low Line, Full Load, Vin=100VAC			0.93	A
	High Line, Full Load, Vin=240VAC			0.93	
Inrush Current	Low Line, Full Load, Vin=100VAC, 25°C, Cool Start			45	A
	High Line, Full Load, Vin=240VAC, 25°C, Cool Start			90	
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, V in=100~120VAC	0.5		1	%
Load Regulation <sup>(4)</sup>	Vin=230VAC, 10~90% Load Change at Condition	4		5	%
Output Power		See Table			
Output Current		See Table			
Ripple & Noise <sup>(5)</sup>		See Table			
Transient Response Time	Full Load, Vin=100VAC			4	mS
Start-Up Time	Full Load, Vin=100~240VAC			2	S
Hold-Up Time <sup>(6)</sup>	Full Load, Vin=100VAC		10		mS
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	%

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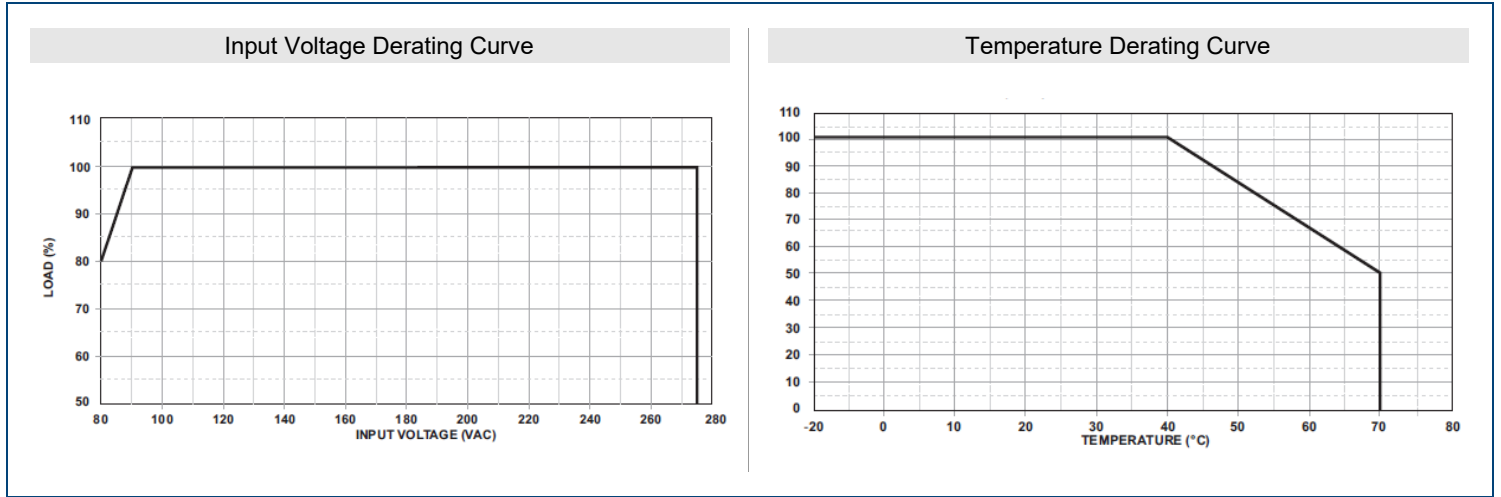
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Temperature	Derate linearly from 100% load at 40°C to 50% load at 70°C	-20		70	°C
Storage Temperature	10~95% RH	-40		85	°C
Operating Humidity	Non-Condensing	0		95	%RH
Storage Humidity		0		95	%RH
Operating Altitude	All Conditions			5000	m
Vibration	10~500Hz, 10min./1cycle, 60min. each along X, Y, Z axes			5	G
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	100,000			Hours
<b>GENERAL SPECIFICATIONS</b>					
Efficiency	Full Load, Vin=230VAC	See Table			
Dielectric Withstanding Voltage	Primary to Secondary			4242	VDC
	Primary to PE			2550	
Surge Voltage	Line-Neutral			1	kV
	Line-PE & Neutral-PE			2	
<b>PHYSICAL SPECIFICATIONS</b>					
Weight		9.35~9.88oz (265~280g)			
Dimensions (L x W x H)		4.21in x 1.85in x 1.19in (107mm x 47mm x 30.1mm)			
Cooling		Free Air Convection			
Flammability Rating		UL94V-1			
<b>SAFETY CHARACTERISTICS</b>					
Safety Approvals <sup>(7)</sup>	IEC 60950-1:2005/A2:2013, EN60950-1:2006/A2:2013 UL 60950-1: 2 <sup>nd</sup> Edition <sup>(9)</sup>				
EMC Emission	Compliance to EN55022 (CISPR22)				Class B
Electrostatic Discharge	Air Discharge, IEC61000-4-2			8	kV
	Air Discharge, IEC61000-4-2			6	
Safety Class					Class I

**NOTES**

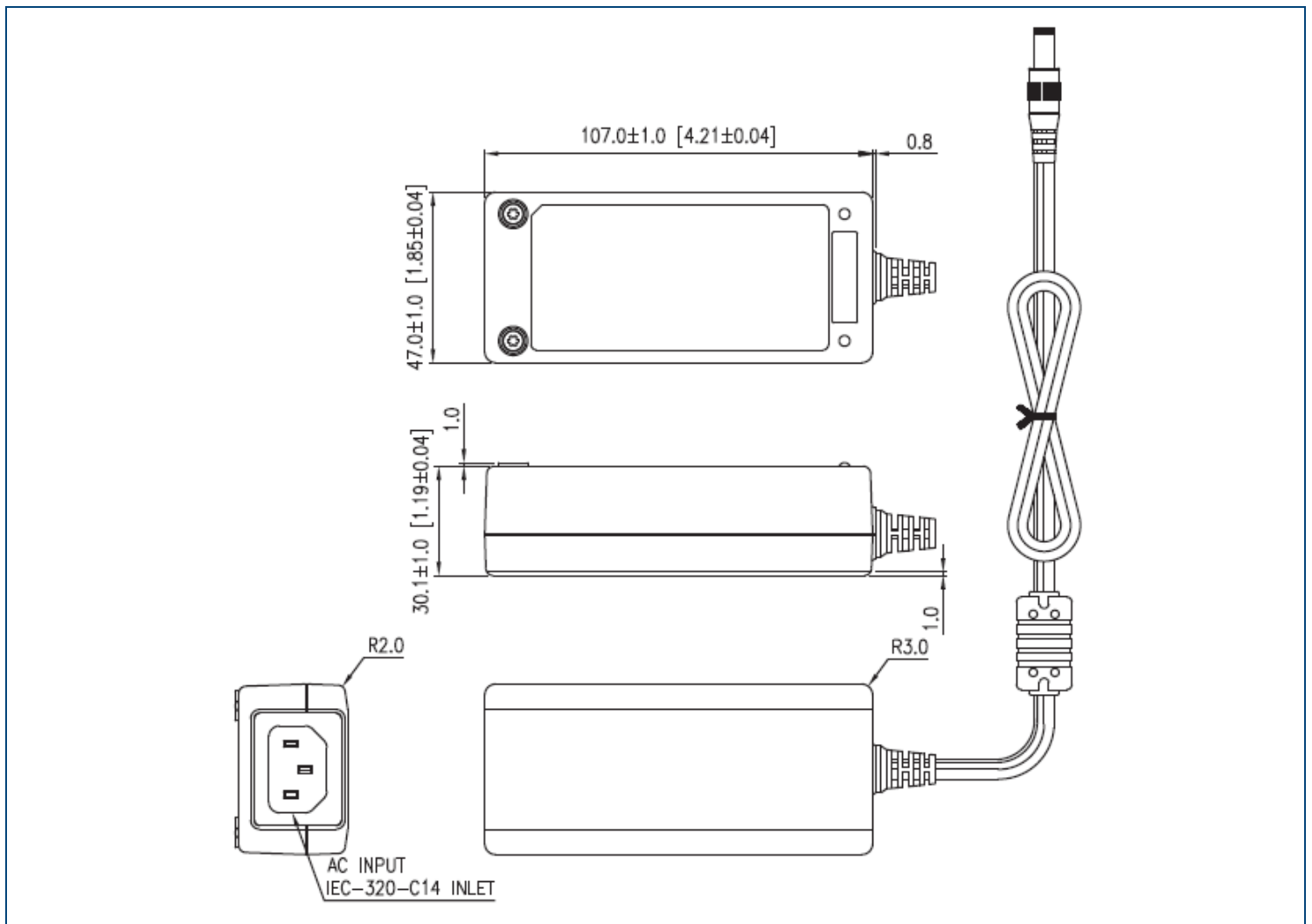
- Output can provide up to peak load when the power supply starts up. Staying in rated load continually is not allowed.
- At factory, each output is checked to be within voltage accuracy at 60% rated load condition.
- Line regulation is defined by changing ±10% of input voltage from nominal line at rated 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.
- DTIPU41-102, 105, 106, and 108 are available on CCC mark.
- DTIPU-102~104 are required to use AWG#16/4FT output cable.  
DTIPU41-105~107 are required to use AWG#18/4FT output cable.  
DTIPU41-108~111 are required to use AWG#18/6FT output cable.  
The regulation and efficiency will be changed by a modified output cable.
- 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



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**COMPANY INFORMATION**

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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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