

FEATURES

- Splash Proof
- 100% Burn-in
- 2 Year Warranty
- Class I Insulation
- IEC-320-C14 Input Inlet
- CEC and Energy Star Compliant
- Optional Output Connectors Available
- Over Voltage and Over Load Protection
- Approved as Limited Power Source (LPS)
- Over Voltage Protection (Crowbar Design)
- -20°C ~ 70°C Operating Temperature Range
- Wide Input Voltage Range: 90 to 264VAC, 47~63Hz



DESCRIPTION

The DTIPU40 series of AC/DC desktop switching mode power supplies provide up to 40 watts of continuous output power. All models have a single output, universal input voltage range, and an operating temperature range of -20°C ~ +70°C. These supplies are also protected against over voltage and over load conditions. All supplies are also UL 94V-1 compliant and include an IEC-320-C14 input connector for worldwide applications. All models meet FCC-Part-15 class B and CISPR-22 class B emission limits and are designed to comply with UL/c-UL (UL 60950-1), TUV/GS (EN 60950-1), and new CE requirements. These supplies are CEC and Energy Star compliant as well as 100% burn-in tested.

SPECIFICATIONS: DTIPU40 Series					
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	Nom	Max	Unit
INPUT (V_{in})					
Operating Voltage Range		90		264	VAC
Input Frequency		47		63	Hz
Input Current (Low Line)	I _o = Full Load, V _{in} = 115VAC			1	A
Input Current (High Line)	I _o = Full Load, V _{in} = 230VAC			0.5	A
Inrush Current (Low Line)	I _o = Full Load, 25°C, Cool Start, V _{in} = 115VAC		12	15	A
Inrush Current (High Line)	I _o = Full Load, 25°C, Cool Start, V _{in} = 230VAC		26	30	A
Safety Ground Leakage Current	I _o = Full Load, V _{in} = 240VAC		0.5	0.75	mA
Start-Up Time	I _o = Full Load, V _{in} = 100VAC	0.3		0.5	s
OUTPUT (V_o)					
Output Voltage		See Rating Chart			VDC
Load Regulation	V _{in} = 230VAC		3	7	%
Line Regulation	I _o = Full Load		0.5	1	%
Output Power	V _{in} = 90 to 264VAC	0		40	W
Output Current		See Rating Chart			A
Ripple & Noise (peak to peak)	Full Load, V _{in} = 90VAC		0.5	1	%
Transient Response Time	I _o = Full Load to Half Load, V _{in} = 100VAC			4	ms
Hold-Up Time	I _o = Full Load, V _{in} = 100VAC	12			ms
Temperature Coefficient	All Outputs	-0.04		+0.04	%/°C
PROTECTION					
Over Voltage Protection		112		132	%
Over Current Protection		110		150	%
GENERAL					
Efficiency	I _o = Full Load, V _{in} = 230VAC	78	83	90	%
Dielectric Withstanding Voltage For Primary to Secondary	Primary to Secondary	4242			VDC
Dielectric Withstanding Voltage For Primary to Ground	Primary to Ground	2121			VDC
Isolation Resistance	Test Voltage = 500VDC	50			MΩ
No Load Power Consumption	No load, V _{in} =240VAC		0.3	0.5	W
ENVIRONMENTAL					
Operating Temperature	Derates linearly from 100% Load at 40°C to 50% load at 70°C	-20		+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity		5		95	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	100,000 hours			
PHYSICAL					
Weight		Approximately 275 grams			
Dimensions (L x W x H)		4.65 x 2.05 x 1.36 inches 118.0 x 52.0 x 34.5 mm			
Warranty		2 years			
SAFETY					
EMI Requirements for CISPR-22	V _{in} = 220VAC	B			Class
EMI Requirements for FCC PART-15	V _{in} = 110VAC	B			Class

OUTPUT VOLTAGE / CURRENT RATING CHART

Model Number	Input Current	Preset Voltage	Output Voltage Range	Output Current	Total Regulation ⁽²⁾	Output Power
DTIPU40-102	90 ~ 264VAC	6 VDC	5 ~ 6 VDC	5.00 ~ 4.16 A	5%	25W
DTIPU40-103	90 ~ 264VAC	8 VDC	6 ~ 8 VDC	5.00 ~ 3.75 A	5%	30W
DTIPU40-104	90 ~ 264VAC	11 VDC	8 ~ 11 VDC	4.37 ~ 3.18 A	4%	35W
DTIPU40-105	90 ~ 264VAC	13 VDC	11 ~ 13 VDC	3.63 ~ 3.07 A	3%	40W
DTIPU40-106	90 ~ 264VAC	16 VDC	13 ~ 16 VDC	3.07 ~ 2.50 A	3%	40W
DTIPU40-107	90 ~ 264VAC	21 VDC	16 ~ 21 VDC	2.50 ~ 1.90 A	3%	40W
DTIPU40-108	90 ~ 264VAC	27 VDC	21 ~ 27 VDC	1.90 ~ 1.48 A	2%	40W
DTIPU40-109	90 ~ 264VAC	33 VDC	27 ~ 33 VDC	1.48 ~ 1.21 A	2%	40W
DTIPU40-110	90 ~ 264VAC	40 VDC	33 ~ 40 VDC	1.21 ~ 1.00 A	2%	40W
DTIPU40-111	90 ~ 264VAC	50 VDC	40 ~ 50 VDC	1.00 ~ 0.80 A	2%	40W

NOTES

1. For single output models the output voltage is specified as a range (Ex: 40 ~ 50VDC); the preset voltage will be set as standard models if nothing different is requested. Please contact factory for ordering details.
2. Models 102~105 need to use AWG#16/4FT output cable in order to meet the CEC requirement. Models 106~111 need to use AWG#18/4FT output cable in order to meet the CEC requirement. By modifying this output cable the total regulation might not meet the listed specifications.
3. Optional output connectors are available. Please call factory for ordering details.

MECHANICAL DRAWING

Unit: inches [mm]

