

SPU40 SERIES

40W Desk Top Switching Power Supplies For I.T.E.



Description:

The SPU40 series of AC/DC switching mode power supplies provide 40 Watts of continuous output power and is well-suited for a variety of applications. All supplies are UL 94V-1 min compliant. 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. All units are 100% burned in and tested.

Features:

- Wide Input Voltage 90 to 264 VAC, 47 to 63 Hz
- IEC-320-C14 Input Inlet
- Single output
- Output Voltage Available From 5 VDC Thru 50 VDC
- Optional Output Connector (See appendix)
- Over Voltage Protection (Crowbar Design)
- Splash proof
- Class I Insulation
- CEC and Energy Star compliance
- Approved as Limited Power Source (LPS).
- 2 year warranty



Safety Approvals :



Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Input Voltage	Operating Voltage	90		264	VAC
Fin	Input Frequency		47		63	Hz
Wo	Output Power Range	Vin=90 to 264VAC	0		40	W
Vo	Output Voltage Range		See rating chart			V
Io	Output Current Range		See rating chart			A
Iil	Input Current (Low Line)	Io=Full load, Vin=115VAC			1	A
Iih	Input Current (High Line)	Io=Full load, Vin=230VAC			0.5	A
Irl	Low Line Inrush Current	Io=Full load, 25 c, Cool start, Vin=115VAC		12	15	A
Irh	High Line Inrush Current	Io=Full load, 25 c, Cool start, Vin=230VAC		26	30	A
Eff	Efficiency	Io=Full Load, Vin=230VAC	78	83	90	%
REG-i	Line Regulation	Io=Full Load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC		3	7	%
OVP	Over Voltage Protection		112		132	%
OCP	Over Current Protection		110		150	%
Ttr	Transient Response	Io=Full Load to Half Load, Vin=100VAC			4	mS
Thold	Hold-Up Time	Io=Full Load, Vin=110VAC	16			mS
Ts	Start Up Time	Io=Full Load, Vin=100VAC	0.3		0.5	S
Vrn	Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC		0.5	1	%
Ilk	Safety Ground Leakage Current	Io=Full Load, Vin=240VAC		0.5	0.75	mA
Tc	Temperature Coefficient	All output	-0.04		0.04	%/ c
Pnlc	Power Consumption (No load)	No load, Vin=240VAC		0.3	0.5	W

Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Toper	Operating Temperature		0		70	°C
Tstg	Storage Temperature		-40		85	°C
Hr	Relative Humidity		5		95	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1			M Hrs
Pd	Derate linearly from 100% load at 40 °C to 50% load at 70 °C					

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Safety Specifications:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V _{ps}	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242			VDC
V _{pg}	Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2121			VDC
R _i	Isolation Resistance	Test Voltage=500VDC	50			M Ω
CISPR	EMI requirements for CISPR-22	Vin=220VAC	B			CLASS
FCC	EMI requirements for FCC PART-15	Vin=110VAC	B			CLASS

Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Maximum Output Power	Safety
SPU40-102	5 ~ 6 VDC	4.16 ~ 5.00 A	7%	25W	UL/CUL, TUV-GS, CE, CB, PSE
SPU40-104	8 ~ 11 VDC	3.63 ~ 5.00 A	5%	40W	UL/CUL, TUV-GS, CE, CB
SPU40-105	11 ~ 13 VDC	3.07 ~ 3.63 A	5%	40W	UL/CUL, TUV-GS, CE, CB
SPU40-107	16 ~ 21 VDC	1.90 ~ 2.50 A	5%	40W	UL/CUL, TUV-GS, CE, CB
SPU40-108	21 ~ 27 VDC	1.48 ~ 1.90 A	3%	40W	UL/CUL, TUV-GS, CE, CB
SPU40-111	40 ~ 50 VDC	0.80 ~ 1.00 A	3%	40W	UL/CUL, TUV-GS, CE, CB

The total regulation on each model is required to use AWG#18/4FT output cable. The regulation will be changed by modified output cable.

Mechanical Specifications :

