

IPU 16A SERIES

15W Desk Top Switching Power Supplies For Industrial Equipment

Description:

The IPU16A series of AC/DC switching mode power supplies provide 15 Watts of continuous output power and is well-suited for a variety of applications. All supplies are UL 94V-1 min compliant. All model meet FCC Part-15 class B and CISPR-22 class B emission Limits and are designed to comply with UL/c-UL(UL 60950-1:2ndEdition), TUV/GS(EN 60950-1:2ndEdition) and new CE requirements. All units are 100% burned-in and tested.



Features:

- Wide Operating Voltage 90 to 264VAC, 47 to 63 Hz
- IEC-320-C14 Input Inlet
- Optional Output Connector (See appendix)
- Single Output
- Energy Star 2.0, Efficiency level V
- Class I
- Operating temperature -20~70°C
- 3 year warranty

Safety Approvals:



Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Safety Approvals Input Voltage Range		100		240	VAC
	Operate Voltage Range		90		264	VAC
f _{in}	Input Frequency		47		63	Hz
P _o	Output Power Range	V _{in} =90 to 264VAC			15	W
V _o	Output Voltage Range		See rating chart			V
I _o	Output Current Range		See rating chart			A
I _{il}	Input Current (Low Line)	I _o =Full load, V _{in} =115VAC			0.4	A
I _{ih}	Input Current (High Line)	I _o =Full load, V _{in} =230VAC			0.26	A
I _{rl}	Low Line Inrush Current	I _o =Full load, 25°C, Cool start, V _{in} =115VAC		12	15	A
I _{rh}	High Line Inrush Current	I _o =Full load, 25°C, Cool start, V _{in} =230VAC		26	30	A
Eff	Efficiency	I _o =Full Load, V _{in} =230VAC	See rating chart			%
REG-i	Line Regulation	I _o =Full Load		0.5	1	%
REG-o	Load Regulation	V _{in} =230VAC		3	10	%
OVP	Over Voltage Protection		Nil			%
OCP	Over Current Protection	Nil. But, Output protected to short circuit conditions				%
T _{tr}	Time of Transient Response	I _o =Full Load to Half Load, V _{in} =100VAC			4	ms
T _{hold}	Hold-Up Time	I _o =Full Load, V _{in} =110VAC	8			ms
T _s	Start Up Time	I _o =Full Load, V _{in} =100VAC	0.3	1	2	S
* V _{p-p}	Ripple & Noise (Peak to Peak)	Full Load, V _{in} =90VAC		0.5	1	%
I _{lk}	Safety Ground Leakage Current	I _o =Full Load, V _{in} =240VAC		0.5	0.75	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°C
P _{no}	No-Load Power Consumption	No load, V _{in} =230VAC	See rating chart			W

* Note: The Ripple & Noise which is under 3.3VCD at 2% max

Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
T _{oper}	Operating Temperature		-20	40	70	°C
T _{stg}	Storage Temperature		-40		85	°C
H _o	Operating Humidity		0		95	%
H _r	Storage Humidity		0		95	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs
P _d	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
Vps	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242			VDC
Vpg	Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2121			VDC
Ris	Isolation Resistance	Test Voltage=500VDC	50			MΩ
CISPR	EMI requirements for CISPR-22	Vin=220VAC	B			CLASS
FCC	EMI requirements for FCC PART-15	Vin=120VAC	B			CLASS

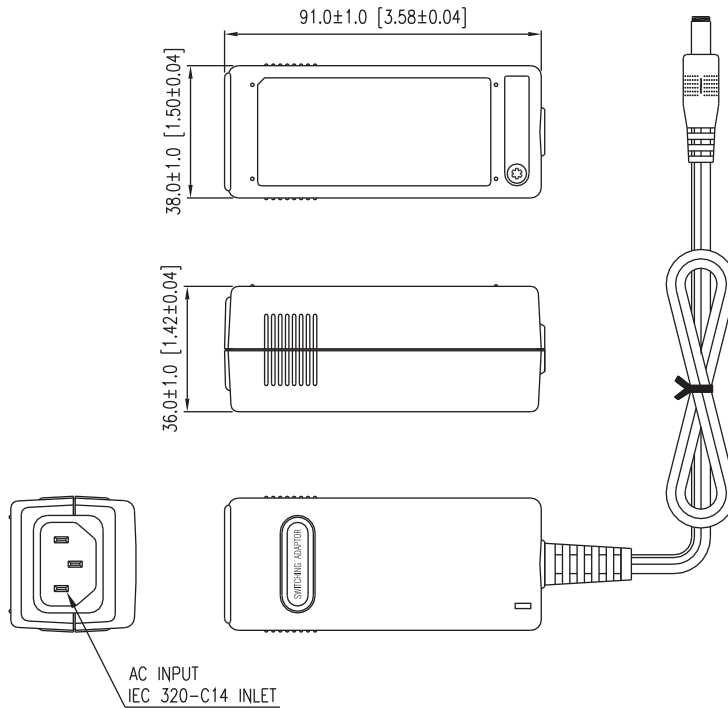
Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Efficiency (min.)	Maximum Output Power	Pno(max.)
IPU16A-101	3 ~ 5 VDC	2.50 A max	7%	74.7%	12W	0.3W
IPU16A-102	5 ~ 5.99 VDC	2.50 ~ 2.00 A	5%	74.7%	12W	
IPU16A-103	6 ~ 8 VDC	2.00 ~ 1.50 A	5%	77.8%	12W	
IPU16A-104	8 ~ 11 VDC	1.87 ~ 1.36 A	5%	79.2%	15W	
IPU16A-105	11 ~ 13 VDC	1.36 ~ 1.15 A	5%	79.2%	15W	
IPU16A-106	13 ~ 16 VDC	1.15 ~ 0.94 A	5%	79.2%	15W	
IPU16A-107	16 ~ 21 VDC	0.94 ~ 0.72 A	5%	79.2%	15W	
IPU16A-108	21 ~ 27 VDC	0.72 ~ 0.55 A	5%	79.2%	15W	
IPU16A-109	27 ~ 33 VDC	0.55 ~ 0.45 A	5%	79.2%	15W	
IPU16A-110	33 ~ 40 VDC	0.45 ~ 0.37 A	3%	79.2%	15W	
IPU16A-111	40 ~ 48 VDC	0.37 ~ 0.31 A	3%	79.2%	15W	

IPU16A-101 had been approved by CEC level IV.

IPU16A-102~111 had been approved by CEC level V.

Mechanical Specifications :



Note:

1. Dimensions are shown in mm.
2. Weight: 165gs approx.
3. Optional output connector: See page Appendix.