# Http://www.sinpro.com

# **IBU40 SERIES**

# 40W Open frame Switching Power Supplies For Industrial Equipment

**Description:** 

The IBU40 series of products, open frame constructed, AC/DC switching mode power supplies provide 40 Watts of continuous output power. They are suited for use in portable equipments and many other applications. All models meet CISPR-22 class B emission Limits and are designed to comply with new CE requirements. All units are 100% burned in and tested.

### **Features:**

- Wide Operating Voltage 90 to 264 VAC,47 to 63 Hz
- Internal EMI filter
- Input connector mates with Molex housing 35977-0390 and Molex 35922 series crimp terminal
- Single Output
- Input Surge Current, Over Voltage and Over Load protection
- Operating temperature -20~70°C
- Over Voltage Protection (Crowbar Design)
- Class I
- 3 year warranty



# **Safety Approvals:**



# **Electrical Characteristics:**

Sym.	Parameter	Test Conditions	Min.	Тур.	Max.	Unit
Vin	Safety Approvals Input Voltage Range		100		240	VAC
	Operate Voltage Range		90		260	VAC
fin	Input Frequency		47		63	Hz
Ро	Output Power Range	Vin=90 to 264 VAC	0		40	W
Vo	Output Voltage Range		See r	ating	Chart	V
Io	Output Current Range		See r	ating	Chart	А
Iil	Input Current (Low Line)	Io=Full load, Vin=115VAC			1	А
Iih	Input Current (High Line)	Io=Full load, Vin=230VAC			0.5	А
Irl	Low Line Inrush Current	Io=Full load, 25°C,Cool start, Vin=115VAC		25	30	А
Irh	High Line Inrush Current	Io=Full load, 25°C,Cool start, Vin=230VAC		55	60	А
Eff	Efficiency	Io=Full load, Vin=230VAC	See rating Chart		%	
REG-i	Line Regulation	Io=Full load		0.5	1	%
REG-∞	Load Regulation	Vin=230VAC		3	5	%
OVP	Over Voltage Protection		112 132		132	양
OCP	Over Current Protection		110		150	%
Ttr	Time of Transient Response	Io=Full load to Half Load, Vin=100VAC			4	mS
Thold	Hold-Up Time	Io=Full load, Vin=110VAC	12			mS
Ts	Start Up Time	Io=Full load, Vin=100VAC	0.3	1	2	S
Vp-p	Ripple & Noise (Peak to Peak)	Full load, Vin=90VAC		0.5	1	ે
Ilk	Safety Ground Leakage Current	Io=Full load, Vin=240VAC		0.4	0.75	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°C
Pno	No-Load Power Consumption	ad Power Consumption No load, Vin=230VAC See rating Chart		Chart	W	

### **Environmental:**

Sym.	Parameter	Test Conditions	Min.	Тур.	Max.	Unit
Toper	Operating Temperature		-20	50	70	°C
Tstg	Storage Temperature		-40		85	°C
Но	Operating Humidity		0		95	%
Hr	Storage Humidity		0		95	00
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F 0.1M Hrs					Hrs
Pd	Derate linearly from 100% load at 50°C to 50% load at 70°C					

# **IBU40 SERIES**

# 40W Open frame Switching Power Supplies For Industrial Equipment

# **Safety Specifications:**

Sym.	Parameter	Test Conditions	Min.	Тур.	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			МΩ
CISPR	EMI requirements for CISPR-22	Vin=220VAC	В			CLASS
FCC	EMI requirements for FCC PART-15	Vin=120VAC	В			CLASS

# **Output Voltage And Current Rating Chart (Single Output):**

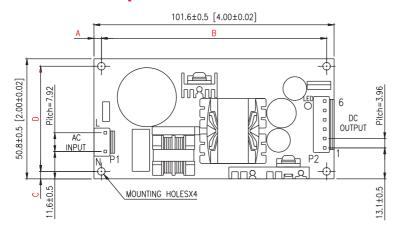
Model Number	Output Voltage	Output Current	Total Regulation	Efficiency (min.)	Maximum Output Power	Pno (max.)
IBU40-101	3.3 ~ 5 VDC	4.00 ~ 6.06 A	3 %	78%	2 0 W	
IBU40-102	5 ~ 6 VDC	4.66 ~ 5.60 A	3 %	78%	28W	
IBU40-103	6 ~ 8 VDC	4.00 ~ 5.33 A	3 %	80%	3 2 W	
IBU40-104	8 ~ 11 VDC	3.27 ~ 4.50 A	3 %	8 2 %	3 6 W	
IBU40-105	11 ~ 13 VDC	3.07 ~ 3.63 A	3 %	8 2 %	4 0 W	
IBU40-106	13 ~ 16 VDC	2.50 ~ 3.07 A	3 %	8 2 %	4 0 W	0.5W
IBU40-107	16 ~ 21 VDC	1.90 ~ 2.50 A	3 %	83%	4 0 W	0.5W
IBU40-108	21 ~ 27 VDC	1.48 ~ 1.90 A	3 %	85%	4 0 W	
IBU40-109	27 ~ 33 VDC	1.21 ~ 1.48 A	3 %	86%	4 0 W	
IBU40-110	33 ~ 40 VDC	1.00 ~ 1.21 A	3 %	87%	4 0 W	
IBU40-111	40 ~ 48 VDC	0.83 ~ 1.00 A	3 %	87%	4 0 W	

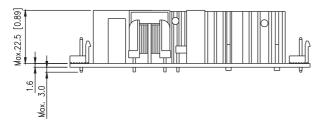
Mark " \* " means approved by UL.

## **PIN CHART**

PIN MODEL	1	2	3	4	5	6
IBU40-1XX	OUT	OUT	OUT	RTN	RTN	RTN

## **Mechanical Specifications::**





# Note:

- 1. Dimensions are shown in mm.
- 2. Weight: 120gs approx.
- 3. Input connector mates with Molex housing 35977-0300 and Molex 35922 series crimp terminal

P/N: IBU40 – XXX – H3 or IBU40 – XXX – H4

	Н3	H4
MOUNTING HOLES	3.2±0.5	4.0±0.5
Α	3.15±0.5	4.3±0.5
В	95.3±0.5	93.0±0.5
С	3.15±0.5	4.0±0.5
D	44.5±0.5	42.8±0.5