

# IBU 100 SERIES

## 100W Open Frame Switching Power Supplies For Industrial Equipment

### Description:

The IBU100 series of compact, open frame constructed, AC/DC switching mode power supplies provide 100 Watts of continuous output power. They are suited for use in based systems, portable equipments and many other 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 60950-1:2<sup>nd</sup> Edition), TUV/Bauart(EN 60950-1:2<sup>nd</sup> Edition) and new CE requirements. All units are 100% burned in and tested.

### Features:

- Wide Operating Voltage 90 to 260 VAC, 47 to 63 Hz
- Internal EMI filter
- Single Output
- Input connector mates with Molex housing 09-52-4054 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing 09-52-4134 and Molex 2478 series crimp terminal
- Active Power Factor Correction
- Size: 3"x5"x1.18"
- 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		260	VAC
fin	Input Frequency		47		63	Hz
PF	Power Factor Correction	Io=Full load, Vin=90~260VAC	0.95	0.97	1.0	
Po	Output Power Range	Vin=90 to 260 VAC	0		100	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			1.6	A
Iih	Input Current (High Line)	Io=Full load, Vin=230VAC			0.8	A
Irl	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC		44	50	A
Irh	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		88	100	A
Eff	Efficiency	Io=Full load, Vin=230VAC	See rating Chart			%
REG-i	Line Regulation	Io=Full load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC		3	5	%
OVP	Over Voltage Protection		112		132	%
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	16			mS
Ts	Start Up Time	Io=Full load, Vin=100VAC			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		0.5	0.75	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°C
Pno	No-Load Power Consumption	No load, Vin=230VAC	See rating Chart			W

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

### Environmental :

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

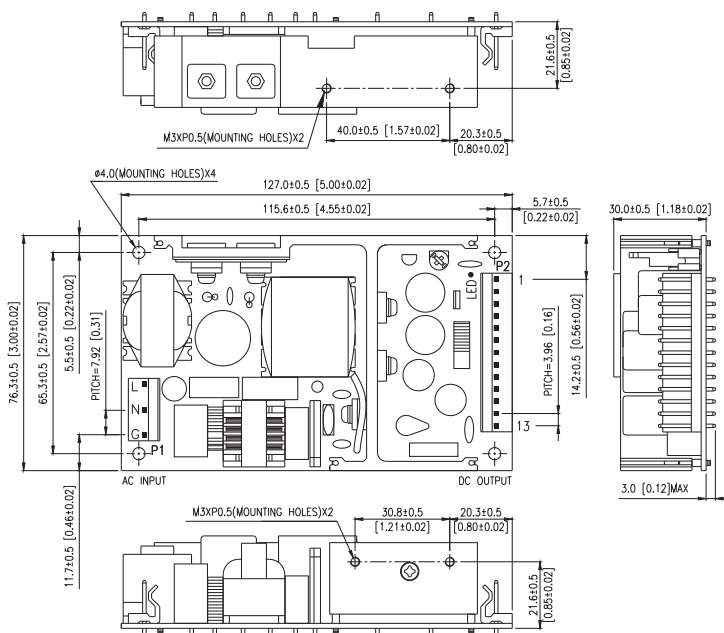
### Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Efficiency (min.)	Maximum Output Power	Pno(max.)
IBU100-101	3 ~ 5 VDC	18.00 ~ 10.80 A	5%	75%	54W	6W
IBU100-102	5 ~ 6 VDC	14.00 ~ 11.66 A	5%	77%	70W	
IBU100-103	6 ~ 9 VDC	13.33 ~ 8.88 A	5%	80%	80W	
IBU100-104	9 ~ 11 VDC	11.11 ~ 9.09 A	5%	80%	100W	
IBU100-105	11 ~ 13 VDC	9.09 ~ 7.69 A	3%	85%	100W	
IBU100-106	13 ~ 16 VDC	7.69 ~ 6.25 A	3%	85%	100W	
IBU100-107	16 ~ 21 VDC	6.25 ~ 4.76 A	3%	85%	100W	
IBU100-108	21 ~ 27 VDC	4.76 ~ 3.70 A	2%	86%	100W	
IBU100-109	27 ~ 33 VDC	3.70 ~ 3.03 A	2%	86%	100W	
IBU100-110	33 ~ 40 VDC	3.03 ~ 2.50 A	2%	87%	100W	
IBU100-111	40 ~ 50 VDC	2.50 ~ 2.00 A	2%	87%	100W	

### PIN CHART

MODEL	PIN	1	2	3	4	5	6	7	8	9	10	11	12	13
IBU100-1XX-13PIN	OUT	OUT	OUT	OUT	OUT	OUT	RTN	RTN	RTN	RTN	RTN	RTN	RTN	N/C

### Mechanical Specifications :



#### Note:

1. Dimensions are shown in inches or mm.
2. Weight: 345gs approx.
3. Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal.