Total Power International, Inc.

TPSBU30 SERIES

30W Open Frame Type
I.T.E. Power Supplies

Features:

- Wide Operating Voltage 90 to 264 VAC,47 to 63 Hz
- Internal EMI filter
- Input Surge Current, Over Voltage and Over Load protection
- Single and Dual Output
- Over Voltage Protection (Crowbar Design)
- Output connector mates with Lead wire
- Class I
- 2 year warranty

Electrical Characteristics:

Vin	**Safety Approvals Input Voltage Range**		100~240VAC
	Operate Voltage Range		90~264VAC
fin	**Input Frequency**		47~63Hz
Po	**Output Power Range**		See rating chart
Vo	**Output Voltage Range**		See rating chart
Io	**Output Current Range**		See rating chart
Iil	**Input Current (Low Line)**	Io=Full load, Vin=100VAC	0.8A (max.)
Iih	**Input Current (High Line)**	Io=Full load, Vin=240VAC	0.5A (max.)
Ir	**Low Line Inrush Current**	Io=Full load, 25°C, Cool start, Vin=115VAC	23A (max.)
	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC	45A (max.)
Eff	**Efficiency**	Io=Full Load, Vin=230VAC	70~88%
REG-i	**Line Regulation**	Io=Full Load	0.5~1%
REG-o	**Load Regulation**	Vin=230VAC	2~10%
OVP	**Over Voltage Protection**	Over Voltage Protection	112~132%
OCP	**Over Current Protection**	Over Current Protection	110~150%
Ttr	**Time of Transient Response**	Io=Full Load to Half Load, Vin=100VAC	4mS (max.)
Th	**Hold-Up Time**	Io=Full Load, Vin=110VAC	10mS (min.)
Ts	**Start Up Time**	Io=Full Load, Vin=100VAC	2S (max.)
Vp-p	**Ripple & Noise(Peak to Peak)**	Full Load, Vin=90VAC	1% (max.)
Ilk	**Safety Ground Leakage Current**	Vin=240VAC/60Hz	0.75mA (max.)
TC	**Temperature Coefficient**	All output	±0.04%/°C
Pno	**No-Load Power Consumption**	No load, Vin=230VAC	See rating chart
Vps	**Dielectric Withstanding Voltage for Primary to secondary**	Primary to secondary	4242VDC (min.)
Vpg	**Dielectric Withstanding Voltage for Primary to PE**	Primary to PE	2121VDC (min.)
Ris	**Isolation Resistance**	Test Voltage=500VDC	50MΩ (min.)

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

Environmental

To	**Operating Temperature**	See derating curve
Ts	**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 (min.)
Pd	**Derate linearly from 100% load at 40°C to 50% load at 70°C**	

Application:

- Monitor
- Industrial PC
- Set-top box
- AV equipment
- CCD recorder

Safety Approvals:

CE RoHS 2002/95/EC COMPLIANT

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Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Max. Output Power	Pno (max.)
TPSBU30-101	3 ~ 5 VDC	5.00 ~ 3.00 A	7%	15W	3.5W
TPSBU30-102	5 ~ 6 VDC	4.00 ~ 3.33 A	5%	20W	3.5W
TPSBU30-103	6 ~ 8 VDC	4.00 ~ 3.00 A	5%	24W	3.5W
TPSBU30-104	8 ~ 11 VDC	3.75 ~ 2.72 A	5%	30W	3.5W
TPSBU30-105	11 ~ 13 VDC	2.72 ~ 2.30 A	5%	30W	3.5W
TPSBU30-106	13 ~ 16 VDC	2.30 ~ 1.87 A	5%	30W	3.5W
TPSBU30-107	16 ~ 21 VDC	1.87 ~ 1.42 A	3%	30W	3.5W
TPSBU30-108	21 ~ 27 VDC	1.42 ~ 1.11 A	2%	30W	3.5W
TPSBU30-109	27 ~ 33 VDC	1.11 ~ 0.90 A	2%	30W	3.5W
TPSBU30-110	33 ~ 40 VDC	0.90 ~ 0.75 A	2%	30W	3.5W
TPSBU30-111	40 ~ 50 VDC	0.75 ~ 0.60 A	2%	30W	3.5W

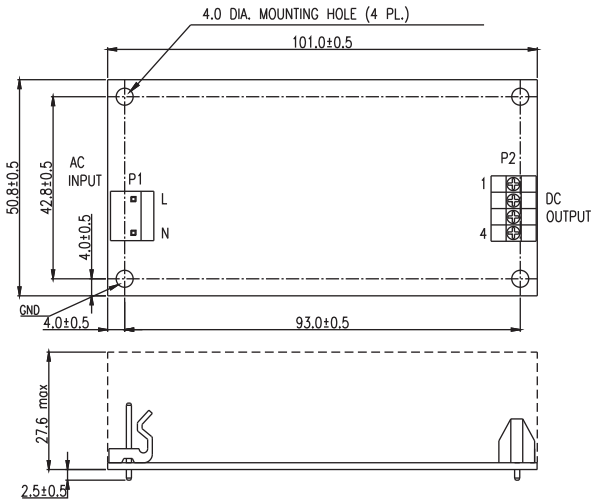
Output Voltage And Current Rating Chart (Multi Output) :

Model Number	Output #1				Output #2				Max. Output Power	Pno(max.)
	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax		
TPSBU30-200	+3.3V	0.6A	3A	5%	+12V	0.20A	1.25A	10%	24.90W	3.5W
TPSBU30-201	+5.0V	0.6A	3A	5%	+12V	0.25A	1.25A	10%	30W	3.5W
TPSBU30-202	+5.0V	0.6A	3A	5%	+15V	0.20A	1.00A	10%	30W	3.5W
TPSBU30-203	+5.0V	0.6A	3A	5%	+24V	0.12A	0.62A	10%	30W	3.5W
TPSBU30-204	+3.3V	0.6A	3A	5%	+5V	0.30A	1.50A	10%	17.40W	3.5W
TPSBU30-205	+5.0V	0.6A	3A	5%	+36V	0.10A	0.42A	10%	30.12W	3.5W
TPSBU30-205	+9.0V	0.4A	2A	5%	-9V	0.20A	1.33A	10%	30W	3.5W
TPSBU30-209	+12V	0.2A	2A	5%	-12V	0.05A	0.50A	10%	30W	3.5W

PIN CHART

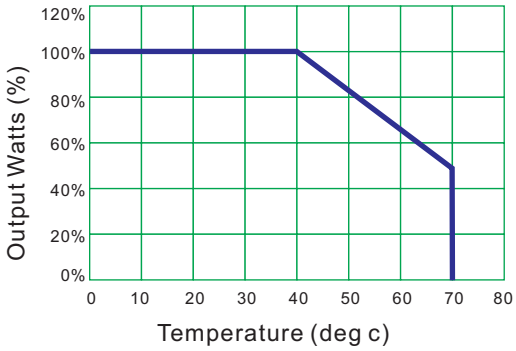
PIN / MODEL	1	2	3	4
TPSBU30-1XX	RTN	RTN	OUT	OUT
TPSBU30-2XX	Vo1	COM	COM	Vo2

Mechanical Specifications:



Note:
1. Dimensions are shown in mm.
2. Weight: 140gs approx.
3. Input connector mates with Molex housing 09-50-3031 and Molex 2478series crimp terminal.
4. Output connector mates with Lead wire

Derating Cruve :



1. Operating Temperature: 0 to 70°C
2. Derate linearly from 100% load at 40°C to 50% load at 70°C