

## **TPIBU101 SERIES**

100W Open Frame Type Industrial Power Supplies

### **Features:**

- Wide Operating Voltage 90 to 260 VAC,47 to 63 Hz
- Internal EMI filter
- Single Output
- Active Power Factor Correction
- Size: 3"x5"x1.18"
- Operating temperature -20~70°C
- Class I

Vin

■ 3 year warranty

## **Electrical Characteristics:**

Safety Approvals Input Voltage Range

| Vin   |   |  |                  |
|-------|---|--|------------------|
| VIII  | Operate Voltage Range                                       |  | 90~260VAC        |
| fin   | Input Frequency   |  | 47~63Hz          |
| PF    | Power Factor Correction                                     | lo=Full load, Vin=240VAC                   | 0.95~1           |
| Ро    | Output Power Range  |  | See rating chart |
| Vo    | Output Voltage Range  |  | See rating chart |
| lo    | Output Current Range  |  | See rating chart |
| lil   | Input Current (Low Line)                                    | lo=Full load, Vin=100VAC                   | 2.0A (max.)      |
| lih   | Input Current (High Line)                                   | lo=Full load, Vin=240VAC                   | 2.0A (max.)      |
| l.    | Low Line Inrush Current                                     | lo=Full load, 25°C, Cool start, Vin=115VAC | 50A (max.)       |
| lr    | High Line Inrush Current                                    | lo=Full load, 25°C, Cool start, Vin=230VAC | 100A (max.)      |
| Eff   | Efficiency  | lo=Full Load, Vin=230VAC                   | 70~85%           |
| REG-i | Line Regulation   | lo=Full Load                               | 0.5~1%           |
| REG-o | Load Regulation   | Vin=230VAC                                 | 2~5%             |
| OVP   | Over Voltage Protection                                     | Over Voltage Protection                    | 112~132%         |
| OCP   | Over Current Protection                                     | Over Current Protection                    | 110~150%         |
| Ttr   | Time of Transient Response                                  | lo=Full Load to Half Load, Vin=100VAC      | 4mS (max.)       |
| Th    | Hold-Up Time  | lo=Full Load, Vin=110VAC                   | 16mS (min.)      |
| Ts    | Start Up Time   | lo=Full Load, Vin=100VAC                   | 3S (max.)        |
| Vp-p  | Ripple & Noise(Peak to Peak)                                | Full Load, Vin=90VAC                       | 1% (max.)        |
| llk   | Safety Ground Leakage Current                               | Vin=240VAC/60Hz                            | 0.75mA (max.)    |
| тс    | Temperature Coefficient                                     | All output                                 | ±0.04%/°C        |
| Pno   | No-Load Power Consumption                                   | No load, Vin=230VAC                        | See rating chart |
| Vps   | Dielectric Withstanding Voltage<br>for Primary to secondary | Primary to secondary                       | 4242VDC (min.)   |
| Vpg   | Dielectric Withstanding Voltage<br>for Primary to PE        | Primary to PE                              | 2594VDC (min.)   |
| Ris   | Isolation Resistance  | Test Voltage=500VDC                        | 50MΩ (min.)      |
|       |   |  |                  |

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

### **Environmental**

| То   | Operating Temperature                                       | See derating curve |
|------|---|--------------------|
| Ts   | Storage Temperature   | -40~85°C           |
| Но   | 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 50°C to 50% load at 70°C  |                    |

Toll Free: 877-646-0900



100~240VAC

# Safety Approvals: c & us C E C B

**Application:** 

- Electrical Test & Measurement

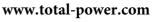
- Communication equipment

- Industrial PC

Instruments

- AV equipment

UL/c-UL(UL 60950-1:2nd Edition) TUV/GS(EN 60950-1:2nd Edition)





# **P** Total Power International, Inc.

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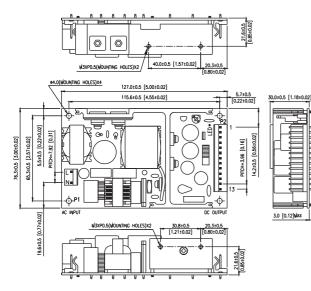
## **Output Voltage And Current Rating Chart ( Single Output ) :**

| Model Number Output Voltage |             | Output Current  | Total<br>Regulation | Max.<br>Output Power | Pno (max.) |  |
|-----------------------------|-------------|-----------------|---------------------|----------------------|------------|--|
| TPIBU101-101                | 3 ~ 5 VDC   | 18.00 ~ 10.80 A | 5%                  | 54W                  | 6W         |  |
| TPIBU101-102                | 5 ~ 6 VDC   | 14.00 ~ 11.66 A | 5%                  | 70W                  | 6W         |  |
| TPIBU101-103                | 6 ~ 9 VDC   | 13.33 ~ 8.88 A  | 5%                  | 80W                  | 6W         |  |
| TPIBU101-104                | 9 ~ 11 VDC  | 11.11 ~ 9.09 A  | 5%                  | 100W                 | 6W         |  |
| TPIBU101-105                | 11 ~ 13 VDC | 9.09 ~ 7.69 A   | 3%                  | 100W                 | 6W         |  |
| TPIBU101-106                | 13 ~ 16 VDC | 7.69 ~ 6.25 A   | 3%                  | 100W                 | 6W         |  |
| TPIBU101-107                | 16 ~ 21 VDC | 6.25 ~ 4.76 A   | 3%                  | 100W                 | 6W         |  |
| TPIBU101-108                | 21 ~ 27 VDC | 4.76 ~ 3.70 A   | 2%                  | 100W                 | 6W         |  |
| TPIBU101-109                | 27 ~ 33 VDC | 3.70 ~ 3.03 A   | 2%                  | 100W                 | 6W         |  |
| TPIBU101-110                | 33 ~ 40 VDC | 3.03 ~ 2.50 A   | 2%                  | 100W                 | 6W         |  |
| TPIBU101-111                | 40 ~ 50 VDC | 2.50 ~ 2.00 A   | 2%                  | 100W                 | 6W         |  |

#### **PIN CHART**

| PIN          | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| TPIBU101-1XX | OUT | OUT | OUT | OUT | OUT | OUT | RTN | RTN | RTN | RTN | RTN | RTN | N/C |

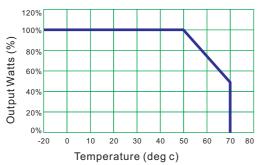
## **Mechanical Specifications:**



Note:

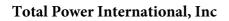
- 1. Dimensions are shown in mm.
- 2. Weight: 345gs approx.
- 3. Input connector mates with Molex housing
- 09-52-4034 and Molex 2478 series crimp terminal . 4. Output connector mates with Molex housing
  - 09-52-4134 and Molex 2478 series crimp terminal.

**Derating Cruve :** 



1. Operating Temperature: -20 to 70°C

2. Derate linearly from 100% load at 50°C to 50% load at 70°C



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