

# SBU150 SERIES

## 150W Open Frame Switching Power Supplies For I.T.E.

### Description:

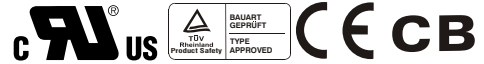
The SBU150 series of compact, open frame constructed, AC/DC switching mode power supplies provide 150 Watts of continuous output power. They are ideally suited for use in CRT terminals, disc drive systems, microprocess or based systems, portable equipments and many other applications. All models meet FCC Part-15 class B and CISPR-22 class B emission Limits and are designed to comply with UL/c-UL(UL 60950-1) ,TUV/Bauart(EN 60950-1) and new CE requirements. All units are 100% burned in and tested.



### Features:

- Wide Input Voltage 90 to 264 VAC,47 to 63 Hz
- Internal EMI filter
- Single Output
- Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing09-50-3131 and Molex 2478 series crimp terminal
- Output Voltage Available From 9 VDC Thru 48 VDC
- Input Surge Current, Over Voltage and Over Load protection
- Power Factor Correction
- Power Fail Detect(Optional)
- Class I Insulation
- Synchronous Rectification
- Two Years Warranty

### Safety Approvals :



### Electrical Characteristics:

| Sym.  | Parameter                     | Test Conditions                            | Min.             | Typ. | Max. | Unit |
|-------|-------------------------------|--|------------------|------|------|------|
| Vin   | Input Voltage                 | Operating Voltage                          | 90               |      | 264  | VAC  |
| Fin   | Input Frequency               |  | 47               |      | 63   | Hz   |
| PFC   | Power Factor Correction       | Io=Full load, Vin=90~260VAC                | 0.95             | 0.97 | 1.0  |      |
| Wo    | Output Power Range            | Vin=90 to 264 VAC                          | 0                |      | 150  | 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                   |                  |      | 2.0  | A    |
| Iih   | Input Current (High Line)     | Io=Full load, Vin=230VAC                   |                  |      | 0.7  | A    |
| Irl   | Low Line Inrush Current       | Io=Full load, 25°C, Cool start, Vin=115VAC |                  | 12   | 15   | A    |
| Irh   | High Line Inrush Current      | Io=Full load, 25°C, Cool start, Vin=230VAC |                  | 26   | 30   | A    |
| Eff   | Efficiency                    | Io=Full load, Vin=230VAC                   | 80               | 85   | 90   | %    |
| 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   | Transient Response            | Io=Full load to Half Load, Vin=100VAC      |                  |      | 4    | mS   |
| Thold | Hold-Up Time                  | Io=Full load, Vin=110VAC                   | 16               | 18   | 20   | 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                       |                  | 1    | 2    | %    |
| Ilk   | Safety Ground Leakage Current | Io=Full load, Vin=240VAC                   |                  | 0.4  | 0.45 | mA   |
| Tc    | Temperature Coefficient       | All output                                 | -0.04            |      | 0.04 | %/°C |

### Environmental :

| Sym.  | Parameter  | Test Conditions | Min. | Typ. | Max. | Unit |
|-------|--|-----------------|------|------|------|------|
| Toper | Operating Temperature                                      |                 | 0    |      | 70   | °C   |
| Tstg  | Storage Temperature  |                 | -40  |      | 85   | °C   |
| Hr    | Relative Humidity  |                 | 5    |      | 95   | %    |
| 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   |
| Ri    | 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=110VAC           | B    |      |      | CLASS |

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

| Model Number | Output Voltage | Output Current | Total Regulation | Maximum Output Power |
|--------------|----------------|----------------|------------------|----------------------|
| SBU150-104   | 9 VDC          | 16.0 A         | 5%               | 144W                 |
| SBU150-105   | 12 VDC         | 12.5 A         | 5%               | 150W                 |
| SBU150-106   | 15 VDC         | 10.0 A         | 5%               | 150W                 |
| SBU150-107   | 18 VDC         | 8.33 A         | 4%               | 150W                 |
| SBU150-108   | 24 VDC         | 6.25 A         | 3%               | 150W                 |
| SBU150-109   | 30 VDC         | 5.00 A         | 2%               | 150W                 |
| SBU150-110   | 36 VDC         | 4.17 A         | 2%               | 150W                 |
| SBU150-111   | 48 VDC         | 3.13 A         | 2%               | 150W                 |

### PIN CHART

| PIN        | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13 (Optional) |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|
| MODEL      | OUT | OUT | OUT | OUT | OUT | OUT | RTN | RTN | RTN | RTN | RTN | RTN | PFD           |
| SBU150-1XX | OUT | OUT | OUT | OUT | OUT | OUT | RTN | RTN | RTN | RTN | RTN | RTN | PFD           |

### Note:

1. Dimensions are shown in inches or mm .
2. Weight: 390gs 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.

### Mechanical Specifications :

