

SBU30 SERIES

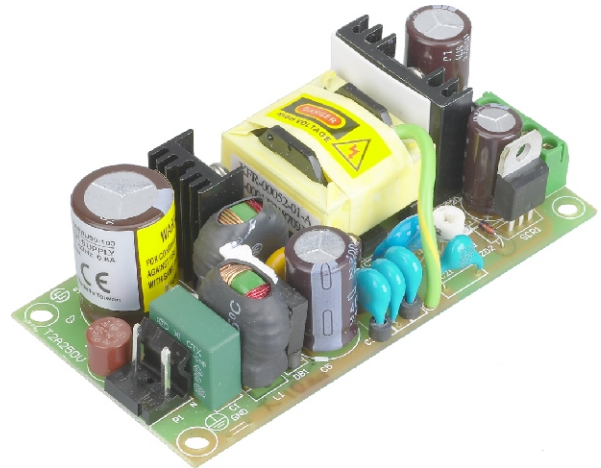
30W Open frame Switching Power Supplies For I.T.E.

Description:

The SBU30 series of products, open frame constructed, AC/DC switching mode power supplies provide 30 Watts of continuous output power. They are suited for use in disc drive systems, microprocess or based systems, 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 Input Voltage 90 to 264 VAC, 47 to 63 Hz
- Internal EMI filter
- Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal
- Output connector mates with Lead wire
- Single and Dual Output
- Output Voltage Available From 3 VDC Thru 50 VDC
- Input Surge Current, Over Voltage and Over Load protection
- Over Voltage Protection (Crowbar Design)
- Class I Insulation
- 2 year 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 |
| Wo | Output Power Range | Vin=90 to 264VAC | 0 | | 30 | 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 | | | 0.8 | A |
| Iih | Input Current (High Line) | Io=Full load, Vin=230VAC | | | 0.5 | 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 | 70 | 80 | 88 | % |
| REG-i | Line Regulation | Io=Full Load | | 0.5 | 1 | % |
| REG-o | Load Regulation | Vin=230VAC | | 3 | 10 | % |
| 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 | 10 | 12 | | mS |
| Ts | Start Up Time | Io=Full Load, Vin=100VAC | 0.3 | 1 | 2 | S |
| * Vrn | 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 |

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

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 40°C to 50% load at 70°C | | | | | |

SBU30 SERIES

30W Open Frame Switching Power Supplies For I.T.E.

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 | | | M Ω |
| CISPR | EMI requirements for CISPR-22 | Vin=220VAC | B | | | CLASS |
| FCC | EMI requirements for FCC PART-15 | Vin=110VAC | B | | | CLASS |

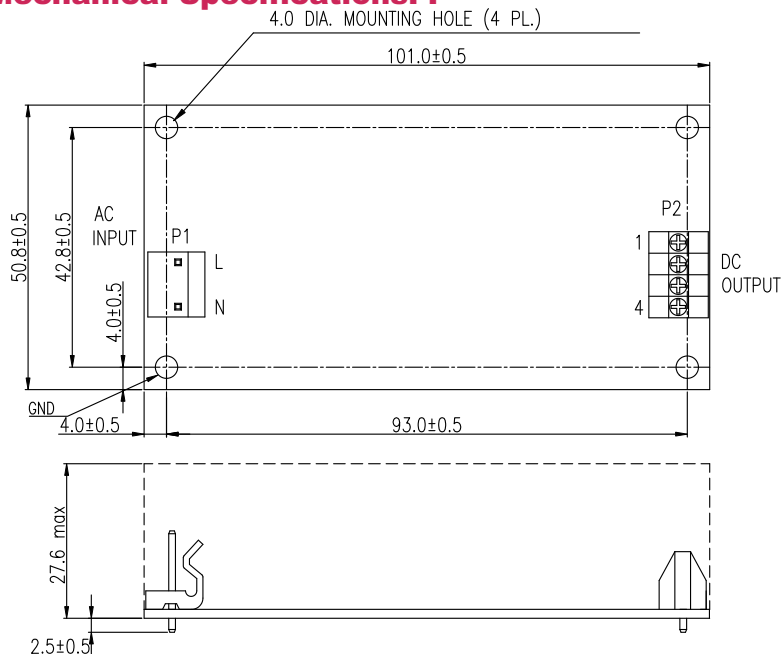
Output Voltage And Current Rating Chart (Single Output) :

| Model Number | Output Voltage | Output Current | Total Regulation | Maximum Output Power |
|--------------|----------------|----------------|------------------|----------------------|
| SBU30-101 | 3 ~ 5 VDC | 5.00 ~ 3.00 A | 7% | 15W |
| SBU30-102 | 5 ~ 6 VDC | 4.00 ~ 3.33 A | 5% | 20W |
| SBU30-103 | 6 ~ 8 VDC | 4.00 ~ 3.00 A | 5% | 24W |
| SBU30-104 | 8 ~ 11 VDC | 3.75 ~ 2.72 A | 5% | 30W |
| SBU30-105 | 11 ~ 13 VDC | 2.72 ~ 2.30 A | 5% | 30W |
| SBU30-106 | 13 ~ 16 VDC | 2.30 ~ 1.87 A | 5% | 30W |
| SBU30-107 | 16 ~ 21 VDC | 1.87 ~ 1.42 A | 3% | 30W |
| SBU30-108 | 21 ~ 27 VDC | 1.42 ~ 1.11 A | 2% | 30W |
| SBU30-109 | 27 ~ 33 VDC | 1.11 ~ 0.90 A | 2% | 30W |
| SBU30-110 | 33 ~ 40 VDC | 0.90 ~ 0.75 A | 2% | 30W |
| SBU30-111 | 40 ~ 50 VDC | 0.75 ~ 0.60 A | 2% | 30W |

Output Voltage And Current Rating Chart (Multi Output) :

| Model Number | Output #1 | | | | Output #2 | | | | Output #3 | | | | Maximum Output Power |
|--------------|-----------|-------|-------|--------|-----------|-------|-------|--------|-----------|-------|-------|--------|----------------------|
| | Vonom | Iomin | Iomax | Regmax | Vonom | Iomin | Iomax | Regmax | Vonom | Iomin | Iomax | Regmax | |
| SBU30-200 | +3.3V | 0.6A | 3A | 5% | +12V | 0.20A | 1.25A | 10% | | | | | 24.90W |
| SBU30-201 | +5.0V | 0.6A | 3A | 5% | +12V | 0.25A | 1.25A | 10% | | | | | 30.00W |
| SBU30-202 | +5.0V | 0.6A | 3A | 5% | +15V | 0.20A | 1.00A | 10% | | | | | 30.00W |
| SBU30-203 | +5.0V | 0.6A | 3A | 5% | +24V | 0.12A | 0.62A | 10% | | | | | 30.00W |
| SBU30-204 | +3.3V | 0.6A | 3A | 5% | +5V | 0.30A | 1.50A | 10% | | | | | 17.40W |
| SBU30-205 | +5.0V | 0.6A | 3A | 5% | +36V | 0.10A | 0.42A | 10% | | | | | 30.12W |
| SBU30-208 | +9.0V | 0.4A | 2A | 5% | -9V | 0.20A | 1.33A | 10% | | | | | 30.00W |
| SBU30-209 | +12.0V | 0.2A | 2A | 5% | -12V | 0.05A | 0.50A | 10% | | | | | 30.00W |

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 2478 series crimp terminal
4. Output connector mates with Lead wire