

BDS SERIES

AC / DC Single Output: 75 ~ 300 Watts

LS series



Features

- Universal input 85 - 264VAC
- Stand Alone industrial power supply
- Five power levels, 75 ~ 300 watts output power
- Low cost solution for industrial applications.
- Output voltage adjustment
- Short circuit and OVP protection
- Harmonic correction EN61000-3-2
- Power Factor 0.95
- EMC EN55022-B
- Immunity to EN61000-4
- Some models suitable for battery charging

Specifications

| | |
|------------------------------------|---|
| Input Voltage | 85 ~ 264VAC (120 ~ 370VDC) (110 / 230VAC 150W models) |
| Power Factor | 0.95 200-300W models |
| Harmonics | EN61000-3-2 |
| Output Power | 75 ~ 300 watts |
| Efficiency | Model dependent: 67 ~ 85% |
| Output Voltage | See table |
| Ripple & Noise | Model dependent: 80 ~200mV (3.3V ~ 48V) |
| Line Regulation | Model dependent: 20 ~192mV (3.3V ~ 48V) |
| Load Regulation | Model dependent: 40 ~384mV (3.3V ~ 48V) |
| Temp Co-Eff. | 0.02% per °C |
| Overload Protection | Current limiting, with auto recovery (200 & 300 watts , with constant current) |
| Overvoltage Protection | OVP will shutdown unit. Recycle AC power after 30 seconds to restart. |
| Over temperature Protection | OTP will shutdown unit. Recycle AC power after 30 seconds to restart. (200 / 300W models) |
| Hold-Up time | Typically 20ms |
| Parallel Operation | NO |
| Operating Temp. | -25°C to +50°C @ 100% load, +70°C @ 50% load. |
| Humidity | 10 ~ 90% RH no dewdrop |
| Cooling | 75 ~ 150W convection cooled 200 ~ 300W Forced air by internal fan |
| Isolation | Input – Output: 3000VAC Input – Case: 2000VAC Output – Case: 500VAC |
| Safety | Internal module approvals: UL60950-1, EN60950-1, EN50178 |
| EMI | EN55011 / EN55022 – A |
| Immunity | EN61000-4-2, -3, -4, -5, -6, -8, -11. |
| Dimensions | 300 x 150 x 75mm (0.5 ~ 1.5kg) (Includes terminals) |

Description

The **BDS Series** power supplies were designed for a range of Industrial applications, requiring a stand-alone solution, with mains power cord for AC power connection.

This allows the use of these power supplies in workshops or in fixed installations, with the AC power connection fully protected by the use of an IEC socket and mains power cord. The DC output is on heavy duty 30A terminals.

The internal of these units, is a standard dc power supply module that has a proven track record and reliability.

Voltage adjustment is by way of a trim-pot (on internal modules), allowing for a minimum 10% voltage adjustment.

Some of these units can also be used as a combined Power Supply / Battery Charger, offering a low cost & reliable Battery Back-up solution.

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| Model | Output V | A | Voltage Range | Power W |
|-----------|----------|-------|---------------|---------|
| BDS75-3 | 3.3V | 15A | 3.0-3.6V | 75W |
| BDS75-5 | 5V | 12A | 4.75-5.5V | |
| BDS75-12 | 12V | 6A | 10.8-13.2V | |
| BDS75-15 | 15V | 5A | 13.5-16.5V | |
| BDS75-24 | 24V | 3.2A | 22.0-27.2V | |
| BDS75-36 | 36V | 2.1A | 32.0-40.0V | |
| BDS75-48 | 48V | 1.6A | 42.0-54.0V | |
| BDS100-3 | 3.3V | 20A | 3.0-3.3V | 100W |
| BDS100-5 | 5V | 16A | 4.75-5.5V | |
| BDS100-12 | 12V | 8.5A | 10.8-13.2V | |
| BDS100-15 | 15V | 7A | 13.5-16.5V | |
| BDS100-24 | 24V | 4.5A | 22.0-27.2V | |
| BDS100-36 | 36V | 3A | 32.0-40.0V | |
| BDS100-48 | 48V | 2.3A | 42.0-54.0V | |
| BDS150-3 | 3.3V | 30A | 3.0-3.3V | 150W |
| BDS150-5 | 5V | 26A | 4.75-5.5V | |
| BDS150-12 | 12V | 12.5A | 10.8-13.2V | |
| BDS150-15 | 15V | 10A | 13.5-16.5V | |
| BDS150-24 | 24V | 6.5A | 22.0-27.2V | |
| BDS150-36 | 36V | 4.3A | 32.0-40.0V | |
| BDS150-48 | 48V | 3.3A | 42.0-54.0V | |

| Model | Output V | A | Voltage Range | Power W |
|------------|----------|-------|---------------|---------|
| BDS200-3.3 | 3.3V | 40A | 3.0 ~3.6V | 132W |
| BDS200-5 | 5.0V | 40A | 4.7 ~ 5.5V | 200W |
| BDS200-7.5 | 7.5V | 26.7A | 6.8~8.2V | 200W |
| BDS200-12 | 12V | 16.7A | 10.8 ~14.4V | 200W |
| BDS200-15 | 15V | 13.4A | 13.5 ~16.5V | 200W |
| BDS200-24 | 24V | 8.4A | 22.0~ 28.8V | 200W |
| BDS200-36 | 36V | 5.6A | 32.0~40V | 200W |
| BDS200-48 | 48V | 4.2A | 42.0 ~ 57.6V | 200W |

- BDS200-24 & BDS200-36 Peak Output power 250W

| Model | Output V | A | Voltage Range | Power W |
|-----------|----------|------|---------------|---------|
| BDS300-5 | 5.0V | 55A | 4.5 ~ 6.0V | 275W |
| BDS300-12 | 12V | 26A | 9.6 ~13.2V | 312W |
| BDS300-15 | 15V | 21A | 13.20 ~18.6V | 315W |
| BDS300-24 | 24V | 13A | 20.0~ 28.8V | 313W |
| BDS300-28 | 28V | 11A | 22.4 ~33.6V | 312W |
| BDS300-36 | 36V | 8.7A | 28.8~40V | 313W |
| BDS300-48 | 48V | 6.7A | 40.0 ~ 57.6V | 320W |

Battery Charging models

| Model | Output V | A | Voltage Range | Power W |
|------------|----------|-------|---------------|---------|
| BDS200-12B | 13.8V | 13.4A | 13.5 ~16.5V | 200W |
| BDS200-48B | 55V | 4.2A | 42.0 ~ 57.6V | 200W |
| BDS300-12B | 13.8V | 21A | 13.2~18V | 300W |
| BDS300-24B | 27.6V | 11A | 20~28.8V | 300W |
| BDS300-48B | 55V | 5.6A | 40-57.6V | 300W |