### Features:
- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 1500VAC I/O isolation
- Forced air cooling by built-in DC Fan
- 100% full load burn-in test
- 24V and 48V input voltage design refer to LVD
- 2 years warranty

### SPECIFICATION

#### MODEL | DC VOLTAGE | RATED CURRENT | CURRENT RANGE | RATED POWER | RIPPLE & NOISE (max.) | VOLTAGE ADJ. RANGE | VOLTAGE TOLERANCE | LINE REGULATION | LOAD REGULATION | SETUP, RISE TIME | VOLTAGE RANGE | EFFICIENCY (Typ.) | DC CURRENT (Typ.) | INRUSH CURRENT (Typ.) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SD-350B</strong></td>
<td>5V</td>
<td>57A</td>
<td>0 ~ 57A</td>
<td>285W</td>
<td>100mVp-p</td>
<td>4.5 ~ 5.5VDC</td>
<td>±2.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>300ms, 50ms at full load</td>
<td>B:19 ~ 36VDC</td>
<td>74%</td>
<td>14.4A/24V</td>
<td>C:45A/48VDC</td>
</tr>
<tr>
<td></td>
<td>12V</td>
<td>27.5A</td>
<td>0 ~ 27.5A</td>
<td>330W</td>
<td>120mVp-p</td>
<td>11 ~ 16VDC</td>
<td>±1.0%</td>
<td>±0.3%</td>
<td>±1.0%</td>
<td>350ms, 50ms at full load</td>
<td>C:36 ~ 72VDC</td>
<td>80%</td>
<td>16A/24V</td>
<td>D:45a/96VDC</td>
</tr>
<tr>
<td></td>
<td>24V</td>
<td>14.6A</td>
<td>0 ~ 14.6A</td>
<td>350.4W</td>
<td>150mVp-p</td>
<td>23 ~ 30VDC</td>
<td>±1.0%</td>
<td>±0.2%</td>
<td>±1.0%</td>
<td>700ms, 50ms at full load</td>
<td>D:72 ~ 144VDC</td>
<td>84%</td>
<td>17.6A/24V</td>
<td></td>
</tr>
<tr>
<td></td>
<td>48V</td>
<td>7.3A</td>
<td>0 ~ 7.3A</td>
<td>350.4W</td>
<td>200mVp-p</td>
<td>43 ~ 53VDC</td>
<td>±1.0%</td>
<td>±0.2%</td>
<td>±1.0%</td>
<td>700ms, 50ms at full load</td>
<td></td>
<td>76%</td>
<td>17.6A/24V</td>
<td></td>
</tr>
<tr>
<td><strong>SD-350C</strong></td>
<td>5V</td>
<td>60A</td>
<td>0 ~ 60A</td>
<td>300W</td>
<td>100mVp-p</td>
<td>4.5 ~ 5.5VDC</td>
<td>±2.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>300s, 50ms at full load</td>
<td>57 ~ 16VDC</td>
<td>84%</td>
<td>14.6A</td>
<td>7.3A</td>
</tr>
<tr>
<td></td>
<td>12V</td>
<td>27.5A</td>
<td>0 ~ 27.5A</td>
<td>330W</td>
<td>120mVp-p</td>
<td>11 ~ 16VDC</td>
<td>±1.0%</td>
<td>±0.3%</td>
<td>±1.0%</td>
<td>300ms, 50ms at full load</td>
<td>81 ~ 16VDC</td>
<td>81%</td>
<td>14.6A</td>
<td>7.3A</td>
</tr>
<tr>
<td></td>
<td>24V</td>
<td>14.6A</td>
<td>0 ~ 14.6A</td>
<td>350.4W</td>
<td>150mVp-p</td>
<td>23 ~ 30VDC</td>
<td>±1.0%</td>
<td>±0.2%</td>
<td>±1.0%</td>
<td>700ms, 50ms at full load</td>
<td>33 ~ 53VDC</td>
<td>81%</td>
<td>14.6A</td>
<td>7.3A</td>
</tr>
</tbody>
</table>

**INPUT**

- OVERLOAD: 105 ~ 135% rated output power
- OVER VOLTAGE: 5.75 ~ 6.75V, 16.8 ~ 20V, 31.5 ~ 37.5V, 53 ~ 65V
- OVER TEMPERATURE: Shut down input voltage, recovers automatically after temperature goes down

**PROTECTION**

- WORKING TEMP: -20 ~ +60°C (Refer to "Derating Curve")
- WORKING HUMIDITY: 20 ~ 90% RH non-condensing
- STORAGE TEMP. HUMIDITY: -40 ~ +85°C, 10 ~ 95% RH
- TEMP. COEFFICIENT: ±0.03%/℃ (0 ~ 50℃)
- VIBRATION: 10 ~ 500Hz, 2G, 10min./cycle, 60min. each along X, Y, Z axes

**SAFETY & EMC (Note 4)**

- SAFETY STANDARDS: IEC60950-1 CB approved by TUV (for D type only)
- WITHSTAND VOLTAGE: 1kVAC @ 1000VDC (for I/O-PG, O/P-FG), 2kVAC (for I/O-IP), 5kVAC (for I/O-PG)
- ISOLATION RESISTANCE: 100M Ohms / 500VDC / 25℃, 70% RH
- EMC EMISSION: Compliance to EN55022 (CISPR22) Class B
- EMC IMMUNITY: Compliance to EN61000-4-2, 3, 4, 6, 8, and light industry level, criteria A

**OTHERS**

- MTBF: 209.4K hrs min. 
  - MIL-HDBK-217F (25℃)
- DIMENSION: 215*115*50mm(L*W*H)
- PACKING: 1.1Kg, 2pcs/14.4Kg, 92CUFT

**NOTE**

1. All parameters NOT specially mentioned are measured at 24, 48, 96VDC input, rated load and 25% ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-certified that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to EMI testing of component power supplies.

(as available on http://www.meanwell.com)
# 350W Single Output DC-DC Converter

**SD-350 series**

## Features:
- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 1500VAC I/O isolation
- Forced air cooling by built-in DC Fan
- 100% full load burn-in test
- 24V(B) and 48V(C) input voltage design refer to LVD
- 2 years warranty

## SPECIFICATION

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DC VOLTAGE</th>
<th>RATED CURRENT</th>
<th>CURRENT RANGE</th>
<th>RATED POWER</th>
<th>RIPPLE &amp; NOISE (max.)</th>
<th>VOLTAGE ADJ. RANGE</th>
<th>VOLTAGE TOLERANCE</th>
<th>LINE REGULATION</th>
<th>LOAD REGULATION</th>
<th>SETUP, RISE TIME</th>
<th>VOLTAGE RANGE</th>
<th>EFFICIENCY (Typ.)</th>
<th>DC CURRENT (Typ.)</th>
<th>INRUSH CURRENT (Typ.)</th>
<th>OVER TEMPERATURE</th>
<th>WORKING TEMP.</th>
<th>WORKING HUMIDITY</th>
<th>STORAGE TEMP.</th>
<th>TEMP. COEFFICIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD-350D</td>
<td>5V</td>
<td>60A</td>
<td>0 ~ 60A</td>
<td>300W</td>
<td>100mVp-p</td>
<td>4.5 ~ 5.5VDC</td>
<td>±2.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>300ms, 50ms at full load</td>
<td>B:19 ~ 36VDC</td>
<td>78%</td>
<td>6A/96V</td>
<td>C:45A/48VDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12V</td>
<td>29.2A</td>
<td>0 ~ 29.2A</td>
<td>350W</td>
<td>120mVp-p</td>
<td>11 ~ 16VDC</td>
<td>±1.0%</td>
<td>±0.3%</td>
<td>±1.0%</td>
<td></td>
<td>C:36 ~ 72VDC</td>
<td>83%</td>
<td>6A/96V</td>
<td>D:36 ~ 72VDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24V</td>
<td>14.6A</td>
<td>0 ~ 14.6A</td>
<td>350W</td>
<td>150mVp-p</td>
<td>23 ~ 30VDC</td>
<td>±1.0%</td>
<td>±0.2%</td>
<td>±1.0%</td>
<td></td>
<td>D:72 ~ 144VDC</td>
<td>87%</td>
<td>6A/96V</td>
<td>E:72 ~ 144VDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>48V</td>
<td>7.3A</td>
<td>0 ~ 7.3A</td>
<td>350W</td>
<td>200mVp-p</td>
<td>43 ~ 53VDC</td>
<td>±1.0%</td>
<td>±1.0%</td>
<td>±1.0%</td>
<td></td>
<td></td>
<td>89%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### INPUT
- **VOLTAGE RANGE**: B:19 ~ 36VDC, C:36 ~ 72VDC, D:72 ~ 144VDC
- **EFFICIENCY (Typ.)**: 78%, 83%, 87%, 89%
- **DC CURRENT (Typ.)**: 6A/96V, 6A/96V, 6A/96V
- **INRUSH CURRENT (Typ.)**: C:45A/48VDC, D:45A/96VDC

### OUTPUT
- **OVERLOAD**: 105 ~ 135% rated output power
- **PROTECTION OVERVOLTAGE**: Protection type: Shut down o/p voltage, re-power on to recover
- **OVER TEMPERATURE**: Shuts down o/p voltage, recovers automatically after temperature goes down
- **ENVIRONMENT**:
  - **WORKING TEMP.**: -20 ~ +60°C (Refer to "Derating Curve")
  - **WORKING HUMIDITY**: 20 ~ 90% RH non-condensing
  - **STORAGE TEMP.**: -40 ~ +85°C, 10 ~ 95% RH
  - **TEMP. COEFFICIENT**: ±0.03%/°C (0 ~ 50°C)
  - **VIBRATION**: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes

### SAFETY & EMC
- **SAFETY STANDARDS**: IEC60950-1 CB approved by TUV (for D type only)
- **ISOLATION RESISTANCE**: UP-OIP: 1.5kVAC, I/P-FG: 2kVAC, O/P-FG: 0.5kVAC
- **EMC EMISSION**: Compliance to EN55022 (CISPR22) Class B
- **EMC IMMUNITY**: Compliance to EN61000-4-2, 3, 4, 6, 8, light industry level, criteria A

### OTHERS
- **MTBF**: 209.4K hrs min. (MIL-HDBK-217F (25°C))
- **DIMENSION**: 215*115*50mm (L*W*H)
- **PACKING**: 1.1Kg; 12pcs/14.4Kg/0.92CUFT

### NOTE
1. All parameters NOT specially mentioned are measured at 24,48,96VDC input, rated load and 25 of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to EMI testing of component power supplies. (as available on http://www.meanwell.com)

---

**File Name**: SD-350-SPEC 2015-01-22
### Mechanical Specification

**Ambient Temperature (°C) vs. Load (%)**

- **SD-350B, C, D-5**

### Derating Curve

- **AMBIENT TEMPERATURE (°C)**
- **LOAD (%)**

### Static Characteristics

**Input Voltage (V) vs. Load (%)**

- **LOAD (%)**
- **Input Voltage (V)**

### Block Diagram

- **Block Diagram**

**fosc**: 100kHz

### Terminal Pin No. Assignment

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Assignment</th>
<th>Pin No.</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DC INPUT V+</td>
<td>4, 5, 6</td>
<td>DC OUTPUT V-</td>
</tr>
<tr>
<td>2</td>
<td>DC INPUT V-</td>
<td>7, 8, 9</td>
<td>DC OUTPUT V+</td>
</tr>
<tr>
<td>3</td>
<td>FG</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

### Terminal Pin No. Assignment Diagram

- **6-M4 L=6mm**
- **Air flow direction**

---

**File Name**: SD-350-SPEC 2015-01-22
Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Mean Well: