# MS-150W

## 150W Single Output Switching Power Supply

### Features:
- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 77KHz

### 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>HOLD UP TIME (Typ.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS-150-5</td>
<td>5V</td>
<td>25A</td>
<td>0-25A</td>
<td>125W</td>
<td>100mV/µp</td>
<td>4.75 - 5.5V</td>
<td>±2.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>200ms</td>
<td></td>
</tr>
<tr>
<td>MS-150-12</td>
<td>12V</td>
<td>12.5A</td>
<td>0-12.5A</td>
<td>150W</td>
<td>100mV/µp</td>
<td>10.8 - 13.2V</td>
<td>±1.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>100ms</td>
<td></td>
</tr>
<tr>
<td>MS-150-15</td>
<td>15V</td>
<td>10A</td>
<td>0-10A</td>
<td>150W</td>
<td>120mV/µp</td>
<td>13.5 - 16.5V</td>
<td>±1.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MS-150-24</td>
<td>24V</td>
<td>6.25A</td>
<td>0-6.25A</td>
<td>150W</td>
<td>120mV/µp</td>
<td>21.5 - 24.4V</td>
<td>±1.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Input
- **VOLTAGE RANGE**: 88-132VAC/176-264VAC selected by jumper or switch
- **FREQUENCY RANGE**: 47-63Hz
- **EFFICIENCY (Typ.%)**: 70%
- **AC CURRENT (Typ.)**: 0.5A/115VAC, 0.25A/230VAC
- **INRUSH CURRENT (Typ.)**: COLD START 115A/115VAC, 30A/230VAC
- **LEAKAGE CURRENT**: <0.5mA/240VAC

### Protection
- **OVERLOAD**: 105~150% rated output power
- **OVER VOLTAGE**: 5.75-6.75V, 13.8-16.2V, 17.25-20.25V, 27.6-32.4V
- **WORKING TEMP.**: -10~+60°C (Refer to "Derating Curve")
- **WORKING HUMIDITY**: 20~90% RH non-condensing
- **STORAGE TEMP., HUMIDITY**: -20~+85°C, 10~95% RH
- **TEMP. COEFFICIENT**: ±0.03°C/°C (0~50°C)
- **VIBRATION**: 10~500Hz, 2G 10min./cycle, period for 60min., each along X, Y, Z axes

### Safety & EMC
- **SAFETY STANDARDS**: UL1012, UL60950-1, TUV EN60950-1, CCC GB4943 approved
- **WITHSTAND VOLTAGE**: IP-0/P:1.5kVAC, IP-FG:1.5kVAC, IP-FG:0.5kVAC
- **ISOLATION RESISTANCE**: IP-0/P:500M Ohms / 500VDC / 25°C, IP-FG:70M Ohms / 500VDC / 25°C
- **EMC EMISSION**: Compliance to EN55022 ( CISPR22) Class B, EN61000-3-2, EN61000-3-3
- **EMC IMMUNITY**: Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, light industry level, criteria A

### Others
- **MTBF**: 521,1k hrs min.
- **DIMENSION**: 152x99x50mm (LxWxH)
- **WEIGHT**: 0.48kg, 30pcs/4.5kg, 0.9CLFT

### Note
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz bandwidth 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.