

## AC-DC Switching Power Supply 350W SM350 Series



#### Key features

- Universal input:90-265 VAC, 50/60 Hz
- Low ripple and noise
- Output overload protection ,short circuit protection
- High efficiency, high density, fine quality and low price
- Industrial design
- Lower power, RoHS
- 100% test and work
- 1 year product warranty

**€** RoHS

SM350 series --- a metal mesh switching power supply offered by Zhongyiguang. The output power of this series module power supply is 350W, with low leakage current, which is only 0.5mA, the size is (215\*115\*50mm) and isolated pressure up to 3kv, etc. The product is safe and reliable, which has a good EMC. EMC and safety specifications meet the IEC/EN61000-4, CISPR22/EN55022, UL60950/EN60950/EN60601 and other related standards. This series of products are widely used in industrial, office and civil industries, such as applied to a relatively harsh environment electromagnetic compatibility must refer to the application circuit.

| Electrical specification | S |
|--------------------------|---|
|--------------------------|---|

| Model     | Input voltage | Output<br>Power(W) | Output<br>voltage(V) | Output<br>current(A) | Ripple(mv) | Efficiency (%) |
|-----------|---------------|--------------------|----------------------|----------------------|------------|----------------|
| SM350-S12 | 90-135VAC     | 350                | 12                   | 29                   | 150        | 85             |
| SM350-S15 | 90-135VAC     | 350                | 15                   | 23.3                 | 150        | 86             |
| SM350-S24 | 90-135VAC     | 350                | 24                   | 14.5                 | 150        | 87             |
| SM350-S36 | 90-135VAC     | 350                | 36                   | 9.7                  | 150        | 88             |
| SM350-S48 | 90-135VAC     | 350                | 48                   | 7.3                  | 150        | 88             |

#### **General features**

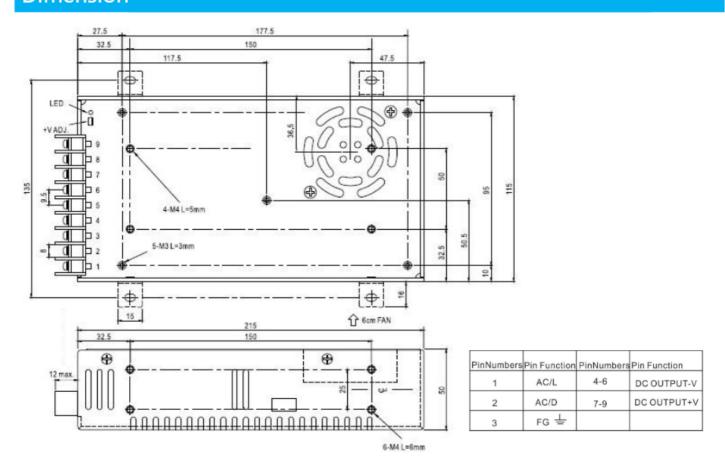
| Output     | Output voltage accuracy   | ±2.0% @100%load                                      |  |  |
|------------|---|--|--|--|
|            | Source effect   | ±1.0% @100%load                                      |  |  |
| Output     | Load effect   | ±1.0% @10-100%load                                   |  |  |
|            | Starting time (TYP)   | 50ms/230VAC @100%load                                |  |  |
|            | Output hold time (TYP)  | 30ms/230VAC @100% load                               |  |  |
|            | Input voltage range   | 90-135VAC 185 ~ 265VAC                               |  |  |
|            | Input frequency range   | 47 ~ 63Hz, 440Hzmax                                  |  |  |
| Input      | Input current (TYP)   | 1.2A / 230VAC  |  |  |
|            | Inrush current (TYP)  | Cold boot 60 A / 230 VAC                             |  |  |
|            | Leakage current(TYP)  | < 0.5mA at 230VAC/50Hz                               |  |  |
| Protection | Over-current protection: 110%120% load, automatic recovery after troubleshooting;       |  |  |  |
| FIOLECTION | Over-temperature and short circuit protection, automatic recovery after troubleshooting |  |  |  |
|            | Operating Temperature   | —40 ~ +70 °C (According to the output load derating) |  |  |
| Work       | Humidity  | 10 ~ 85% RH  |  |  |
| VVOIK      | Storage Temperature   | -40 ~ +105,  |  |  |



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| environment                | Temperature coefficient  | 0.03%/ (0~ 50°C)  |  |  |  |
|----------------------------|--|---|--|--|--|
|                            | Vibration coefficient  | 10~500Hz,2G10min./1cycle, 60min.each along X,Y,Z axes   |  |  |  |
| Safety and<br>EMC (Note:3) | Safety Standard  | IEC60950,EN60950,UL60950                                |  |  |  |
|                            | I/O-Isolation voltage  | I/P-O/P:3KVAC I/P-FG(CASE):1.5KVAC O/P-FG(CASE):0.5KVAC |  |  |  |
|                            | Isolation resistance   | I/P-O/P,I/P-FG,O/P-FG:>100M Ohms/500VDC 25°C 70% RH     |  |  |  |
|                            | EMI / RFI conducted  | EN55011, EN55022 (CISPR22) class A                      |  |  |  |
|                            | ESD  | IEC/EN 61000-4-2 level 4 8kV/15kV                       |  |  |  |
|                            | RF   | IEC/EN 61000-4-3 level 4                                |  |  |  |
|                            | EFT  | IEC/EN 61000-4-4 level 4 4kV                            |  |  |  |
|                            | SURGE  | IEC/EN 61000-4-5 level 4 2kV                            |  |  |  |
| Othoro                     | MTBF   | 165K hrs min. MIL-HDBK-217F(25)                         |  |  |  |
| Others                     | Dimension  | 215*115*50mm (L*W*H)                                    |  |  |  |
| Notes                      | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature;  |   |  |  |  |
|                            | <ol> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uf &amp;<br/>47uf parallel capacitor;</li> </ol>    |   |  |  |  |
|                            | 3. 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. |   |  |  |  |

### **Dimension**



### Block diagram