

# SPS 230P

# Single

# 230W



Country of Origin : Taiwan  
 Operating Temperature : -10 ~ 70° C  
 Dimension : 198 x 99 x 50 mm  
 Approvals / Marks : UL, c-UL, TÜV, CB, CE

**Features:**

- Universal AC input with active Power Factor Correction
- Non minimum load requirement
- Overload, over voltage & short circuit protection
- Over temperature protection (Optional)
- Remote Control ON/OFF (Optional)
- Built in EMI filter, low ripple noise
- 100% burn-in tested
- 1 year warranty
- Also available with Charger function (constant current limiting) -> see SPS230PC

**Specification:**

| MODEL                        |                  | SPS230P-3.3  | SPS230P-05 | SPS230P-7.5 | SPS230P-12 | SPS230P-15 | SPS230P-24 | SPS230P-27 | SPS230P-48 |
|------------------------------|------------------|--|------------|-------------|------------|------------|------------|------------|------------|
| OUTPUT                       | Voltage          | 3.3V   | 5V         | 7.5V        | 12V        | 15V        | 24V        | 27V        | 48V        |
|                              | min. Load        | 0A   | 0A         | 0A          | 0A         | 0A         | 0A         | 0A         | 0A         |
|                              | max. Load        | 40A  | 40A        | 30.7A       | 19.2A      | 15.4A      | 9.6A       | 8.6A       | 4.8A       |
|                              | Tolerance        | ±3%  | ±2%        | ±2%         | ±1%        | ±1%        | ±1%        | ±1%        | ±1%        |
|                              | R & Noise (max)  | 50mV   | 70mV       | 80mV        | 100mV      | 120mV      | 150mV      | 180mV      | 250mV      |
|                              | Efficiency (typ) | 69%  | 75%        | 77%         | 80%        | 80%        | 83%        | 84%        | 84%        |
| Max. Power                   |                  | 132W   | 200W       | 230W        | 230W       | 230W       | 230W       | 230W       | 230W       |
| Output Voltage adjust. range |                  | ±10% of rated output voltage   |            |             |            |            |            |            |            |
| INPUT                        | Voltage          | 85 ~ 264VAC / 120~ 375VDC Universal full range   |            |             |            |            |            |            |            |
|                              | Frequency        | 47 ~ 63 Hz   |            |             |            |            |            |            |            |
|                              | Current          | < 3.2A @ 100VAC input, full load condition   |            |             |            |            |            |            |            |
|                              | Inrush Current   | <80A@230VAC / < 40A@115VAC input, full load condition. Cold start at 25°C ambient  |            |             |            |            |            |            |            |
|                              | Leakage          | <1.5mA@264VAC input  |            |             |            |            |            |            |            |
|                              | P.F.C.           | > 0.95@230VAC / meets IEC 1000-3-2 class D   |            |             |            |            |            |            |            |
| PROTECTION                   | Overload         | Over 105% ~ 180% of rating, recovers automatically after fault has been removed  |            |             |            |            |            |            |            |
|                              | Over Voltage     | 3.8~4.6V   | 5.8~7V     | 8.6~10.5V   | 13.8~17.5V | 17.3~21V   | 27.6~33.6V | 31.1~37.8V | 55.2~67.2V |
|                              | Over Temp.       | Optional (>95°C, Shutdown)   |            |             |            |            |            |            |            |
|                              | Short Circuit    | Shutdown, recovers automatically after fault has been removed  |            |             |            |            |            |            |            |
| OTHERS                       | Rise time        | <20ms@230VAC   |            |             |            |            |            |            |            |
|                              | Holdup time      | >20ms@230VAC   |            |             |            |            |            |            |            |
|                              | Cooling          | 14CFM (min.) DC ball bearing fan   |            |             |            |            |            |            |            |
|                              | Remote On/Off    | Optional ( RC+ / RC- : Power ON : 0 ~ 0.7V / Power OFF : 3 ~ 5V / Sink Current : 3 ~ 10mA )  |            |             |            |            |            |            |            |
| Switching Frequency          |                  | 50KHz (fixed)  |            |             |            |            |            |            |            |
| Environment                  | Temperature      | Operating: -10 ~ 70°C / Derating: 50 ~ 70°C : 2.5%/°C / Storage: -10 ~ 75°C  |            |             |            |            |            |            |            |
|                              | Humidity         | Operating: 20% ~ 85% RH (non condensing) / Storage: 10% ~ 95% RH (non condensing)  |            |             |            |            |            |            |            |
| M.T.B.F.                     |                  | >210K hours ( according to MIL-HDBK-217F at 25°C environment)  |            |             |            |            |            |            |            |
| SAFETY                       | Approved :       | UL 60950 3 <sup>rd</sup> edition (2000) / CSA C22.2 No.60950 3 <sup>rd</sup> edition (2000) / TÜV EN60950 (2000) / IEC 60950 (1999) / EMKO-TSE (74-SEC)207/94  |            |             |            |            |            |            |            |
| EMC                          | EMI              | EN55022 A2 (2003) Class B limit / EN61000-3-2 (2000) Class D / EN61000-3-3 A1 (1995 +A1 2003) / FCC CFR 47 Part 15 Subpart J Class B limit / CNS 13438 Class B |            |             |            |            |            |            |            |
|                              | EMS              | EN50082 / EN61000-4-2,3,4,5,6,8,11   |            |             |            |            |            |            |            |
| WEIGHT                       |                  | N.W.: 1 kg   |            |             |            |            |            |            |            |