

# IPC PSU **FSP220-60LE**

# DESCRIPTION

FSP220-60LE is an industrial level of switching power supply. The power supply comes to offer the total power capacity up to 220 Watts, and uses unique active PFC (Power Factor Correction) circuit design with its high-load electrical components, makes it to be perfectly used in an industrial environment. In addition, with its full range of insut and output locations input and output electrical features, the power supply is ideally the best choice for server, workstation, communication or any other automation applications to use. The product also complies with the latest safety and EMC standards, which is perfectly to meet various regulations worldwide.

# APPLICATION

For standard, advanced server, NAS and industrial power system.

### FEATURES

- 80 Plus Low Ripple & Noise
- Output over voltage protection
- Short circuit protection on all outputs
- Resettable power shut down
- INTERNAL 4 cm fan
- 100% burn-in under high ambient temperature(50 $^\circ\!\!\mathbb{C}$ ) Vacuum-impregnated transformer

220W

- MTBF:100K hours at 25°C
- 100% Hi-pot tested
  Line input fuse protection

# WATTAGE

# Wattage: DIMENSION

**Dimension:** 

150mm(L) x 81.5mm(W) x 40.3mm(H)

#### PRODUCT HIGHLIGHT **Efficiency Level:** 80 Plus Altitude: 2000M PMBus:

For standard, advanced server, NAS and industrial power system.

INPUT SPECIFICATION Input Range: 90-264 Vac Input Frequency: 47-63 Hz Input Current: 115V@ 5.0 Amps-rms maximum 230V@ 3.0 Amps-rms maximum

GENERAL SPECIFICATION				
Effciency:	80% 230VAC			
Voltage	+3.3V, +12V, +5V, +5SB: ±5%			
Regulation:	-12V: ±10%			
<b>PWOK Delay Time:</b>	500ms > PWOK > 100ms			

\*Output Voltage and Current Rating

	+3.3V	+5V	+12V1	+12V2	-12V	+5Vsb
Ripple-Noise(R-P) mV	50mV	50mV	120mV	120mV	120mV	50mV
Regulation Load %	±5%	±5%	±5%	±5%	±10%	±5%
Output Max.(A)	14A	16A	16A	16A	0.8A	2.5A
Output Min.(A)	0.5A	0.5A	1A	1A	0A	0A

TEMP.Range:

MTBF:

### NOTE

5V, 3.3V, 12V, -12V Will have the regulation to 10% when all load take off. 220W(50 $^\circ$ ):3.3V+5V+12V1+12V2=207W 250W

(25°C):3.3V+5V+12V1+12V2=237W

The 12V1 and 12V2 total output shall not exceed 17A. The +3.3V and +5V total output shall not exceed 90 watts. The +3.3V and +5V total output shall not exceed 110 watts

The total output shall not exceed 250 watts

# MECHANICAL SPECIFICATION



This content is subject to change, please refer to specification for more detail. FSP reserve the right to change the content without prior notice



### SAFETY STANDARD APPAOVAL C E F©

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OUTPUT SPECIFICATION					
Hold up Time: Ouput Voltage Regulation:	115V/60Hz 17mSec. Minimum@100% Load, 230V/50Hz 17mSec. Minimum,@100% Load +3.3Vdc output : +3.5 Vdc maximum, + 4.8Vdc maximum +5Vdc output : +5.5 Vdc minimum, + 6.82Vdc maximum +12Vdc output : +13.4 Vdc minimum, + 15.6Vdc				
Output Rise Time:	maximum 115V-rms/230V-rms 5V 20ms Maximum 115V-rms/230V-rms 12V 20ms Maximum				
Ripple & Noise:	3.3V:50mV p-p 5V:50mV p-p 12V1:120mV p-p 12V2:120mV p-p -12V:120mV p-p 5Vsb:50mV p-p				
Short Circuit Protection:	load < 0.1 Ohm				
ENVIRONMENTAL SPECIFICATION					

# Storage Temperature: 20°C to + $80^{\circ}$ C The power supply have a minimum predicted MTBF(MIL-HDBK-217) of 100,000 hours of continuous operation at 25℃ maximum-output load, and nominal AC inout voltage