

## DESCRIPTION

FSP700-50ERS is an industrial level of switching power supply. The power supply comes to offer the total power capacity up to 700 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 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 and storage power system.

## FEATURES

- Remarkable power density
- Excellent redundant PSU efficiency
- Operating altitude complies with 5Km certification
- Well working performance at 50°C (24 house running)
- Low ripple and noise
- Support OTP, OVP, OCP and SCP circuit protection
- Comply with FCC, CB, TUV, CE and CCC certification or declaration requirement

## WATTAGE

**Wattage:** 700W

## DIMENSION

**Dimension:** 250mm(L) x 75.6mm(W) x 83.8mm(H)

## PRODUCT HIGHLIGHT

**Efficiency Level:** 80 Plus Platinum  
**Altitude:** 5000M  
**PMBus:** For standard, advanced server and storage power system.

## INPUT SPECIFICATION

**Input Range:** 90-264 Vac  
**Input Frequency:** 47-63 Hz  
**Input Current:** 115V@ 8.0 Amps-rms maximum, 230V@ 4.0Amps-rms maximum

## GENERAL SPECIFICATION

**Efficiency:** 92% 230VAC  
**Voltage Regulation:** +3.3V, +12V, +5V, +5SB: ±5%  
**Regulation:** -12V: ±10%

### \*Output Voltage and Current Rating

	+3.3V	+5V	+12V1	-12V	+5Vsb
<b>Ripple-Noise(R-P) mV</b>	50mV	50mV	120mV	120mV	50mV
<b>Regulation Load %</b>	±5%	±5%	±5%	±10%	±5%
<b>Output Max.(A)</b>	20A	20A	56A	0.3A	5A
<b>Output Min.(A)</b>	0.5A	0.5A	0.5A	0A	0A

## NOTES

- 5V, 3.3V, 12V, -12V Will gave the regulation to 10% when all load take off.
- Maximum combined current for the 12V outputs shall be 45A
- The +3.3V and +5V total output shall not exceed 140 watts.
- The total output shall not exceed 700 watts

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 APPROVAL



## OUTPUT SPECIFICATION

**Hold up Time:** 115V/60Hz 16mSec.  
 Minimum@100% Load, 230V/50Hz 16mSec.

**Output Voltage Regulation:** Minimum,@100% Load  
 +3.3Vdc output : +3.9 Vdc minimum, + 4.5Vdc maximum  
 +5Vdc output : +5.7 Vdc minimum, + 6.5Vdc maximum  
 +12Vdc output : +13.3 Vdc minimum, + 14.5Vdc maximum

**Output Rise Time:** 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  
 -12V:120mV p-p  
 5Vsb:50mV p-p

## ENVIRONMENTAL SPECIFICATION

**TEMP.Range:** Storage Temperature: -40°C to + 70°C

**MTBF:** The power supply have a minimum predicted MTBF(MIL-HDBK-217) of 100,000 hours of continuous operation at 25°C, 70% output load, and nominal AC inout voltage