

IPC Power Supply FSP280-20FGBBD (PoE 280W)

DESCRIPTION

FSP280-20FGBBD is a high quality industrial level of PoE switching power supply. The power supply offers the total power capacity up to 280 Watts, and employs active PFC (PF>0.9), 80+ Bronze design, making it perfect used in different PoE Systems. This PoE PSU delivers 53Vdc for PoE device (PD) over unshielded twisted-pair wire, and 12Vdc for system (PSE) mainboard.

APPLICATION

PoE System - PoE Switch, IP Camera, DVR/NVR, IP Telephony, Wireless Access Points (AP), Security Access Control (Card Scanner)

FEATURES

- * 80 Plus Bronze (Efficiency 85% 230VAC)
- * Flex ATX Form factor, fit all kinds of PoE System
- * Built-in Active PFC function, power factor > 0.9
- * Max. 8A @12Vdc, 4A @53Vdc Output
- * Compliant with IEEE 802.3af PoE standard
- * Internal 4 cm 12VDC Fan
- * 12V & 53V are fully isolated with 2 separate transformers
- * Operation up to 5000 meters Altitude
- * Over Current Protection (OCP), Over Voltage protection (OVP)
- * Short circuit protection on all outputs
- * MTBF: 100K hours at 25°C

INPUT SPECIFICATIONS

Input Range: 90-264 Vac Input Frequency: 47-63 Hz

Input Current: max. 7.5A @115V / 3.5A @230V

Power Factor: > 0.9

Leakage Current: max. 3.5mA @ 240Vac/50Hz

OUTPUT SPECIFICATIONS

Output Voltage/Current: see rating chart.

Max. Output Power: see rating chart.

Ripple & Noise: +12V: 140mV p-p
+53V: 400mV p-p

Over Voltage Protection: +12Vdc: +14V ~ 15.5Vdc @0.1A

+53Vdc: +58V ~ 63.0Vdc @0.1A

Over Current Protection: +12V: max. 10A +53V: max. 5.6A

Transient Response: max. 5% diviation, recovery to within

10 ms for 50% load change

Short Circuit Protection: No damage, resistance $\leq 0.05\Omega$ Over Temperature Protection: Primary & secondary protection

with auto recovery

 $\begin{array}{ll} \mbox{Over / Undershoot:} & \mbox{max. 10\% at turn on/off} \\ \mbox{Remote On/Off:} & \mbox{On = PSON $\leq 0,8$V, low} \\ \end{array}$

Off = PSON \ge 2.0V, high, open

FSP280-20FGBBD





Dimension: 81.5 (W) x 40.5(H) x 150.0(L) mm

SAFETY STANDARD APPROVALS



UL 60950



CFR 47 Part 15 Subpart BCISPR 22/1997 (Class B)



TUV EN 60950-1



CB

IEC 60950-1

GENERAL SPECIFICATIONS

Efficiency (Module): 85% @230VAC (Typical Load)
Efficiency (Set): ≥ 84% at Max load of 230Vac
Signals: Power good, TTL compatible
Inrush Current: should be less than 200A peak

Hold-up Time: min 20ms @115V/60Hz & @230V/50Hz
Output Rise Time: max. 20ms measured at +12Vdc & +53Vdc

PWOK Delay Time: 500ms > PWOK > 100ms

MTBF: The power supply shall have a minimum MTBF at

continuous operation of 200,000 hours calculated at 100%, according to BELL CORE TR-322 at 25°C excluding the Fan MTBF. At least 100,000 hours

including the fan MTBF.

EMC Performance: EN55022, class B Conducted

EN55022, class B Radiated EN61000-3-2, class D

EN61000-3-3

EN61000-4-4, level 3 Perf Criteria B EN61000-4-5, level 3 Pref Criteria B EN61000-4-6, 10Vrms, Pref Criteria A

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: -10°C to +50°C Storage Temperature: -20°C to +80°C

Relative Operating Humidity: 5% ~ 95% RH, Non-condensing

Operating Altitude: Sea level to 5000m

Vibration Operating: 3g Freq. Range: 10~250Hz duration

15 min for each X,Y,Z axis

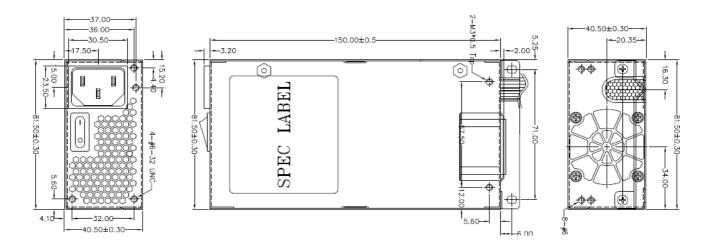
OUTPUT RATING CHART

	Max. Output Watt.	Output Current						
Model Name		+12V		+53V				
		Min.	Max.	Min.	Max.			
FSP280-20FGBBD	280W	0,0A	8,0 A	0,1 A	4,0 A			



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MECHANICAL SPECIFICATIONS



Dimension: 81.5 (W) x 40.5(H) x 150.0(L) mm

Connectors

1* 4P +12Vdc JWT A3963H02-4P (280mm) 1* 2P +53Vdc JWT A3963H02-2P (280mm)