

Industry FSP042-1K20

DESCRIPTION

42W Open frame type power supply with 12V DC output for information technology and industrial applications

APPLICATION

For information technology and industrial applications

FEATURES

- Compact size 2" x 4" x 1.18"
- Wide-range input 90-264 VAC
- Low earth leakage current
- EN55022 class B emissions
- RoHS compliant



42W Wattage:

PRODUCT HIGHLIGHT

Efficiency Level: 80 ~ 88% **Output Voltage:** 12V

Size: 50.8 (2") x 101.6 (4") x 30 (1.18")

INPUT SPECIFICATION

AC-DC Input Type: Input Voltage: 90~264 Vac **Input Frequency:** 47~63 Hz

Input Current: 0.9A (rms) for 100 VAC 0.5A (rms)

for 240 VAC

25A @115VAC; 50A @ 230VAC Inrush current: Earth leakage current 150µA max. @264VAC, 63Hz

OUTPUT SPECIFICATION

Output Voltage/Current:

Output1

12 V, 3.5 A

Ripple & Noise:

Output1

120mV

Over Voltage Protection:

Output1

112% - 132%

Over current All outputs protected to short circuit

protection: conditions

All outputs ±0.04% / [] maximum **Temperature**

coefficien:

Maximum excursion of 4% or better **Transient response:**

on all models, recovering to 1% of final value within 500µs after a

25% step load change

MECHANICAL

Dimension: 50.8mm(L) x 101.6mm(W) x

30.0mm(H)

Molex header 09-65-2038 or **Connector Type-Input:**

equivalent, mating with Molex

housing 09-50-1031 or

equivalent

Conntector Type-Output: Molex header 09-65-2068 or

> equivalent, mating with Molex housing 09-50-1061 or

equivalent

Remote Control: No



SAFETY STANDARD APPAOVAL



ENVIRONMENTAL SPECIFICATION

Operating temperature: -100 to +700

De-rating: De-rate from 100% at +501,

linearly to 50% at +70

Storage temperature: -400 to +850

Relative humidity: 5% to 95% non-condensing

GENERAL SPECIFICATION

80~88% minimum on all Efficiency:

models

12 ms minimum at 12 VAC Hold-up time: Line regulation: ±0.2% maximum at full load

5600 VDC from input to Withstand voltage:

output.

2100 VDC from input to

ground,

700 VDC from output to

around.

MTBF: 400,000 hours minimum at full

load at 25 I ambient, calculated per MIL-HDBK-

217F

EMC PERFORMANCE

VCCI:

EN55011: Class B Conducted, Class B

radiated FN55022:

Class B Conducted, Class B radiated

FCC: Class B Conducted, Class B

radiated

Class B Conducted, Class B

radiated EN61000-3-2: Harmonic distortion, Class A

and D

Line flicker

EN61000-3-3:

EN61000-4-2: ESD, ±8 KV air, ±6 KV contact EN61000-4-3: Radiated immunity, 3 V/m EN61000-4-4: Fast transient/burst, ±2 KV EN61000-4-5: Surge, ±1 KV diff., ±2 KV com.

EN61000-4-6: Conducted immunity, 3 Vrms Magnetic field immunity, 3 A/m EN61000-4-8: EN61000-4-11: Voltage dip immunity, 30%

> reduction for 500ms, 60% reduction for 100ms and > 95% reduction for 10ms