



FSP

FSP260-P35

Open Frame Power Supply

Features:

- Class-I 260W @ Forced air, 150W @ Convection cooling
- Single output voltage: 12V, 18V, 24V, 54V
- Low profile: 3" x 5" x 1.34"
- Input power consumption < 0.5W @ 0.2W max load
- Surge protection ± 2 KV diff., ± 4 KV com
- 1.5KVac withstand between output and FG
- High altitude 5000 meters operation
- Remote on/off control
- OTP, Brown-in/out protection
- Operation temperature $-20^{\circ}\text{C} \sim 50^{\circ}\text{C}$
- Safety certificate: CB 62368, UL, CE

Application:

- Networking Switch
- PoE Switch
- Docking

Product Pofolio:

Family name	Output Watts		Form Factor	Single Output						PFC	Safety Certificate
	Convection	Forced Air		5V	12V	18V	19V	24V	54V		
FSP065-P35 A	65W		3" x 5" x 1.105"	●	●			●		no	cCSAus, CE
FSP150-P35 A	100W	150W	3" x 5" x 1.09"		●			●	●	with	UL, CE
FSP200-P35 A	150W	200W	3" x 5" x 1.17"		●	●	●	●	●	with	cCSAus, CE
FSP260-P35 A	150W	260W	3" x 5" x 1.34"		●	◎		●	●	with	UL, CE
FSP350-F35 A	200W*	350W	3" x 5" x 1.34"		●	●		●	●	with	cCSAus, CE

◎ Developing

● Mass Production

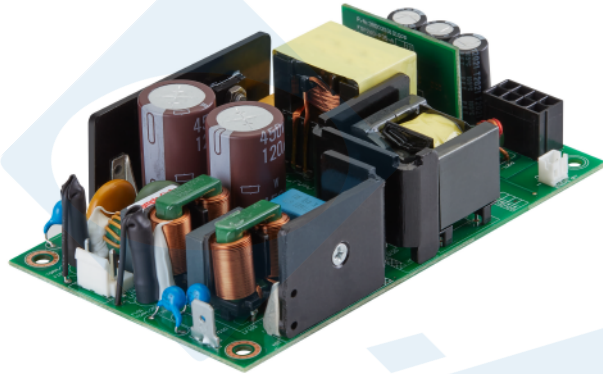
* All products design meet IEC 62368-1



FSP260-P35 A Series

FEATURES

- Class-I design
- IEC 62368-1 safety standard
- Form factor 3" x 5" x 1.34"
- Input power less than 0.5W at 0.2W load
- EN 55032 radiated emission
- Remote ON/OFF input
- High altitude 5000 meters operation
- Long hold up time



SAFETY STANDARD APPROVAL



DESCRIPTION

This AC-DC switching power supplies in a package of 3 x 5 inches is a Class-I (with Protection Earth) safety construction and feature with 0.5W low input power consumption at 0.2W load which is comply with Energy Star requirement. Less audible noise is suitable for quiet design requirement. This PSU is capable of delivering 260 watts continuous power at 18.4 CFM forced air cooling or 150 watts continuous power at convection cooling and 50°C operation temperature. Product is suitable for information, audio & video and networking applications.

INPUT SPECIFICATIONS

Input voltage:	90 to 264 VAC
Input frequency:	47-63 Hz
Input current:	3 A (rms) for 115 VAC 1.5 A (rms) for 230 VAC
Earth leakage current:	1.5 mA maxi. @ 264VAC, 63Hz
Touch current:	250 uA maxi. @ 264VAC, 63Hz
Remote ON/OFF	TTL Low level to turn on PSU

OUTPUT SPECIFICATIONS

Output voltage/current:	See rating chart.
Total output power:	260 watts maximum
Ripple and noise:	1% peak to peak maximum
Protection:	
OVP	Latch off
OCP & Shorted	Auto recovery
OTP	Latch off
Temperature coefficient:	All outputs $\pm 0.04\%$ /°C maximum
Transient response:	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 us after a 25% step load change

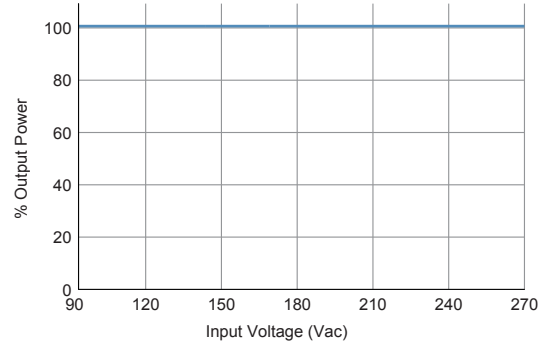
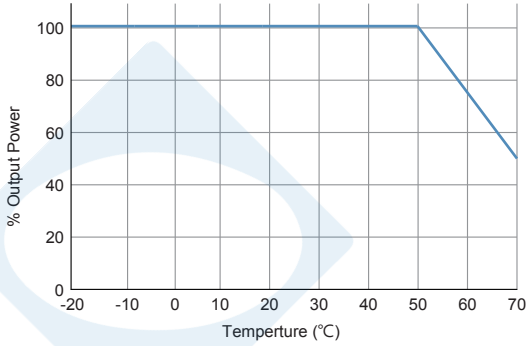
ENVIRONMENTAL SPECIFICATIONS

Operating temperature:	-20°C to +70°C
Storage temperature:	-40°C to +85°C
Relative humidity:	5% to 95% non-condensing
Derating:	Derate from 100% at +50°C linearly to 50% at +70°C, applicable to convection and forced-air cooling conditions.

GENERAL SPECIFICATIONS

Power factor:	0.99 mini. @ 115VAC & 100% load 0.94 mini. @ 230VAC & 100% load
Efficiency:	Refer to rating table
Turn-On Delay Time:	≤ 1 sec at 115 VAC
Hold-up time:	25 mS mini. @ 115VAC & 260W load 50 mS mini. @ 115VAC & 150W load
Line regulation:	$\pm 0.2\%$ maximum at full load
Inrush current:	60A @ 115VAC, 25°C & cold start 120A @ 230VAC, 25°C & cold start
Withstand voltage:	3000 VAC from input to output 1500 VAC from input to ground, 1500 VAC from output to ground
Isolation resistance:	Input to output 100M ohm @ 500Vdc
MTBF:	800,000 hours mini. at full load at 25°C ambient temperature, calculated per Telcordia SR-332
EMC Performance	
EN 55032:	Class B conducted, class B radiated
FCC:	Class B conducted, class B radiated
VCCI:	Class B conducted, class B radiated
EN61000-3-2:	Harmonic distortion, class A and D
EN61000-3-3:	Line flicker
EN61000-4-2:	ESD, ± 8 KV air and ± 4 KV contact
EN61000-4-3:	Radiated immunity, 3 V/m
EN61000-4-4:	Fast transient/burst, ± 1 KV
EN61000-4-5:	Surge, ± 2 KV diff., ± 4 KV com.
EN61000-4-6:	Conducted immunity, 3 V/m
EN61000-4-8:	Magnetic field immunity, 1 A/m
EN61000-4-11:	Voltage dip immunity & voltage interruptions 30% reduction for 500 ms >95% reduction for 10 mS 100% reduction for 5000 ms

OUTPUT POWER DERATING CURVE



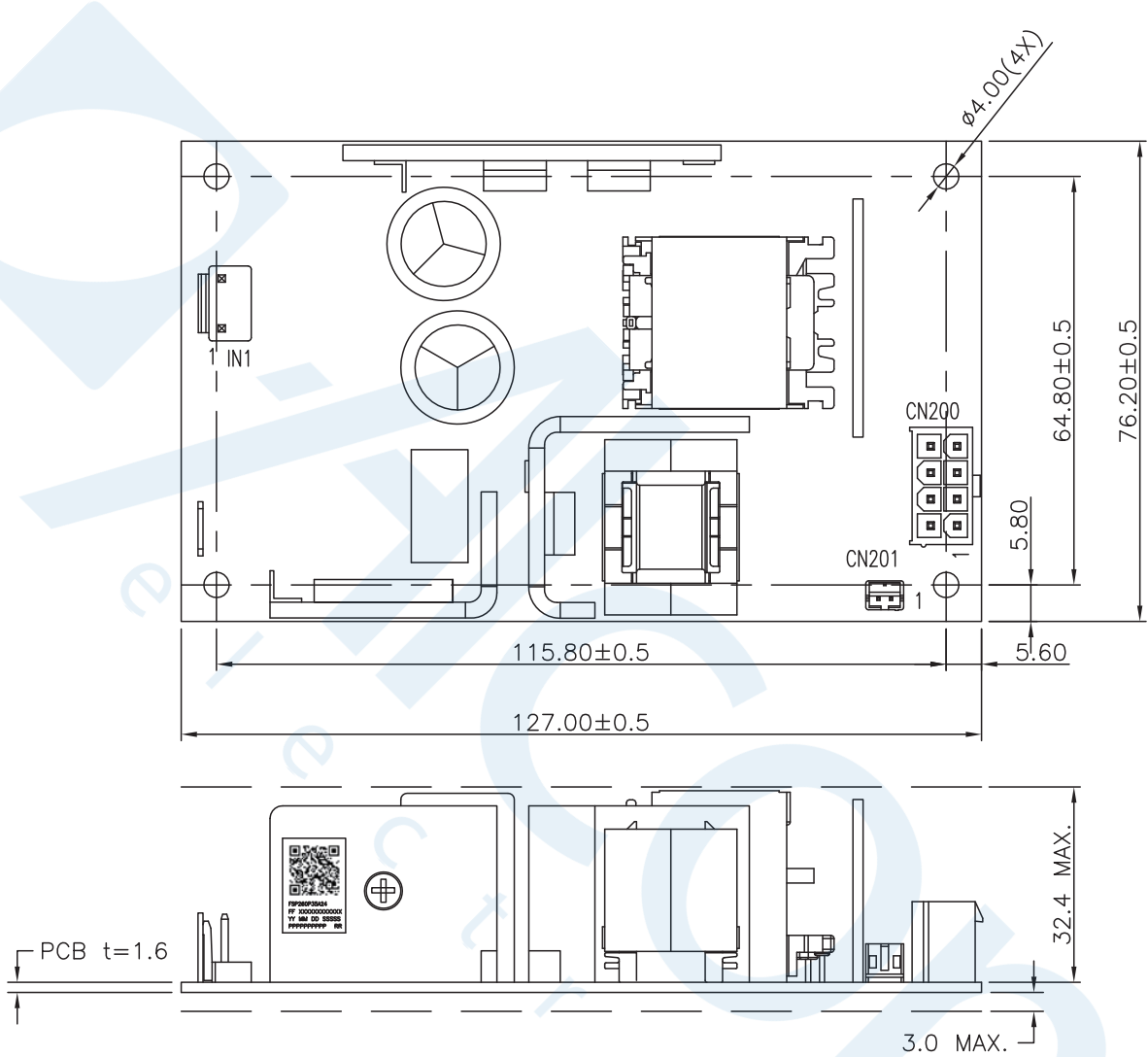
OUTPUT VOLTAGE/CURRENT RATING CHART

Model	Output								Efficiency (typical) @ 115 / 230 VAC
	V1	Min. Current	Max. Current ⁽¹⁾		Tol.	Ripple & Noise ⁽²⁾	Max. Power ⁽¹⁾		
			Convection	Forced air			Convection	Forced air	
FSP260-P35-A12	12 V	0 A	12.50A	21.60A	±3 %	120 mV	150W	260W	90 / 92%
FSP260-P35-A18*	18 V	0 A	8.33A	14.45A	±3 %	180 mV	150W	260W	91 / 92%
FSP260-P35-A24	24 V	0 A	6.25A	10.80A	±3 %	240 mV	150W	260W	91 / 92%
FSP260-P35-A54	54 V	0 A	2.78A	4.82A	±3 %	540 mV	150W	260W	92 / 94%

NOTES:

1. Forced air 18.4 CFM to be provide by user.
2. Ripple and noise is maximum peak to peak voltage value measured at output within 20 MHz bandwidth, at rated line voltage and output load ranges, and with a 10 μ F tantalum (or electrolytic) capacitor in parallel with a 0.1 μ F ceramic capacitor across the output.
3. Please contact with sales representative for safety application schedule

MECHANICAL SPECIFICATIONS



CONNECTOR PIN CHART

CONNECTOR	IN1			CN200								CN201	
PIN NO.	1	2	3	1	2	3	4	5	6	7	8	1	2
OUTPUT	Line	N.C.	Neutral	+Vout				Return				PS_OFF +	PS_OFF -

NOTES:

- Dimensions shown in mm
- Connector IN1: JST B2P3-VH or equivalent.
- Connector CN200: Molex 460271208 or equivalent.
- Connector CN201: JST B2B-PH
- Ground tab : 8 x 6.35 x 0.8 mm

Weight: 280 grams (0.617 lbs.) approx.