FSP420-50UDB

FEATURES

- Meet Intel ATX V3.1
- Meet 80 Plus Gold
- Certified IEC 62368-1 3rd
- High Reliability
- Over Current Protection
- Over Temperature Protection
- Over Voltage Protection

SAFETY STANDARD APPROVAL

DESCRIPTION

FSP420-50UDB is an industrial level of switching power supply. This power is designed to meet newest Intel ATX 3.1 standard, and high efficiency, in such small size. Therefore, it is suitable for applications in "Industrial Box PC" equipment.

GENERAL SPECIFICATIONS

Standby Consumption:	Efficiency > 45% @ 5Vsb/45mA
Operating altitude:	5,000 meters
MTBF:	≥ 100,000Hrs, full load at 25°C
Efficiency (15Vac input):	87%; 90%; 87% at 100%; 50%; 20% load

INTPUT SPECIFICATIONS

Input voltage:	90-264 VAC
Input frequency:	47-63 Hz
Input current:	115Vac / 6.0A, 230Vac / 3.0A

ENVIRONMENTAL SPECITICATIONS

Operating temperature:	0~50°C
Storage temperature:	-20~+80°C
Operating humidity:	10~85% RH non-condensing
Storage humidity:	10~95% RH non-condensing

OUTPUT SPECIFICATIONS

Max. output power:	420W
Hold-up time:	115V / 60Hz: ≥10m Sec. minimum 230V / 50Hz: ≥12m Sec. minimum
Rise time:	115V-rms or 230V-rms
	+5Vdc: 20ms maximum

Protection:

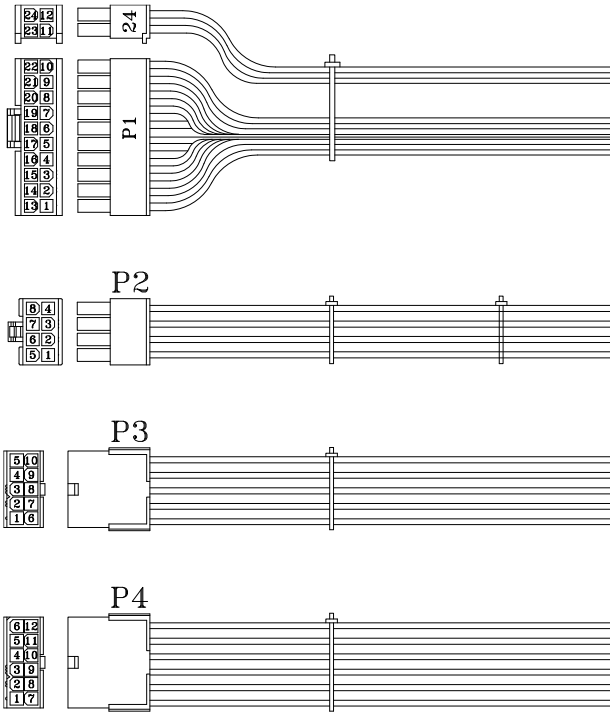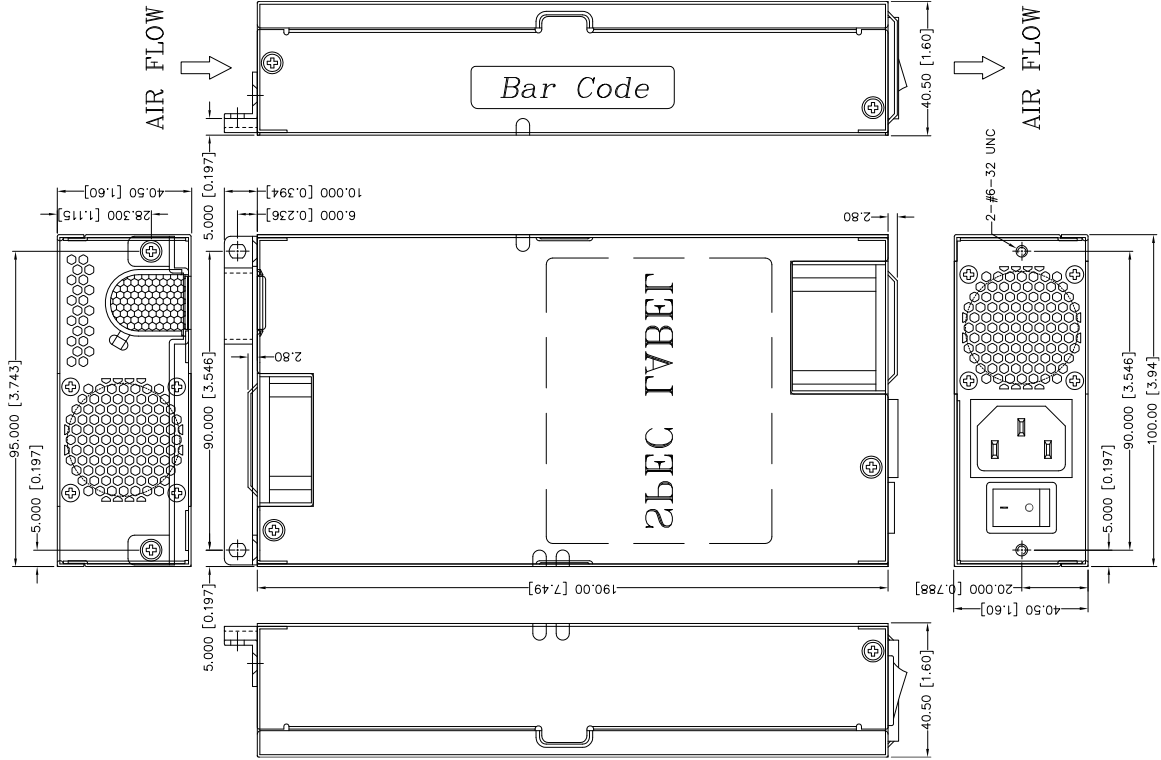|	
Over voltage:	+3.3Vdc: 3.7V~4.5V
	+5Vdc: 5.7V~7.0V
	+12Vdc: 13.3V~16V
Over Power:	Total output shall not exceed 420 watts.
	If the total power between 150%~180% , the power supply will shutdown and latch off without damage to the power supply.
Short circuit:	Shutdown & latch off without damage PSU

OUTPUT RATING CHART:

Outputs	+3.3V	+5V	+12V	+12V	+5Vsb
Max. current	12.0A	14.0A	35.0A	0.3A	3.0A
Min. current	0.0A	0.0A	0.0A	0.0A	0.0A
Regulation	± 5%	± 5%	± 5%	± 10%	± 5%
Ripple/Noise	50mV	50mV	120mV	120mV	50mV

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MECHANICAL & AC CONNECTOR SPECIFICTIONS

Unit: mm

REF. ID.	PIN NO.	SIGNAL	WIRE COLOR	GAUGE	CONNECTOR TYPE	CABLE LENGTH
P1	1	+3.3V	ORANGE	18	MOLEX 39-01-2240 or EQUIV.	370±15mm
	2	+3.3V	ORANGE	18		
	3	COM	BLACK	18		
		COM	BLACK	24		
	4	+5V	RED	18		
	5	COM	BALCK	18		
	6	+5V	RED	18		
	7	COM	BALCK	18		
	8	PW-OK	GRAY	24		
	9	+5Vsb	PURPLE	18		
	10	+12V	YELLOW	18		
	11	+12V	YELLOW	18		
	12	+3.3V	ORANGE	18		
	13	+3.3V	ORANGE	18		
		+3.3Vsense	BROWN	24		
	14	−12V	BLUE	24		
	15	COM	BALCK	18		
	16	PS-ON	GREEN	24		
	17	COM	BALCK	18		
	18	COM	BALCK	18		
	19	COM	BALCK	18		
	20					
	21	+5V	RED	18		
	22	+5V	RED	18		
	23	+5V	RED	18		
	24	COM	BALCK	18		
P2	1	COM	BALCK	18	MOLEX 39-01-2080 or EQUIV.	400±15mm
	2	COM	BALCK	18		
	3	COM	BALCK	18		
	4	COM	BALCK	18		
	5	+12V	YELLOW	18		
	6	+12V	YELLOW	18		
	7	+12V	YELLOW	18		
	8	+12V	YELLOW	18		
P3	1	+3.3VDC	ORANGE	18	WST P10-I42001K1 or EQUIV.	100±15mm
	2	COM	BLACK	18		
	3	+5V	RED	18		
	4	COM	BLACK	18		
	5	+12V	YELLOW	18		
	6	+3.3VDC	ORANGE	18		
	7	COM	BLACK	18		
	8	+5V	RED	18		
	9	COM	BLACK	18		
	10	+12V	YELLOW	18		
P4	1	+12V	YELLOW	18	WST P12-I42001K1 or EQUIV.	100±15mm
	2	+12V	YELLOW	18		
	3	COM	BLACK	18		
	4	COM	BLACK	18		
	5	+5V	RED	18		
	6	COM	BLACK	18		
	7	+12V	YELLOW	18		
	8	+12V	YELLOW	18		
	9	COM	BLACK	18		
	10	COM	BLACK	18		
	11	+5V	RED	18		
	12	COM	BLACK	18		

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