

# FSP180-50FRB

## FEATURES

- Meet Intel ATX V3.0
- Certified IEC 62368-1 3rd
- High Reliability
- Over Current Protection
- Over Temperature Protection
- Over Voltage Protection



## SAFETY STANDARD APPROVAL



## DESCRIPTION

FSP300-50FRB is an industrial level of switching power supply. This power is designed to meet newest Intel ATX 3.0 standard, and high efficiency, in such small size. Therefore, it is suitable for applications in "Industrial Box PC" equipment.

## GENERAL SPECIFICATIONS

Input power at power off:	< 0.5W (5Vsb)
Operating altitude:	5,000 meters
MTBF:	≥ 100,000Hrs, full load at 25°C
Efficiency (15Vac input):	82%; 85%; 82% at 100%; 50%; 20% load

## INPUT SPECIFICATIONS

Input voltage:	90-264 VAC
Input frequency:	47-63 Hz
Input current:	115Vac / 3.0A, 230Vac / 1.5A

## ENVIRONMENTAL SPECIFICATIONS

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:	180W
Hold-up time:	115V / 60Hz: 13m Sec. minimum 230V / 50Hz: 13m Sec. minimum
Rise time:	115V-rms or 230V-rms
	+5Vdc: 20ms maximum
	+3.3Vdc: 20ms maximum
	+12Vdc: 20ms maximum
	-12Vdc: 20ms maximum

## Protection:

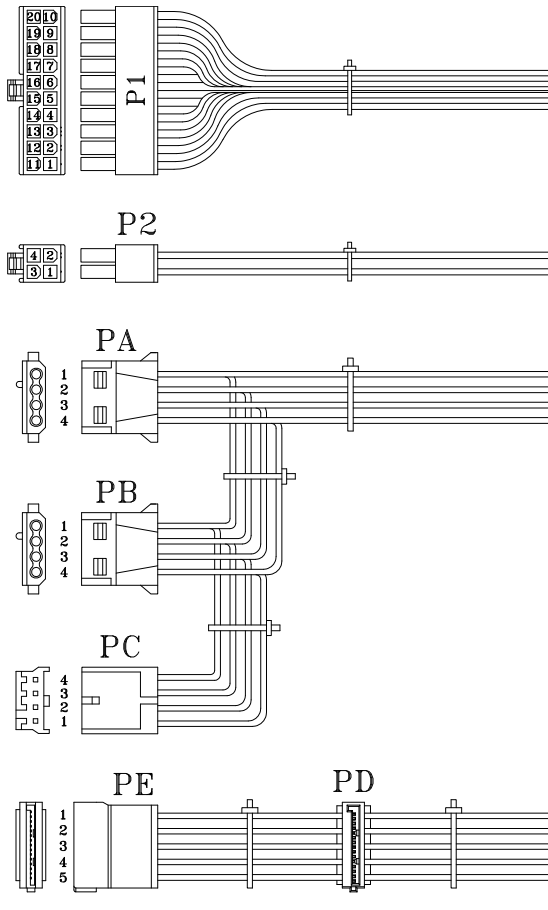
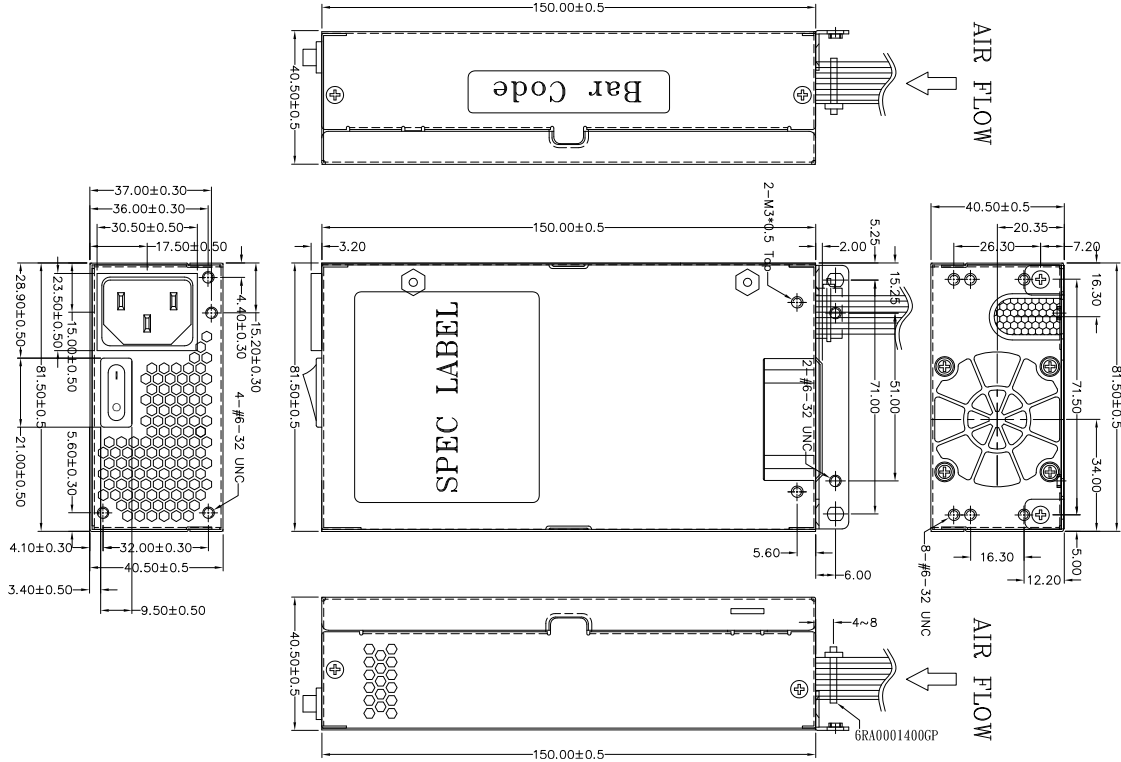
Over voltage:	+3.3Vdc: 3.7V~4.8V
	+5Vdc: 5.7V~7.0V
	+12Vdc: 13.3V~16V
Over current:	+5Vdc: 15A~25A
	+3.3dc: 15A~25A
Short circuit:	Shutdown & latch off without damage PSU

## OUTPUT RATING CHART:

Outputs	+3.3V	+5V	+12V	+12V	+5Vsb
Max. current	8.0A	12.0A	12.0A	0.3A	2.0A
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

MECHANICAL & AC CONNECTOR SPECIFICATIONS

Unit: mm



REF. D	PIN NO.	SIGNAL	WIRE COLOR	GAUGE	CONNECTOR TYPE	LENGTH	
P1	1	+3.3V	ORANGE	20	MOLEX 39-01-2200 or EQUIV.	200±15 mm	
	2	+3.3V	ORANGE	20			
	3	COM	BLACK	20			
	4	+5V	RED	20			
	5	COM	BLACK	20			
	6	+5V	RED	20			
	7	COM	BLACK	20			
	8	PW-OK	GRAY	24			
	9	+5Vsb	PURPLE	20			
	10	+12V	YELLOW	20			
	11	+3.3V	BROWN	24			
	12	-12V	BLUE	24			
	13	COM	BLACK	20			
	14	PS-ON	GREEN	24			
	15	COM	BLACK	20			
	16	COM	BLACK	20			
	17	COM	BLACK	20			
	18						
	19	+5V	RED	20			
	20	+5V	RED	20			
P2	1	COM	BLACK	20	MOLEX 39-01-2040 or EQUIV.	360±15 mm	
	2	COM	BLACK	20			
	3	+12V	YELLOW	20			
	4	+12V	YELLOW	20			
PA	1	+12V	YELLOW	20	WST P4-A10202 or EQUIV.	250±15 mm	
	2	COM	BLACK	20			
	3	COM	BLACK	20			
	4	+5V	RED	20			
PB	1	+12V	YELLOW	20	WST P4-A10202 or EQUIV.	155±15 mm	
	2	COM	BLACK	20			
	3	COM	BLACK	20			
	4	+5V	RED	20			
PC	1	+5V	RED	20	AMP 171822-4 or EQUIV.	155±15 mm	
	2	COM	BLACK	20			
	3	COM	BLACK	20			
	4	+12V	YELLOW	20			
PD	1	+3.3V	ORANGE	20	MOLEX 39-01-2200 or EQUIV.	250±15 mm	
	2	COM	BLACK	20			
	3	+5V	RED	20			
	4	COM	BLACK	20			
	5	+12V	YELLOW	20			
PE	1	+3.3V	ORANGE	20	MOLEX 39-01-2200 or EQUIV.	155±15 mm	
	2	COM	BLACK	20			
	3	+5V	RED	20			
	4	COM	BLACK	20			
	5	+12V	YELLOW	20			