



# FSP400-50AMB

## FEATURES

- Meet Intel ATX V3.0
- Meet 80 Plus Bronze
- Certified IEC 62368-1 3rd
- High Reliability
- Over Current Protection
- Over Temperature Protection
- Over Voltage Protection

## SAFETY STANDARD APPROVAL



## DESCRIPTION

FSP400-50AMB 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 4U or tower chassis" equipment.

## GENERAL SPECIFICATIONS

Input power at power off: < 0.5W (5Vsb)  
 Operating altitude: 5,000 meters  
 MTBF:  $\geq 100,000$ Hrs, full load at 25°C  
 Efficiency (115Vac input): 82%; 85%; 82% at 100%; 50%; 20% load

## INPUT SPECIFICATIONS

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

## ENVIRONMENTAL SPECIFICATIONS

Operating temperature: 0~50°C  
 Storage temperature: -20~+80°C  
 Operating humidity: 5~85% RH non-condensing  
 Storage humidity: 5~95% RH non-condensing

## OUTPUT SPECIFICATIONS

Max. output power: 400W  
 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:

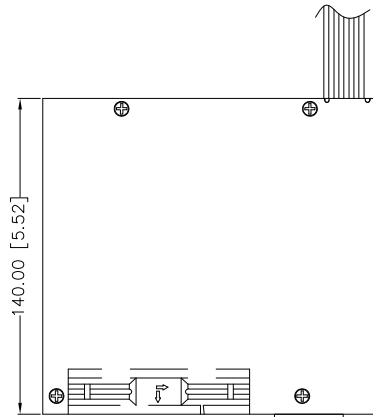
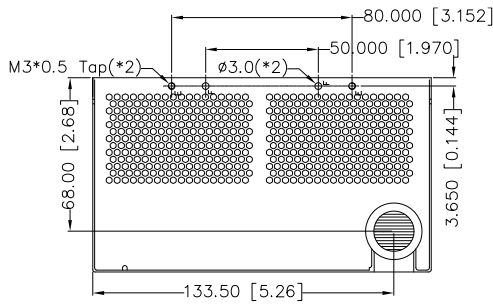
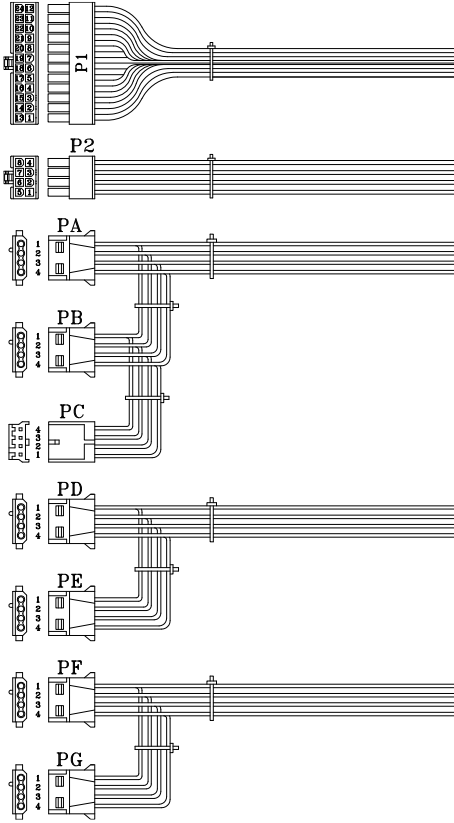
Over voltage: +3.3Vdc: 3.76V~4.3V  
 +5Vdc: 5.7V~7.0V  
 +12Vdc: 13.4V~15.6V  
 Over current: +5Vdc: 25A~35A  
 +3.3dc: 25A~35A  
 Short circuit: Shutdown & latch off without damage PSU

## OUTPUT RATING CHART:

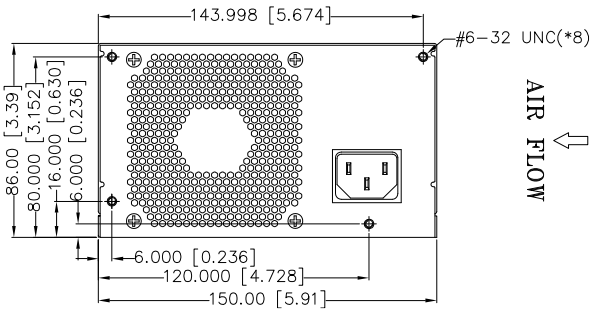
Outputs	+3.3V	+5V	+12V	+12V	+5Vsb
Max. current	20.0A	21.0A	33.0A	0.3A	2.5A
Min. current	0.0A	0.0A	0.0A	0.0A	0.0A
Regulation	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 10\%$	$\pm 5\%$
Ripple/Noise	50mV	50mV	120mV	120mV	50mV

**MECHANICAL & AC CONNECTOR SPECIFICATIONS**

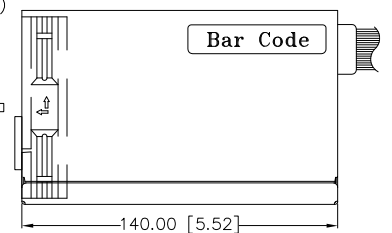
Unit: mm



AIR FLOW



AIR FLOW



REF. ID.	PIN NO.	SIGNAL	WIRE COLOR	GAUGE	CONNECTOR TYPE	CABLE LENGTH		
P1	1	+3.3VDC	ORANGE	20	MOLEX 39-01-2240 or EQUIV.	350±15mm		
	2	+3.3VDC	ORANGE	20				
	3	COM	BLACK	20				
	4	+5VDC	RED	20				
	5	COM	BLACK	20				
	6	+5VDC	RED	20				
	7	COM	BLACK	20				
	8	PW-ON	GRAY	22				
	9	+5Vsb	PURPLE	20				
	10	+12V	YELLOW	20				
	11	+12V	YELLOW	20				
	12	+3.3VDC	ORANGE	20				
	13	+3.3VDC	ORANGE	20				
	13	+3.3V Sense	BROWN	22				
	14	-12VDC	BLUE	22				
	15	COM	BLACK	20				
	16	PS-ON	GREEN	22				
	17	COM	BLACK	20				
	18	COM	BLACK	20				
	19	COM	BLACK	20				
	20							
	21	+5VDC	RED	20			MOLEX 39-01-2080 or EQUIV.	350±15mm
	22	+5VDC	RED	20				
	23	+5VDC	RED	20				
24	COM	BLACK	20					
P2	1	COM	BLACK	20	MOLEX 39-01-2080 or EQUIV.	350±15mm		
	2	COM	BLACK	20				
	3	COM	BLACK	20				
	4	COM	BLACK	20				
PA	5	+12V	YELLOW	20	WST P4-A10202 OR EQUIV.	350±15mm		
	6	+12V	YELLOW	20				
	7	+12V	YELLOW	20				
	8	+12V	YELLOW	20				
PB	1	+12V	YELLOW	20	WST P4-A10202 OR EQUIV.	155±10mm		
	2	COM	BLACK	20				
	3	COM	BLACK	20				
	4	+5V	RED	20				
PC	1	+5V	RED	20	AMP 171822-4 or EQUIV.	155±10mm		
	2	COM	BLACK	20				
	3	COM	BLACK	20				
	4	+12V	YELLOW	20				
PD	1	+12V	YELLOW	20	WST P4-A10202 OR EQUIV.	350±15mm		
	2	COM	BLACK	20				
	3	COM	BLACK	20				
	4	+5V	RED	20				
PE	1	+12V	YELLOW	20	WST P4-A10202 OR EQUIV.	155±10mm		
	2	COM	BLACK	20				
	3	COM	BLACK	20				
	4	+5V	RED	20				
PF	1	+12V	YELLOW	20	WST P4-A10202 OR EQUIV.	350±15mm		
	2	COM	BLACK	20				
	3	COM	BLACK	20				
	4	+5V	RED	20				
PG	1	+12V	YELLOW	20	WST P4-A10202 OR EQUIV.	155±10mm		
	2	COM	BLACK	20				
	3	COM	BLACK	20				
	4	+5V	RED	20				