

1U ATX PSU with PFC

EFAP-200/230 SERIES

230 Watts



Active Power Factor Correction

•
Overvoltage Protection

•
Short Circuit Protection

•
Overload Protection

•
Power Good Signal

•
Efficiency >70%

•
MTBF >100,000 Hours

Specification

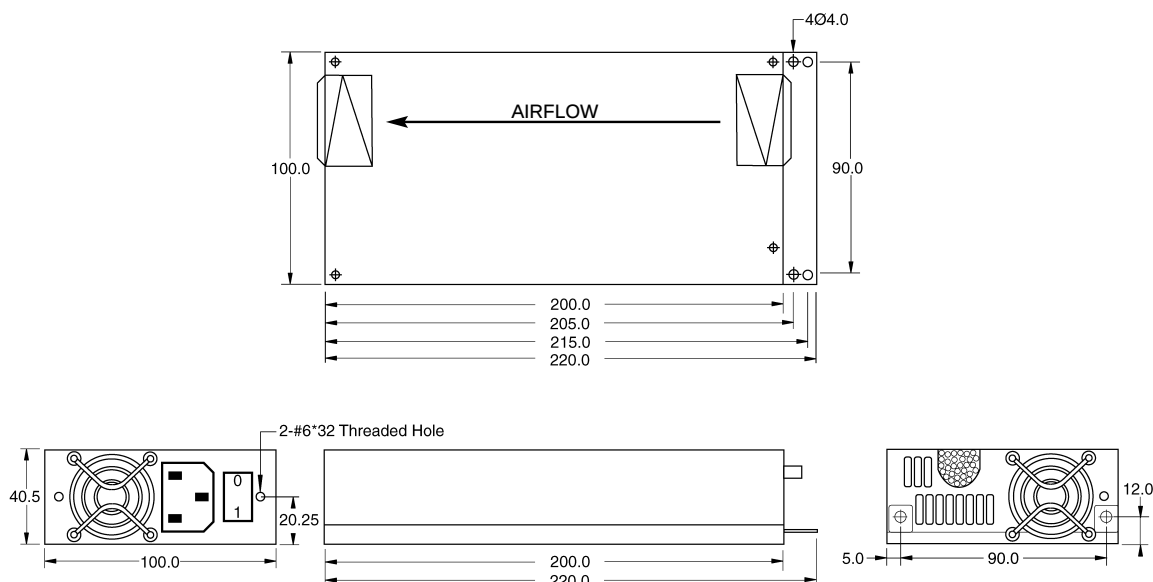
Input Voltage	• 100-240 V AC
Input Frequency	• 47-63 Hz
Input Current	• 5/2.5 A @ 115/230 V AC
Power Factor	• >0.95 meets EN61000-3-2
Efficiency	• >70% @ 100% load & nominal AC input
Hold Up Time	• 20 ms @ 100% load & nominal AC input
Overvoltage Protection	• 110-130% of 5.0 V, 3.3 V & 12.0 V
Overpower Protection	• 110-130% of max total output power
Power Good Signal	• TTL compatible. Signal goes high after turn-on and when the +5.0 V reaches 4.75 V within 100-500 ms. Signal goes low at least 1 ms before the +5 V loss of regulation
Operating Temperature	• 0 °C to +50 °C
Operating Humidity	• 20-90% non-condensing
Cooling	• Internal fan
EMC	• Conducted - FCC Class B, EN55022 Class B, VCCI Class 2
Safety Approvals	• UL, CSA, VDE, CE Marked for LVD
Casing	• Aluminium
MTBF	• >100,000 hours at 75% load and 25 °C ambient conditions

Output Voltage & Current Ratings

Output Voltage	Load		Regulation			Ripple & Noise	Model Number
	Minimum	Maximum	Load	Cross	Line		
+5.0 V	2.0 A	21.0 A	±5%	±5%	±1%	±1%	EFAP-200
+3.3 V	0.0 A	14.0 A	±4%	±4%	±1%	±1%	
+12.0 V	0.5 A	10.0 A	±5%	±5%	±1%	±1%	
-5.0 V	0.0 A	0.5 A	±10%	±10%	±1%	±1%	
-12.0 V	0.0 A	1.0 A	±5%	±5%	±1%	±1%	
5 VSB	0.0 A	3.0 A	±5%	±5%	±1%	±1%	
+5.0 V	2.0 A	23.0 A	±5%	±5%	±1%	±1%	EFAP-230
+3.3 V	0.0 A	17.0 A	±4%	±4%	±1%	±1%	
+12.0 V	0.5 A	10.0 A	±5%	±5%	±1%	±1%	
-5.0 V	0.0 A	0.5 A	±10%	±10%	±1%	±1%	
-12.0 V	0.0 A	1.0 A	±5%	±5%	±1%	±1%	
5 VSB	0.0 A	3.0 A	±5%	±5%	±1%	±1%	

NOTES:

- +5.0 V & +3.3 V & +12.0 V maximum combined output power 280 W - EFAP-200.
- +5.0 V & +3.3 V & +12.0 V maximum combined output power 205 W - EFAP-230.

Mechanical Details

20 PIN ATX		
Pin	Signal	18 AWG Wire
1	+3.3 V DC	Orange
2	+3.3 V DC	Orange
3	COM	Black
4	+5.0 V DC	Red
5	COM	Black
6	+5.0 V DC	Red
7	COM	Black
8	PG	Grey
9	+5 VSB	Purple
10	+12.0 V DC	Yellow
11	+3.3 V DC	Orange
11	+3.3 V Default Sense	Brown
12	-12.0 V DC	Blue
13	COM	Black
14	PS-ON	Green
15	COM	Black
16	COM	Black
17	COM	Black
18	-5.0 V DC	White
19	+5.0 V DC	Red
20	+5.0 V DC	Red

P2 - P4 12 V Power Connector		
Pin	Signal	18 AWG Wire
1	+5.0 V	Red
2	COM	Black
3	COM	Black
4	+12.0 V	Yellow

20 Pin ATX (For motherboard)

Connector : Molex 39-01-2200
Mating Connector : Molex 39-29-9202

P2 - P4

Connector : TKP-5050-04 or equivalent

P5

Connector : TKP-8871-04 or equivalent