

Medical / ITE Open Frame



Features

- 5" x 3" Compact Size
- 2 x MOPP Compliance, IEC/EN60601-1 Approval
- Protections:
Short circuit / Over voltage / Over current / Over temperature
- Energy Efficiency $\geq 89\%$ ~92% depends on models
- No Load Power Consumption ≤ 0.5 W
- MTBF > 100,000 hours
- Low Leakage Current
- 350W Convection / 500W Forced Air
- 5V Stand by & 12V Fan Supply (optional)
- Customized Solutions Available

EPM V 350 U Z - XX YY

- V:** Numbers of outputs
U: Output range
Z: Case Type
 -None(Blank): U-Frame (350W Max.)
 -C: U-Frame with Cover (350W Max.)
 -F: Enclosed Type with Fan (500W Max.)
XX: Specified output voltage, i.e. 12 is 12VDC
YY: Differential segmentation

General Specification

OUTPUT

MODEL No.		OUTPUT POWER (W)		OUTPUT VOLTAGE (Vo)	MIN. LOAD (Io)	MAX. LOAD (Io)		LOAD REGULATION	LINE REGULATION	RIPPLE & NOISE
		Convection	Forced air 25CFM			Convection	Forced air 25CFM			
Single Output	EPM1350A	300W	400W	12V	0A	25A	33.33A	± 5%	± 0.5%	200mV
	EPM1350B	300W	400W	15V	0A	20A	26.66A	± 5%	± 0.5%	200mV
	EPM1350C	300W	400W	18V	0A	16.67A	22.22A	± 5%	± 0.5%	200mV
	EPM1350D	300W	400W	24V	0A	12.5A	16.66A	± 5%	± 0.5%	240mV
	EPM1350E	300W	400W	27V	0A	11.11A	14.81A	± 5%	± 0.5%	270mV
	EPM1350F	300W	400W	36V	0A	8.33A	11.11A	± 5%	± 0.5%	360mV
	EPM1350G	300W	400W	48V	0A	6.25A	8.33A	± 5%	± 0.5%	480mV
	EPM1350H	330W	450W	12V	0A	27.5A	37.5A	± 5%	± 0.5%	200mV
	EPM1350J	330W	450W	15V	0A	22A	30A	± 5%	± 0.5%	200mV
	EPM1350K	350W	500W	18V	0A	19.44A	27.77A	± 5%	± 0.5%	200mV
	EPM1350L	350W	500W	24V	0A	14.58A	20.83A	± 5%	± 0.5%	240mV
	EPM1350M	350W	500W	27V	0A	12.96A	18.51A	± 5%	± 0.5%	270mV
EPM1350N	350W	500W	36V	0A	9.72A	13.88A	± 5%	± 0.5%	360mV	
EPM1350P	350W	500W	48V	0A	7.29A	10.41A	± 5%	± 0.5%	480mV	
Dual Output	EPM2350U	300 ~ 500W		12,15,18, 24,27,36,48V	0A	25A	33.33A	± 5%	± 0.5%	
				5V	0A	0.6A	1A	± 5%	± 0.5%	

NOTE:

- 1 : Ripple & Noise is measured by using 20MHz bandwidth limited oscilloscope and terminated each output with a 0.1uF ceramic capacitor & parallel with 47uF aluminum capacitor at full load and nominal line.
- 2 : Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
- 3 : Max. Power (W) $\geq V_o \times I_o$

INPUT

- Input Range 100 to 240 VAC
- Frequency 50 to 60Hz
- Input Current 6A to 3A
- Inrush Current $\leq 80A/230VAC$
- Hold Up Time $\geq 10ms$
- Turn On Time $\leq 3s$

PROTECTION

- Short Circuit Protection Auto Recovery
- Over Current Protection Auto Recovery
- Over Voltage Protection Auto Recovery
- Over Temperature Protection Auto Recovery

ENVIRONMENT

- Operating Temperature -20 to 50°C
- Storage Temperature -20 to 85°C
- Operating Humidity 10% to 90 %
- Storage Humidity 5% to 95 %

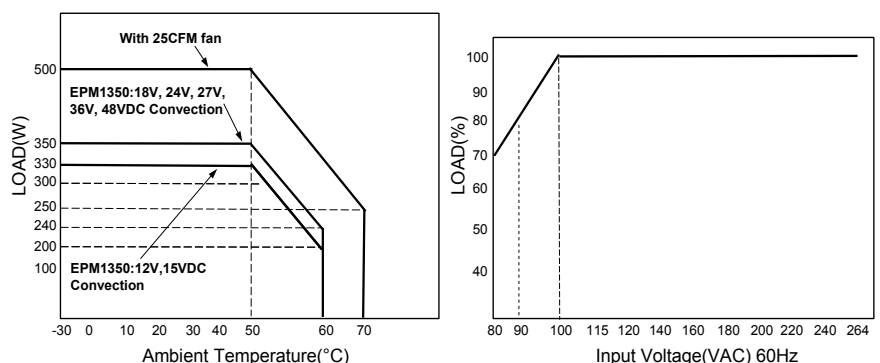
SAFETY

- Certified for whole series: CB IEC 60601-1, CE EMC(EN 60601-1-2), CB IEC 62368-1, CE EMC(EN 55032+EN 55035), FCC Part 15B
- Complied with ANSI/AAMI ES60601-1, CAN/CSA-C22.2 No. 60601-1, TUV EN 60601-1, UL 62368-1, CAN/CSA C22.2 No. 62368-1, TUV EN 62368-1

FUNCTION

- 5V Stand by 5Vsb: 5V@0.6A without fan, 1A with fan 25CFM
- 12V Fan Supply 12V@0.5A for driving fan

DERATING CURVE



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E PM V 350 U Z - XX YY

E	PM	V	U	Z	XX	YY
BUSINESS	TYPE	NUMBERS OF OUTPUTS	OUTPUT RANGE	CASE TYPE	OUTPUT VOLTAGE	OUTLINE IFFERENCE
EDAC	Medical Open Frame	1 2	A = 12V / 300W B = 15V/ 300W ...	None(Blank): U-Frame (350W Max.) C : U-Frame with Cover (350W Max.) F : Enclosed Type with Fan (500W Max.)	12 = 12V 15 = 15V ...	00 = W/O FAN OF = With FAN

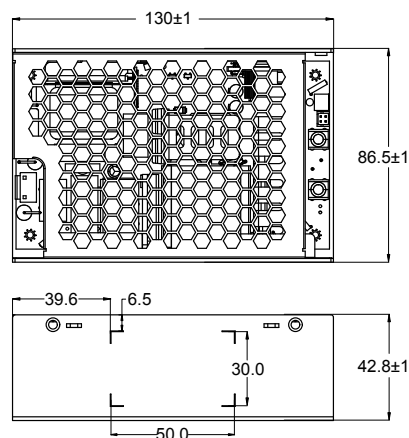
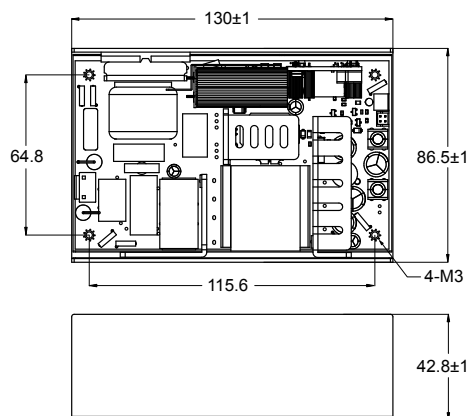
MODEL NAME		MAIN - POWER			STANDBY-POWER			TOTAL POWER
		Vo1(V)	Io1(A)	Wo1(W)	Vo2(V)	Io2(A)	Wo2(W)	
Single output	EPM1350A-1200	12	25	300				300
	EPM1350B-1500	15	20	300				300
	EPM1350C-1800	18	16.67	300				300
	EPM1350D-2400	24	12.5	300				300
	EPM1350E-2700	27	11.11	300				300
	EPM1350F-3600	36	8.33	300				300
	EPM1350G-4800	48	6.25	300				300
	EPM1350H-1200	12	27.5	330				330
	EPM1350J-1500	15	22	330				330
	EPM1350K-1800	18	19.44	350				350
	EPM1350L-2400	24	14.58	350				350
	EPM1350M-2700	27	12.96	350				350
	EPM1350N-3600	36	9.72	350				350
	EPM1350P-4800	48	7.29	350				350
Single output (With FAN)	EPM1350A-120F	12	33.33	400				400
	EPM1350B-150F	15	26.66	400				400
	EPM1350C-180F	18	22.22	400				400
	EPM1350D-240F	24	16.66	400				400
	EPM1350E-270F	27	14.81	400				400
	EPM1350F-360F	36	11.11	400				400
	EPM1350G-480F	48	8.33	400				400
	EPM1350H-120F	12	37.5	450				450
	EPM1350J-150F	15	30	450				450
	EPM1350K-180F	18	27.77	500				500
	EPM1350L-240F	24	20.83	500				500
	EPM1350M-270F	27	18.51	500				500
	EPM1350N-360F	36	13.88	500				500
	EPM1350P-480F	48	10.41	500				500
Dual output	EPM2350A-1200	12	25	300	5	0.6	3	303
	EPM2350B-1500	15	20	300	5	0.6	3	303
	EPM2350C-1800	18	16.67	300	5	0.6	3	303
	EPM2350D-2400	24	12.5	300	5	0.6	3	303
	EPM2350E-2700	27	11.11	300	5	0.6	3	303
	EPM2350F-3600	36	8.33	300	5	0.6	3	303
	EPM2350G-4800	48	6.25	300	5	0.6	3	303
	EPM2350H-1200	12	27.5	330	5	0.6	3	333
	EPM2350J-1500	15	22	330	5	0.6	3	333
	EPM2350K-1800	18	19.44	350	5	0.6	3	353
	EPM2350L-2400	24	14.58	350	5	0.6	3	353
	EPM2350M-2700	27	12.96	350	5	0.6	3	353
	EPM2350N-3600	36	9.72	350	5	0.6	3	353
	EPM2350P-4800	48	7.29	350	5	0.6	3	353

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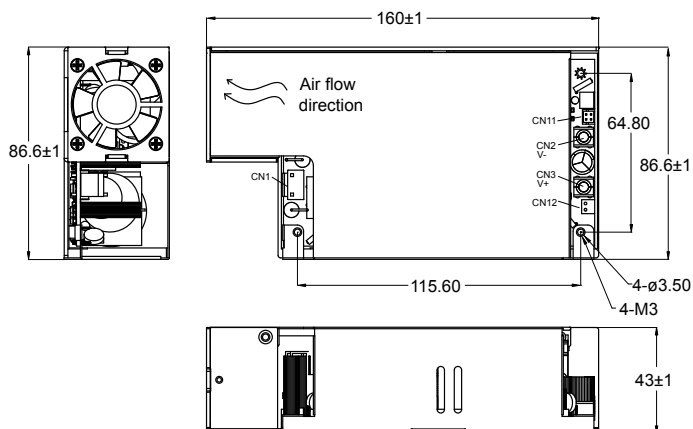
MODEL NAME		MAIN-POWER			STANDBY-POWER			TOTAL POWER
		Vo1(V)	Io1(A)	Wo1(W)	Vo2(V)	Io2(A)	Wo2(W)	
Dual output (With FAN)	EPM2350A-120F	12	33.33	400	5	1	5	405
	EPM2350B-150F	15	26.66	400	5	1	5	405
	EPM2350C-180F	18	22.22	400	5	1	5	405
	EPM2350D-240F	24	16.66	400	5	1	5	405
	EPM2350E-270F	27	14.81	400	5	1	5	405
	EPM2350F-360F	36	11.11	400	5	1	5	405
	EPM2350G-480F	48	8.33	400	5	1	5	405
	EPM2350H-120F	12	37.5	450	5	1	5	455
	EPM2350J-150F	15	30	450	5	1	5	455
	EPM2350K-180F	18	27.77	500	5	1	5	505
	EPM2350L-240F	24	20.83	500	5	1	5	505
	EPM2350M-270F	27	18.51	500	5	1	5	505
	EPM2350N-360F	36	13.88	500	5	1	5	505
	EPM2350P-480F	48	10.41	500	5	1	5	505

MECHANICAL

• Enclosed type



• Enclosed type with fan on the side



- Mechanical Size: 130L x 86.5W x 42.8H (mm)
160L x 86.6W x 43H (mm)
- AC Input Connector: JST B3P-VH or equivalent
- DC Output Connector: CN2 & CN3:
(M3.5 Pan HD screw in 2 positions; Torque to 8 lbs-in (90cNm) max.)
CN11: (TKP DH2L-2X2 or equivalent)
CN95: (TKP DH2L-2X2 or equivalent)

Pin1	Pin2	Pin3	Pin4
-Vs	+Vs	DC COM	PG
Pin1	Pin2	Pin3	Pin4
+5Vstb	DC COM	PS_ON	DC COM

- Weight: 580g