

# 200 ~ 300 Watts Single/Quad Output **Open Frame Type for Medical**

## **FEATURES**

- ◆ Low safety ground leakage current
- ◆ EN61000-3-2 class A and D compliant
- ◆ Power Factor 0.98 typical
- ◆ Power Fail Detect (PFD) signal

**SPECIFICATIONS** 

- ◆ Overvoltage & Short-circuit protection
- Remote sense on output #1 and output #2
- Remote inhibit ITL high to disable output





Input Voltage Range	
Input Current (rms)	
Efficiency	
Earth leakage/Touch current	
Operating Temperature	
	(Derate from 100% load @ $+50^{\circ}$ C , linearly to 50% load @ $70^{\circ}$ C )
Cooling	. 200/250/300 watts continuous output power at 35 CFM forced air cooling
	100 /125 /150 watts at convention cooling
Storage Temperature	40°C ~ 85°C
Relative Humidity	5% to 95% non-condensing

2100 VDC from input to ground (1 MOPP)

700 VDC from output to ground

..... EN55011 Class B EMC Standard ..... EN61000-3-2,-3, EN61000-4-2, 3, 4, 5, 6, 8, 11

All Specifications are Typical at Nominal Line, full Load and 25°C. Unless Otherwise Noted.

Madal Nondon	Output #1			Output #2				Output #3				Output #4				Max. Output	
Model Number	V1	Imin	lmax	Tol.	V2	Imin	lmax	Tol.	V3	Imin	Imax	Tol.	V3	Imin	lmax	Tol.	Power
FPM300-S033-x	3.3V	3.0A	60.0A	±3%													100W/200W
FPM300-S051-x	5.17	3.0A	60.0A	±2%													150W/300W
FPM300-S120-x	12V	1.2A	25.0A	±2%													150W/300W
FPM300-S150-x	15V	1.0A	20.0A	±2%													150W/300W
FPM300-S240-x	24V	0.6A	12.5A	±2%													150W/300W
FPM300-S300-x	30V	0.5A	10.0A	±2%													150W/300W
FPM300-S480-x	48V	0.5A	6.30A	±2%													150W/300W
FPM300-Q040-3-x	3.3V	3.0A	35.0A	±2%	5.1V	2.0A	22A	±2%	12V	OA	4A	±4%	12V	OA	4A	±4%	150W/300W
FPM300-Q040-x	5.1V	2.0A	35.0A	±2%	12V	1.0A	10A	±2%	12V	0A	4A	±4%	5.1V	OA	4A	±4%	150W/300W
FPM300-Q041-x	5.17	2.0A	35.0A	±2%	15V	0.8A	8A	±2%	15V	OA	4A	±4%	24V	OA	2.5A	±4%	150W/300W
FPM300-Q042-x	5.17	2.0A	35.0A	$\pm 2\%$	12V	1.0A	10A	±2%	12V	0A	4A	±4%	12V	OA	4A	±4%	150W/300W
FPM300-Q045-x	5.17	2.0A	35.0A	±2%	12V	1.0A	10A	±2%	12V	OA	4A	±4%	24V	OA	2.5A	±4%	150W/300W
FPM300-Q046-x	5.1V	2.0A	35.0A	±2%	12V	1.0A	10A	±2%	12V	0A	4A	±4%	15V	OA	4A	±4%	150W/300W
FPM300-Q047-x	5.17	2.0A	35.0A	±2%	24V	0.5A	5A	±2%	12V	0A	4A	±4%	12V	OA	4A	±4%	150W/300W
FPM300-Q048-x	5.1V	2.0A	35.0A	±2%	24V	0.5A	5A	±2%	5.1V	0A	4A	±4%	15V	OA	4A	±4%	150W/300W
FPM300-Q049-x	5.1V	2.0A	35.0A	±2%	12V	1.0A	10A	±2%	5.1V	0A	4A	±4%	24V	OA	2.5A	±4%	150W/300W
FPM300-Q0410-x	24V	0.5A	6.30A	$\pm 2\%$	12V	1.0A	10A	±2%	5.1V	0A	4A	±4%	12V	OA	4A	±4%	150W/300W
FPM300-Q0411-x	24V	0.5A	6.30A	±2%	12V	1.0A	10A	±2%	5.1V	0A	4A	±4%	24V	OA	2.5A	±4%	150W/300W
FPM300-Q0412-x	24V	0.5A	6.30A	±2%	12V	1.0A	10A	±2%	12V	0A	4A	±4%	12V	0A	4A	±4%	150W/300W
FPM300-Q0413-x	24V	0.5A	6.30A	±2%	24V	0.5A	5A	±2%	5.1V	OA	4A	±4%	15V	0A	4A	±4%	150W/300W
FPM300-Q0414-x	24V	0.5A	6.30A	±2%	24V	0.5A	5A	±2%	12V	0A	4A	±4%	12V	OA	4A	±4%	150W/300W

- 1. x = U for U-bracket, x = E for Enclosed
- 2. All outputs are floating. They can be connected externally for positive or negative output.
- 3. Output #1 & #2 can be adjusted within 5% of their nominal voltage.
  4. Output #3 & #4 can be adjusted within 15% of their nominal voltage.
- 5. 300 watts for "E" version with cover and fan assembly, 150 watts for "Ü" version without moving air (maximum current of output #1 & #2 derated to 50%), or 300 watts with 35 CFM forced air provided by user.
- 6. FPM300-5033-x is rated 200 watts with 35 CFM forced air cooling or 100 watts convection cooled. FPM300-Q40-3 is rated 250 watts with 35 CFM forced air cooling (maximum current of output #1 & #2 derated to 50%) or 125 watts convection cooled.
- 7. Single output models may be operated at no-load. At no-load, output voltage tolerance increases to 10%
- 8. Ripple and noise is maximum peak to peak voltage value measured at output within 20 MHz bandwidth, at rated line voltage and output load ranges, and with a 10 uF tantalum capacitor in parallel with a 0.1 uF ceramic capacitor across the output.

### MECHANICAL DRAWING (mm) Single Output Models U-bracket Form **Enclosed Form** MOUNTING HOLE, THREADED INSERT FOR M3\*0.5 OR #6-32 MOUNTING HOLE, THREADED INSERT FOR M3\*0.5 OR #6-32 SCREWS (8 PLS.) 10 P4 P4 SCREWS (8 PLS.) [66.04]-**■** P2 P2 P3 P5 [114.30] 1.50 [ 114.30 [66.04] **■** P3 **■**P5 2.60 -2.60 1.50 **■**P6 **⊗** 0.425 [ 10.80 ] 0.955 [24.26] -0.425 [10.80] 955 [ 24.26 ] 6.50 [ 165.10 ] 6.50 [165.10] FAN 1.75 [ 44.45 ] 1.75 [44.45] (3) 1.15 [ 29.20 ] 1.15 [29.20] 7.50 [190.50 ] 7.50 [190.50] Multiple Output Models U-bracket Form Enclosed Form MOUNTING HOLE, THREADED INSERT FOR M3\*0.5 OR #6-32 SCREWS (8 PLS.) MOUNTING HOLE, THREADED INSERT FOR M3\*0.5 OR #6-32 SCREWS (8 PLS.) 0 P2 10 P3 P4 P4 1 #7 全 P2 [66.04]-4.50 | 114.30 P3 [114.30] **■**P3 66.04] P4 0 P5 PCB (1) P5 2.60 -2.60 1.50 ■P6 P6 P1 0 PI 1 0.425 [ 10.80 ] 0.955 [24.26] 0.425 [10.80] 0.955 [24.26] -6.50 [165.10]-6.50 [165.10] -**(P)** FAN 1.75 [44.45] 0 1.15 [ 29.20 ] 1.15 [29.20] 7.50 [190.50 ] --7.50 [190.50] **PIN CHART P7** CONN P1 (AC) P2 **P3** P5 P6 2 4 Output PIN 1 1 2 3 Single Live Neutral Ground +V1 V1 Return N.A V4 Return V1 Return Quad +V1 +V2 V2 Return +V/3 V3 Return +V4 Live Neutral Ground CONN P4 Output 1 2 3 4 5 6 7 8 9 10 Signal Single Common +V1 Sense -V1 Sense PFD Inhibit +V N.C N.C N.C Fan Return +12V Fan Return Signal Quad +V1 Sense -V1 Sense PFD Inhibit +V +V2 Sense -V2 Sense Fan Return +12V Fan Common Return

### Note

- 1. Dimensions shown in inches [mm]; Tolerance 0.02 [0.5] maximum
- 2. Input connector P1 is Dinkle DT-35-B01W-03 with M3, nickel-plated screws
- 3. Connector P4 mates with Molex housing 50-37-5103 and pins 5263.
- 4. Connectors P2, P3, P5 and P6: M3\*0.5 screw connections
- 5. Output connector P7 mates with Molex housing 09-50-3041 and Molex 2878 series crimp terminal.
- 6. Weight: 1.10 Kgs. (2.42 lbs.) approx. for U-bracket form, 1.24 Kgs. (2.73 lbs.) approx. for Enclosed form.
- 7. Maximum penetration depth of fixing screws is 4 mm from the outer surface of chassis.