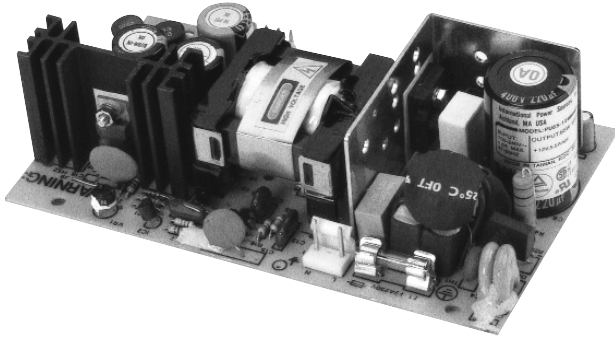


# AC/DC Medical Open Frame

## 65 Watts PM65 Series

**XPiQ inc.**

Intelligent Design Quality Product



- 4000 VAC Isolation
- 100% Burn-in
- Low Safety Leakage Current
- Wide Input Voltage 85 to 264 VAC
- Meets EMI Requirements of Medical Equipment
- Both Line and Neutral Fused for European Requirements

## Specification

### Input

- **Input Voltage** 85 to 264 VAC
- **Input Frequency** 47 to 440 Hz
- **Input Current** 1.6 A (rms) for 115 VAC  
1.0 A (rms) for 230 VAC
- **Safety Ground** 50  $\mu$ A max at 110 VAC 60 Hz
- **Leakage Current** 100  $\mu$ A max at 240 VAC 50 Hz

### Output

- **Total output power:** 0 to 65 watts
- **Ripple and noise:** 1% pk-pk maximum
- **Overvoltage Protection:** Provided on output #1 only; set at 112-132% of its nominal output voltage
- **Overcurrent Protection:** All outputs protected to short circuit conditions
- **Temperature Coefficient:** All outputs  $\pm 0.04\%/^{\circ}$ C maximum
- **Transient Response** Maximum excursion of 4% or better on all models, recovering to 1% of final value 500  $\mu$ s after a 25% step load change
- **Line Regulation**  $\pm 0.5\%$  max at full load

### General

- **Efficiency** 70% minimum at 65 watt output
- **Hold-up time** 10 msec minimum at nominal input
- **Inrush Current** 15 A at 115 VAC or 30 A at 230 VAC at +25  $^{\circ}$ C cold start
- **Withstand Voltage** 4000 VAC from input to output  
1500 VAC from input to ground  
500 VAC from output to ground
- **Insulation Resistance** 10 Mohm minimum from output to ground
- **Switching Frequency** 32 kHz ( $\pm 5$  kHz)

### Environmental

- **Operating Temperature** 0  $^{\circ}$ C to +70  $^{\circ}$ C, derate linearly from 100% load at +50  $^{\circ}$ C to 50% load at +70  $^{\circ}$ C
- **Storage Temperature** -40  $^{\circ}$ C to +85  $^{\circ}$ C
- **Relative Humidity** 5% to 95% non-condensing
- **MTBF** 100,000 hours minimum at full load at +25  $^{\circ}$ C ambient

### EMC & Safety

- **EMI Requirement** Meets the conducted limits of EN 55011 (CISPR11) Level B
- **Safety Requirements** Approved to:  
(Not for patient contact)  
a) UL2601  
b) CSA C22.2 No.601.1-M90 per CUL  
c) IEC 601-1/EN60601-1 (per TUV)

## OUTPUT VOLTAGE & CURRENT RATINGS

**PM65**

Maximum Output Power	Output #1				Output #2				Output #3				Output #4				Model Number
	Vnom	Imin	I <sub>max</sub>	Tol.	Vnom	Imin	I <sub>max</sub>	Tol.	Vnom	Imin	I <sub>max</sub>	Tol.	Vnom	Imin	I <sub>max</sub>	Tol.	
50 W	5 V	0 A	10.0 A	2%													PM65-10A
65 W	12 V	0 A	5.5 A	1%													PM65-12A
65 W	15 V	0 A	4.5 A	1%													PM65-13A
65 W	24 V	0 A	3.0 A	1%													PM65-14A
65 W	30 V	0 A	2.5 A	1%													PM65-16A
65 W	36 V	0 A	2.2 A	1%													PM65-17A
65 W	+5 V	1 A	6.0 A	3%	+12 V	0.5 A	3 A	5%									PM65-23A
65 W	+5 V	1 A	6.0 A	3%	+24 V	0.3 A	2 A	5%									PM65-25A
65 W	+5 V	1 A	6.0 A	3%	+12 V	0.5 A	3 A	5%	-5 V	0.1 A	0.5 A	10%					PM65-30A
65 W	+5 V	1 A	6.0 A	3%	+12 V	0.5 A	3 A	5%	-12 V	0.1 A	0.5 A	10%					PM65-31A
65 W	+5 V	1 A	6.0 A	3%	+15 V	0.4 A	3 A	5%	-15 V	0.1 A	0.5 A	10%					PM65-32A
65 W	+5 V	1 A	6.0 A	3%	+12 V	0.5 A	3 A	5%	-12 V	0.1 A	0.5 A	10%	-5 V	0.1 A	0.5 A	0.1%	PM65-40A

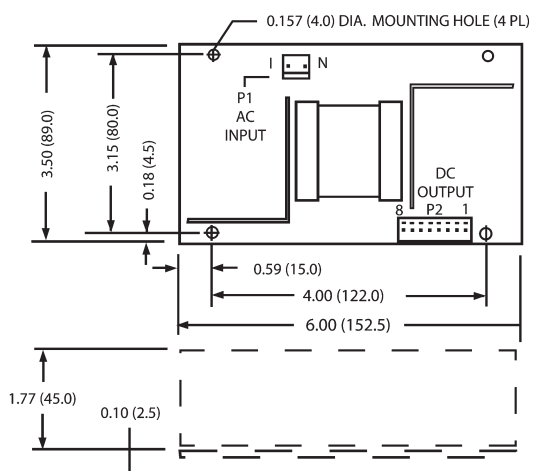
**Notes**

All multi-output units may be operated at no-load without damage. At no-load, output tolerance increases to 10%.

**Pin Chart**

Model		1	2	3	4	5	6	7	8
PM65-10A	PM65-12A	OUTPUT #1	OUTPUT #1	OUTPUT #1	OUTPUT #1	RETURN	RETURN	RETURN	RETURN
PM65-13A	PM65-14A								
PM65-16A	PM65-17A								
PM65-23A		OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #2	OUTPUT #2	N.C.	N.C.
PM65-25A									
PM65-30A	PM65-31A	OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #2	OUTPUT #2	OUTPUT #3	N.C.
PM65-32A									
PM65-40A		OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #2	OUTPUT #2	OUTPUT #3	OUTPUT #4

**Mechanical Details**



**Notes:**

1. Dimensions shown in inches (mm).
2. Tolerance 0.02 (0.5) maximum.
3. Input connector mates with Molex housing 09-50-3031 and Molex 2878 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3081 and Molex 2878 series crimp terminal.
5. Weight: 380 grams approx.