

AC/DC Medical Desktop

50 Watts PCM50 Series

XPIQ inc.
Intelligent Design Quality Product



- 4000 VAC Isolation
- Low Leakage Current
- Single, Dual & Triple Outputs
- Approved to International Medical Safety Standards
- Both Line and Neutral Fused
- Low Voltages Available

Specification

Input

- *Input Voltage* 90-264 VAC
- *Input Frequency* 47 to 63 Hz
- *Input Current* 1.35A max at 115 VAC, 0.7 A max at 230 VAC
- *Inrush Current* 15 A at 115 VAC or 30 A at 230 VAC at 25°C cold start
- *Leakage Current* 0.1 mA max at 230 VAC, 50 Hz

Output

- *Output Voltage:* See Tables
- *Output Power Range* Up to 50 Watts
- *Minimum Load* No minimum load for single output models - See Table for multi output models
- *Line Regulation* ±1% maximum at full load
- *Load Regulation* ±3% typical
- *Ripple and Noise* 2% pk to pk max
- *Transient Response* 4% maximum deviation, 400 µs recovery time for a 50% load change
- *Temperature Coefficient* All outputs ±0.04%/°C max
- *Hold Up Time* 16 ms minimum at low line
- *Overvoltage Protection* 112-132% with auto recovery
- *Overcurrent Protection* 110-150% with auto recovery

General

- *Efficiency* 80% min for single output models, 75% min for multi output models
- *Isolation Voltage* 4000 VAC input to output, 1500 VAC input to ground, 500 VAC output to ground
- *Insulation Resistance* 50 Mohm min from output to ground
- *MTBF* 100,000 hours min at full load & 25 °C ambient to MIL-HDBK-217F.
- *Size* 5.75" x 2.99" x 1.69"
- *Weight* 400-550 g approx

Environmental

- *Operating Temperature* 0 °C to +70 °C, derate linearly from 100% load at +50 °C to 50% load at +70 °C
- *Storage Temperature* -40 °C to +85 °C
- *Relative Humidity* 5-95% non-condensing

EMC & Safety

- *Safety Approvals* Approved to UL 2601, CSA C22.2 No. 601-1 per cUL & EN60601
- *EMI/EMC* Meets conducted & radiated limits of CISPR11 Class B and EN55011 Class B

OUTPUT VOLTAGE & CURRENT RATINGS - SINGLE OUTPUT MODELS				PCM50
Maximum Output Power	Output Voltage	Output Current	Total ⁽¹⁾ Regulation	Model Number
30 W	2.5 V	12.00 A	7%	PCM50US2V5
40 W	3.3 V	8.00 A	5%	PCM50US3V3
40 W	5.0 V	8.00 A	5%	PCM50US05
42 W	7.0 V	6.00 A	5%	PCM50US07
45 W	9.0 V	5.00 A	4%	PCM50US09
45 W	12.0 V	3.75 A	3%	PCM50US12
45 W	15.0 V	3.00 A	3%	PCM50US15
50 W	18.0 V	2.77 A	3%	PCM50US18
50 W	24.0 V	2.08 A	2%	PCM50US24
50 W	28.0 V	1.78 A	2%	PCM50US28
50 W	36.0 V	1.38 A	2%	PCM50US36
50 W	48.0 V	1.04 A	2%	PCM50US48

OUTPUT VOLTAGE & CURRENT RATINGS - MULTI OUTPUT MODELS													PCM50
Output Power	Output 1				Output 2				Output 3				Model Number
	Vnom	Imin	Imax	Reg ⁽¹⁾	Vnom	Imin	Imax	Reg ⁽¹⁾	Vnom	Imin	Imax	Reg ⁽¹⁾	
26.5 W	+3.3 V	1.0 A	5.0 A	7%	+5.0 V	0.4 A	2.0 A	5%					PCM50UD00
40 W	+3.3 V	0.5 A	5.0 A	7%	+12.0 V	0.2 A	2.0 A	5%					PCM50UD01
35 W	+5.0 V	0.2 A	5.0 A	5%	-5.0 V	0.2 A	2.0 A	5%					PCM50UD02
42 W	+5.0 V	0.5 A	5.0 A	5%	+12.0 V	0.2 A	2.0 A	5%					PCM50UD03
42 W	+5.0 V	0.5 A	5.0 A	5%	+15.0 V	0.2 A	1.5 A	6%					PCM50UD04
42 W	+5.0 V	0.5 A	5.0 A	5%	+24.0 V	0.1 A	1.0 A	5%					PCM50UD05
42 W	+5.0 V	0.5 A	5.0 A	5%	-24.0 V	0.1 A	1.0 A	5%					PCM50UD06
42 W	+12.0 V	0.5 A	3.0 A	5%	-12.0 V	0.2 A	1.0 A	5%					PCM50UD07
42 W	+15.0 V	0.5 A	2.0 A	5%	-15.0 V	0.2 A	1.0 A	5%					PCM50UD08
42 W	+5.1 V	0.0 A	5.0 A	5%	+7.2 V	0.2 A	2.6 A	5%					PCM50UD10
42 W	+10.5 V	0.2 A	2.0 A	5%	-10.5 V	0.2 A	2.0 A	5%					PCM50UD11
42 W	+3.3 V	0.5 A	5.0 A	7%	+12.0 V	0.2 A	2.0 A	5%	-5 V	0 A	0.8 A	5%	PCM50UT01
42 W	+3.3 V	0.5 A	5.0 A	7%	+12.0 V	0.2 A	2.0 A	5%	-12 V	0 A	0.8 A	5%	PCM50UT02
42 W	+5.0 V	0.5 A	5.0 A	5%	+12.0 V	0.2 A	2.0 A	5%	-5 V	0 A	0.8 A	5%	PCM50UT03
42 W	+5.0 V	0.5 A	5.0 A	5%	+12.0 V	0.2 A	2.0 A	5%	-12 V	0 A	0.8 A	5%	PCM50UT04
42 W	+5.0 V	0.5 A	5.0 A	5%	+15.0V	0.2 A	2.0 A	6%	-15 V	0 A	0.8 A	5%	PCM50UT05
42 W	+5.0 V	0.5 A	5.0 A	5%	+24.0 V	0.1 A	1.0 A	5%	-12 V	0 A	0.8 A	5%	PCM50UT06
42 W	+5.0 V	0.5 A	5.0 A	5%	+24.0 V	0.1 A	1.0 A	5%	-24 V	0 A	0.5 A	5%	PCM50UT07

Notes

1. Total regulation includes tolerance, line regulation and load regulation.

Mechanical Details

PIN CONNECTIONS			
Pin	SINGLE	DUAL	TRIPLE
1	Common	Common	Common
2	Common	Common	Common
3	Output	Output 1	Output 1
4	Common	Common	Output 3
5	Output	Output 2	Output 2

AC INPUT
IEC 320 INLET

DC OUTPUT
5 PIN PLUG

POWER LED

Pin #

NOTES:

1. Dimensions shown in inches (mm).
2. Tolerance 0.04 (1.0) maximum.
3. Cable length is 48.0" approx.
4. For mating connector, use standard 5 Pin Din 180° socket.
5. Optional output connectors available, contact sales office.
6. Weight: 400-550 g approx.
7. Multi output models include a ferrite bead on the output connector.