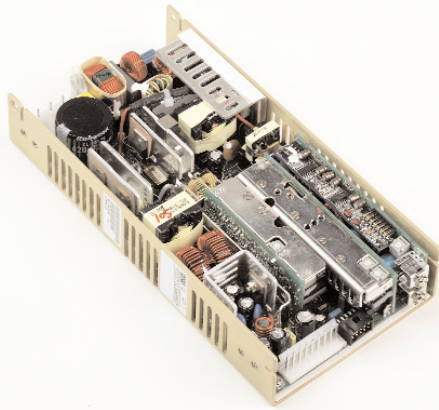


# 175 Watts LPQ172 Series

**Total Power:** 110-175 Watts  
**Input Voltage:** 85-264 VAC  
 120-300 VDC  
**# of Outputs:** Quad



## Special Features

- Active power factor correction
- IEC EN61000-3-2 compliance
- Adjustable outputs on 1, 3 & 4
- Remote sense on main output
- Single wire current sharing
- Power fail and remote inhibit
- Built-in EMI filter
- Low output ripple
- Overvoltage protection
- Overload protection
- Thermal overload protection
- DC power good
- 5 V standby output
- Adjustable floating 4th output
- Optional cover (-C suffix)

## Environmental

Operating temperature: 0° to 50°C ambient  
 derate each output at 2.5% per degree from  
 50° to 70°C (except for -C version)

Electromagnetic susceptibility: designed to  
 meet EN61000-4, -2, -3, -4, -5, -6, -8, -11,  
 Level 3

Humidity: Operating; non-condensing  
 5% to 95%

Vibration: Three orthogonal axes, sweep at  
 1 oct/min, 5 min. dwell at four major  
 resonances 0.75 G peak 5 Hz to 500 Hz,  
 operational

Storage temperature: -40° to 85°C

Temperature coefficient: ± .04% per °C

MTBF demonstrated: >550,000 hours at full  
 load and 25°C ambient conditions

## Electrical Specs

### Input

Input range	85-264 VAC, 120-300 VDC
Frequency	47-63 Hz
Inrush current	38 A max, cold start @ 25°C
Efficiency	75% typical at full load
EMI filter	Meets FCC Class B conducted CISPR 22 Class B conducted EN55022 Class B conducted VDE 0878 PT3 Class B conducted
Power factor	0.99 typical
Safety ground leakage current	1.0 mA @ 50/60 Hz, 264 VAC input

### Output

Maximum power	110 W convection (75 W with cover) 175 W with 30 CFM forced air (130 W with cover)
Adjustment range	3.3 - 5.5V on main; -12 - 15V on 3rd output 3.3 - 25 V on 4th output
Hold-up time	20 ms @175 W load at nominal line
Overload protection	Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating
Overvoltage protection	Tracks outputs 1, 3 & 4; 15 to 35%
Standby output	5 V @ 200 mA regulated ±5%

### Logic Control

AC Power failure	TTL logic signal goes high 100 - 500 msec after V1 output; It goes low at least 4 msec before loss of regulation
Remote inhibit	Requires contact closure to inhibit outputs
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.
DC Ok	TTL logic signal goes high after main output is in regulation. It goes low when there is a loss of regulation

## Safety

<b>VDE</b>	0805/EN60950 (IEC950)
<b>UL</b>	UL1950
<b>CB</b>	Certificate and report
<b>CSA</b>	CSA 22.2-234 Level 3
<b>CE</b>	Mark (LVD)
<b>NEMKO</b>	EN 60950/EMKO-TUE

AMERICAS

5810 Van Allen Way  
Carlsbad, CA 92008  
Telephone: 760-930-4600  
Facsimile: 760-930-0698

EUROPE

Astec House, Waterfront Business Park  
Merry Hill, Dudley  
West Midlands, DY5 1LX, UK  
Telephone: 44 (1384) 842-211  
Facsimile: 44 (1384) 843-355

ASIA

Units 2111-2116, Level 21  
Tower 1, Metroplaza  
223, Hing Fong Road  
Fwai Fong, New Territories  
Hong Kong  
Telephone: 852-2437-9662  
Facsimile: 852-2402-4426



## Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load	Regulation <sup>2</sup>	Ripple P/P(PARD) <sup>3</sup>
LPQ172	5 V (3.3 - 5.5 V)	0 A	15 A	30 A	32 A	±2%	50 mV
	12 V	0 A	6 A	8 A	10 A	±3%	120 mV
	-12 V (-12 -15 V)	0 A	1.5 A	3 A	3.5 A	±3%	<1%
	±3.3-25 V	0.5 A*	2 A	5 A	5.5 A	±3%	<50mV or 1%

1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20 MHz bandwidth and 10 µF in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.
4. 4th output adjustable 3.3-25 V factory set at 5 V.
5. \*Minimum loads are required when output set below 5 Volts
6. Remote inhibit resets OVP latch

Note: -C suffix added to the model number indicates cover option and is limited to 50C operation.

## Pin Assignments

Connector LPQ172

SK1	PIN 1	N/C
	PIN 2	5V Standby
	PIN 3	N/C
	PIN 4	V1 SWP
	PIN 5	Common
	PIN 6	+V1 sense
	PIN 7	Sense common
	PIN 8	Remote inhibit
	PIN 9	DC power good
	PIN 10	POK
SK2	PIN 1,2	+12 V
	PIN 3,4,5	Common
	PIN 6	-12 V
	PIN 7	POK
	PIN 8	+3.3 V to +25 V (Float)
PIN 9	Common (Float)	
SK3	TB-1	COMMON
	TB-2	+5 V (3.3V to 5.5V)
SK4	PIN 1	GROUND
	PIN 3	LINE
	PIN 5	NEUTRAL

Mating Connectors

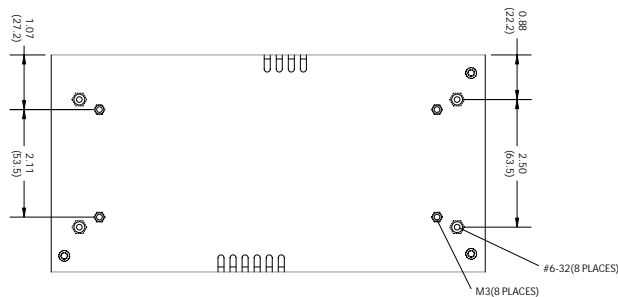
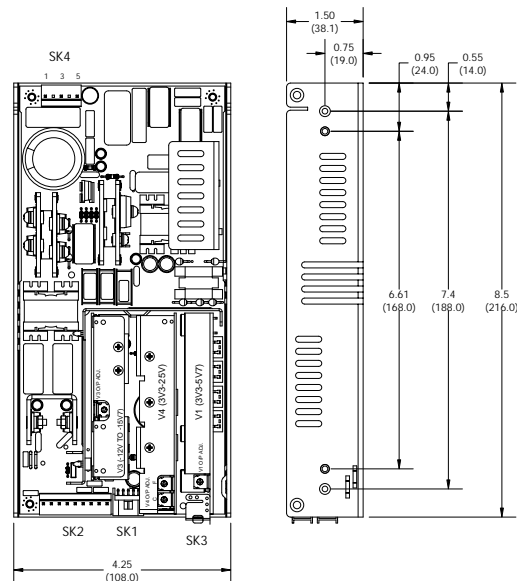
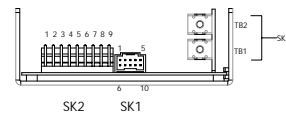
(SK4) AC Input: Molex 09-50-8051 (USA)  
Molex 09-91-0500 (UK)  
PINS: 08-58-0111

(SK3) Main output: Molex BB-124-08

(SK2) Aux DC Output/Power fail: Molex 09-50-8091 (USA)  
Molex 09-91-0900 (UK)  
PINS: 08-58-0111

(SK1) Control Signals: Molex 90142-0010 (USA)  
PINS: 90119-2110 or  
Amp: 87977-3  
PINS: 87309-8

Astec connector kit #70-841-015, includes al of the above.



Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±0.02".
3. Specifications are for convection rating at factory settings unless otherwise stated.
4. Mounting screw maximum insertion depth is 0.12".
5. Warranty: 1 year
6. Weight: 2 lb / 0.91 kg



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.