Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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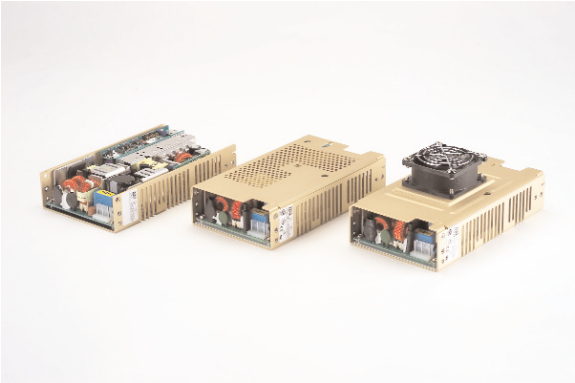
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

145 Watts
LPQ142 Series

Total Power:	110-145 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
- Adjustable floating 4th output
- Optional cover (-C suffix)
- Optional fan cover (-CF suffix)

Environmental

Operating temperature: 0° to 50°C ambient

derate each output at 2.5%per degree from

50° to 70°C

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	80 W convection (60 W with cover-C) 145 W with 30 CFM forced air (100 W with cover-C)
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 @145 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; 10 to 35%

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

VDE	60950
UL	60950
CB	Certificate and report
CSA	60950
CE	Mark (LVD)
NEMKO	EN 60950/EMKO-TUE

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ASIA

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Tower1, 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[2]	Ripple P/P(PARD)[3]
LPQ142	5 V (3.3 - 5.5 V)	0 A	12 A	25 A	27 A	±2%	50 mV
	12 V	0 A	5 A	6 A	9 A	±3%	120 mV
	-12 V (-12 -15 V)	0 A	1 A	1.5 A	2 A	±3%	<1%
	±3.3-25 V	0.5 A	1.5 A	4.5 A	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.
-CF suffix added to the model number indicates fan cover option.

Pin Assignments

Connector	LPQ142	
SK1	PIN 1	GROUND
	PIN 3	NEUTRAL
	PIN 5	LINE
SK2	PIN 1	+12 V
	PIN 2	COMMON
	PIN 3	-12 V
	PIN 4	COMMON
	PIN 5	+5 V to +25 V (Float)
	PIN 6	COMMON (Float)
SK4	TB-1	COMMON
	TB-2	+5 V
SK6	PIN 1	N/C
	PIN 2	DC OK
	PIN 3	N/C
	PIN 4	V1 SWP
	PIN 5	Common
	PIN 6	+V1 sense
	PIN 7	Sense common
	PIN 8	+ inhibit
	PIN 9	- inhibit
	PIN 10	Power fail

Mating Connectors

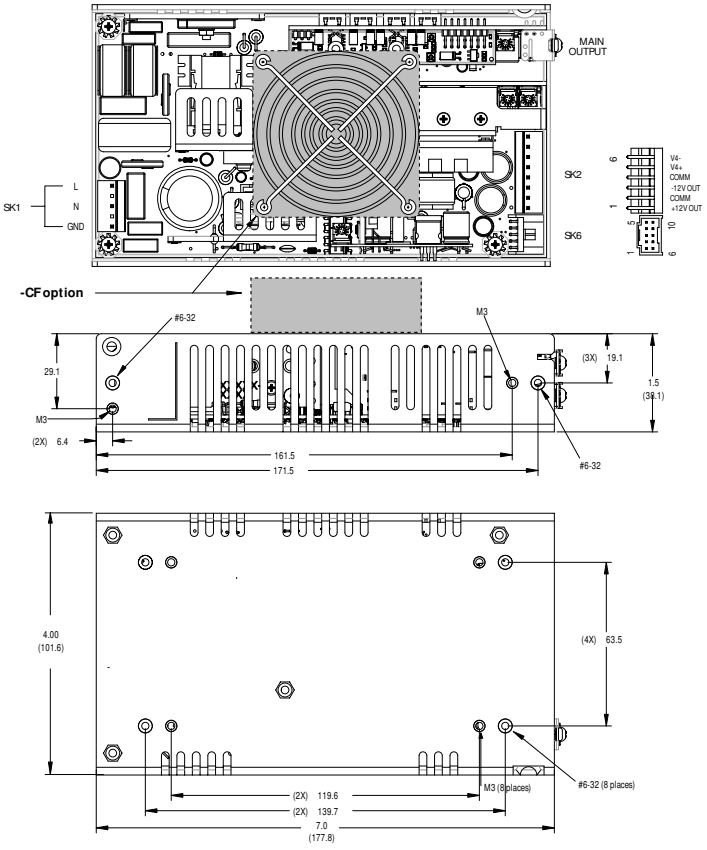
(SK1) AC Input:
Molex 09-50-8051 (USA)
Molex 09-91-0500 (UK)
PINS: 08-58-0111

(SK2) Aux DC Output:
Molex 09-50-8061 (USA)
Molex 09-91-0600 (UK)
PINS: 08-58-0111

(SK6) Control Signals:
Molex 90142-0010 (USA)
PINS: 90119-2110 or
Amp: 87977-3
PINS: 87309-8

(SK4) Main output:
Molex BB-124-08

Astec connector kit #70-841-017, 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: 1.63 lb / 0.74 kg