# 350 Watts LPQ350 Series

Total Power: 350 Watts Input Voltage: 85-264 VAC 120-300 VDC *# of Outputs:* Quad

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### **Special Features**

- Active power factor correction
- IEC EN61000-3-2 compliance
- Remote sense on 1st and 4th output
- Power fail and remote inhibit
- Single wire current sharing
- Built-in EMI filter
- Adjustable floating 4th output
- 2 Supervisory output 5 V and 12 V
- Overvoltage protection
- Overload protection
- ٠ Thermal overload protection
- DC power good ٠
- 135 khz switching frequency ٠
- Cover -C
- Optional with fan cover -CF
- Optional end-mounted fan -CEF

## **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 IEC 801, -2, -3, -4, -5, -6, 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 0.7 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 Frequency Inrush current Efficiency EMI filter

Power factor Safety ground leakage current

#### Output

Maximum power

Adjustment range

Supervisory output

Hold-up time

Overload protection

Overvoltage protection

#### Logic Control

Power failure

Remote on/off

DC-OK

Remote sense

85-264 VAC; 120-300 VDC 47-440 Hz 38 A max., cold start @ 25°C 75% typical at full load FCC Class B conducted and radiated CISPR 22 Class B conducted and radiated EN55022 Class B conducted and radiated VDE 0878 PT3 Class B conducted and radiated. 0.99 typical

<0.5 mA @ 50/60 Hz, 264 VAC input

With cover: 350 W with 30 CFM forced air, (-C) (-CF) (-CEF) ± 5% min. on main: 3.3-24 V on output

5 V @ 500 mA regulated, 12 @ 150 mA x2

20 ms @ 350 W load, 115 VAC nominal line

Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating 5 V output: 5.7-6.7 VDC.

TTL logic signal goes high 50-150 msec after 5 V output. It goes low at least 4 msec before loss of regulation Requires an external contact (N.O or N.C) to inhibit outputs

TTL logic goes high 50-150 msec after 5 V output. It goes low when there is loss of regulation. Compensates for 0.5 V lead drop min.

Will operate without remote sense

connection

VDE 0805/EN60950 (IEC950) UL1950 UL CSA CSA 22.2-234 Level 5 NEMKO EN 60950/EMKO-TUE Certificate and report СВ CE Mark (LVD)

Safety

21310-3336-0001 E186249 LR109492C P97102061 (74-sec) 203 4048, 4049





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М3

SK2

65432 0000000

(6 places) SK3

345678910

 $\heartsuit$ 

diiiid

Π 

2 1

SK1

SK5 5V aux

3.68

(93.6)

2.17 (55)

SK4 fan

Top pot. =V4 adjust

Bottom pot. =V1 adjust

Optional (-CF) Cover with Fan

3.15

(80)

SK6

Units 2111-2116, Level 21 Tower1, Metroplaza 223, Hing Fong Road Fwai Fong, New Territories Hong Kong Telephone: 852-2437-9662

Facsimile: 852-2402-4426

ASIA



**Ordering Information** 

	Output Voltage	Minimum Load	Maximum Load with 30 CFM Forced Air	Peak Load'		Ripple P/P (PARD) <sup>3</sup>
Model Number					Regulation <sup>2</sup>	
LPQ352-C	+5 V	5 A	50 A	60 A	±2%	50 mV
	+12 V	0 A	12 A	14 A	±3%	120 mV
	-12 V	0 A	6 A	8 A	±3%	120 mV
	3.3-24 V	*1 A	6 A	8 A	±3%	240 mV, max.
LPQ353-C	+5 V	5 A	50 A	60 A	±2%	50 mV
	+15 V	0 A	12 A	14 A	±3%	150 mV
	-15 V	0 A	6 A	8 A	±3%	150 mV
	3.3-24 V	*1 A	6 A	8 A	±3%	240 mV, max.

6-32 (2 places)

Main Output

+ve -ve

Terminal

Block TB1

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 3.3-24 V factory set at 5 V.

5. \* Minimum load required when the output is set below 5 volts.

6. If optional CF or CEF fans are not used, 30CFM forced air cooling needs to be provided and is required through the

length of the power supply. Not convection rated.

7. Remote inhibit resets OVP latch

Note: -CF suffix added to the model number indicates cover with fan,

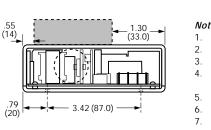
-CEF suffix added to model number indicates end-mounted fan chassis.

#### **Pin Assignments**

SK1	PIN 1	Neutral				
	PIN 2	Line				
	PIN 3	Ground				
SK2	PIN 1	+12 / 15 V				
	PIN 2	Common				
	PIN 3	Common				
	PIN 4	-12 / 15 V				
	PIN 5	3.3-25 V RET Float				
	PIN 6	3.3-25 V Float				
SK3	PIN 1	+ Sense V 4				
	PIN 2	- Sense V 4				
	PIN 3	+Sense V 1				
	PIN 4	-Sense V 1				
	PIN 5	POK				
	PIN 6	C.Share				
	PIN 7	DC-OK				
	PIN 8	Inhibit (N.O.)				
	PIN 9 PIN 10	Inhibit (N.C.) COM				
SK4	PIN 1	+ Fan 1 (12V@150mA)				
	PIN 2	– Common				
SK5	PIN 1	+ 5V aux (5V@100mA)				
	PIN 2	– Common				
SK6	PIN 1	+ Fan 2 (12V@150mA)				
	PIN 2	– Common				
Matina (	Connectors					
SK3	Molex: 22-01-1084					
	PINS: 08-70-0057					

SK3	Molex: 22-01-1084
	PINS: 08-70-0057
SK4	Molex 22-01-3027
	PINS: 08-50-0114
SK5	Molex 22-01-3027
	PINS: 08-50-0114
SK6	Molex 22-01-3027
	PINS: 08-50-0114

Astec Connector Kit #70-841-011, includes all of the above.



6-32 (3 places)

5.0 (127.0)

Notes:

Optional

(-CEF) Cover

with fan

- Specifications subject to change without notice.
- All dimensions in inches (mm), tolerance ±.02".

M3 (4 places)

#6-32 UNC (8 places)

.24 (6.1)

5.46 (138.6)

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▶ 1.18 (30.0)

6.64 (168.6)

8.52 (216.4)

9.0 (228.6)

10.78 (273.8)

Specifications are at factory settings

2.5 (63.5) 35 (88.9)

- To enable normally closed Remote Inhibit, cut Jumper J1.
- Mounting maximum insertion depth is 0.12".
- Warranty: 1 year
- Weight: 4 lb. / 1.8kg.



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