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!

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POWER

LPQ250 Series

250 Watts

Data Sheet

Total Power: 250 Watts
Input Voltage: 85 - 264 Vac
120 - 300 Vdc
# of Outputs: Quad

SPECIAL FEATURES

- Active power factor correction
- IEC EN61000-3-2 compliance
- Remote sense on main output
- Power fail and remote inhibit
- Single wire current sharing
- Built-in EMI filter
- Adjustable floating 4th output
- Two supervisory outputs 5 V and 12 V
- Overvoltage protection
- Overload protection
- Thermal overload protection
- DC power good
- 120 KHz switching frequency
- RoHS compliant
- Cover -C
- Optional with fan cover -CF
- Optional end fan cover -CEF

SAFETY

- VDE 0805/EN60950 (IEC950) 11774-3336-1262
- UL UL1950 EI32002
- CSA CSA 22.2-234 Level 5 LR53982C
- NEMKO EN 60950/EMKO-TUE P95102999 (74-sec) 203
- CB Certificate & report 2186
- CE Mark (LVD)

Electrical Specifications

Input	
Input range	85 - 264 Vac; 120-300 Vdc
Frequency	47 - 440 Hz
Inrush current	20 A max, cold start @ 25 °C
Efficiency	75% typical at full load
EMI filter	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
Safety ground leakage current	< 0.5 mA @ 50/60 Hz, 264 Vac input
Output	
Maximum power	With cover: 250 W with 30 CFM forced air. (-C) (-CF) (CEF)
Adjustment range	± 5% min. on main: 5-25 V on 4th output
Standby outputs	5 V @ 100 mA regulated, 12 V @ 500 mA
Hold-up time	16 ms @ 250 W load, 115 Vac nominal line
Overload protection	Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating
Overvoltage protection	5 V output: 5.7 to 6.7 Vdc. Other models 10% to 25% above nominal output

ARTESYN™
EMBEDDED TECHNOLOGIES

Logic Control

Power fail	TTL Logic signal goes high 50-150 msec after 5 V output. It goes low at least 4 ms before loss of regulation
Remote on/off	Requires an external contact (N.O or N.C) to inhibit outputs
DC-OK	TTL logic goes high 50-150 msec after the output. It goes low when there is loss of regulation.
Remote sense	Compensates for 0.5 V lead drop minimum, will operate without remote sense connected. Reverse connection protected

Environmental Specifications

Operating temperature	0 °C to 50 °C ambient; derate each output at 2.5% per degree from 50 °C to 70 °C
Storage temperature	-40 °C to +85 °C
Temperature coefficient	± 0.4% per °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
MTBF demonstrated	> 550,000 hours at full load and 25 °C ambient conditions

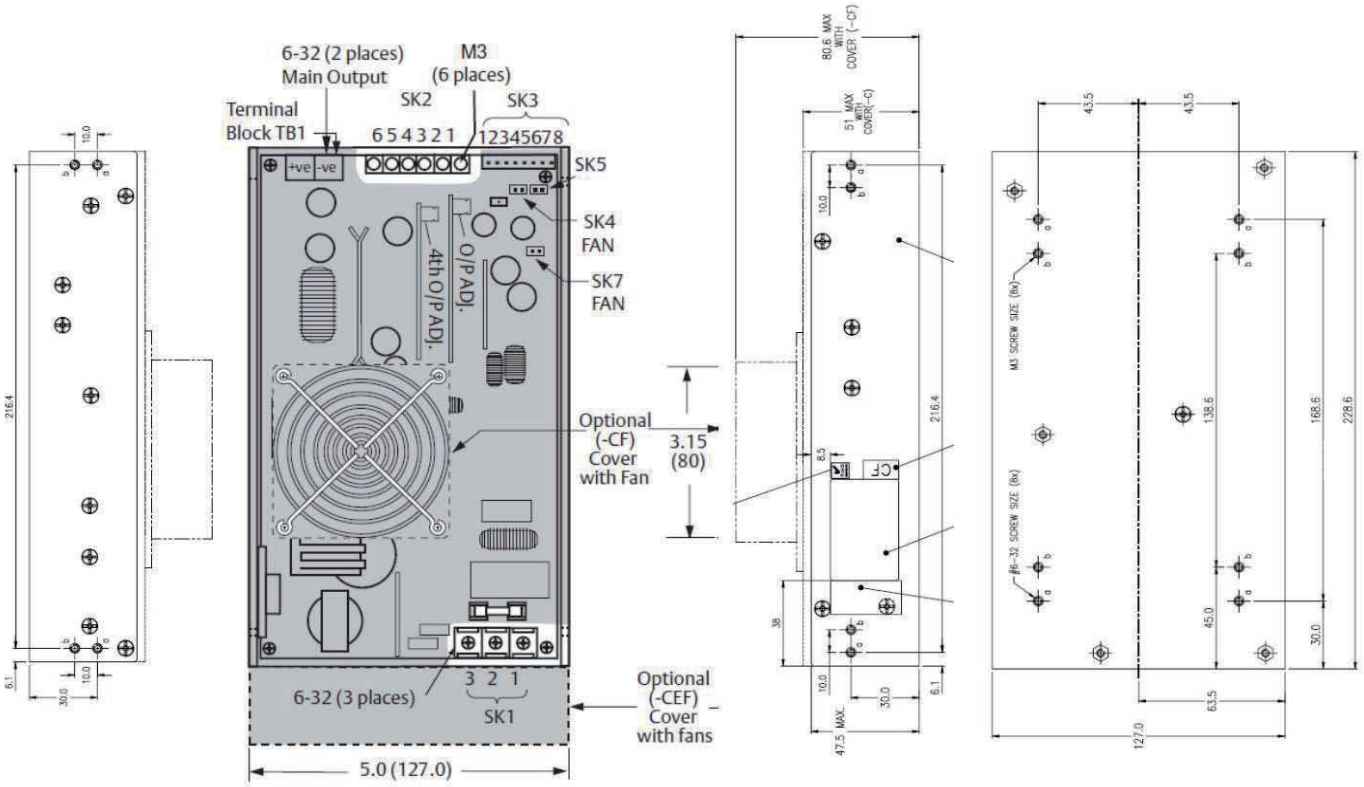
Ordering Information

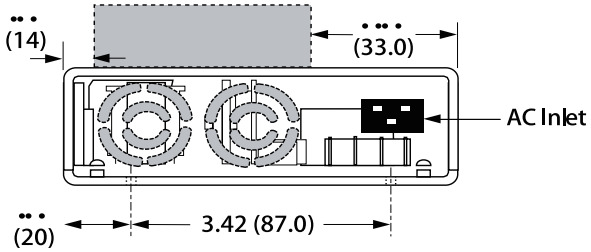
Model Number	Output Voltage	Minimum Load	Maximum Load with 30CFM Forced Air	Peak Load[1]	Regulation[2]	Ripple P/P(PARD)[3]
LPQ252-C	+5 V	3 A	35 A	40 A	±2%	50 mV
	+12 V	0 A	10 A	12 A	±3%	120 mV
	-12 V	0 A	6 A	8 A	±3%	120 mV
	± 5 - 25 V	0 A	6 A	8 A	±3%	240 mV max.
LPQ253-C	+5 V	3 A	35 A	40 A	±2%	50 mV
	+15 V	0 A	10 A	12 A	±3%	150 mV
	-15 V	0 A	6 A	8 A	±3%	150 mV
	± 5 - 25 V	0 A	6 A	8 A	±3%	240 mV max.

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 5 - 25 V factory set at 5 V.
5. Minimum Load is required.
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. This product is a Component Power Supply and is only for inclusion by professional installers within other equipment and must not be operated as a standalone product. EMC compliance to appropriate standards must be verified at the system level. This product is for sale to OEMs and System Integrators, including through Distribution Channels. It is not intended for sale to End Users.

Notes: -CF suffix added to the model number indicates cover with top fan. -CEF suffix added to the model number indicates cover with dual end mounted fan cover and AC inlet.

Mechanical Drawing





1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ± 0.02”(± 0.5mm)
3. Specifications are at factory settings.
4. To enable normally closed remote inhibit, cut jumper J1.
5. Mounting maximum insertion depth is 0.12”.
6. Warranty: 2 years
7. Weight: 3.1 lb/1.41 kg

Pin Assignments

Connector		
SK1	PIN 1	Neutral
	PIN 2	Line
	PIN 3	Ground
SK2	PIN 1	+ 12/15V
	PIN 2	Common
	PIN 3	Common
	PIN 4	- 12/15 V
	PIN 5	5-25 V RET Float
	PIN 6	5-25 V Float
SK3	PIN 1	+ Remote sense
	PIN 2	- Remote sense
	PIN 3	Remote inhibit (N.O.)
	PIN 4	Remote inhibit (N.C.)
	PIN 5	Common
	PIN 6	Current sharing
	PIN 7	Power Fail
	PIN 8	DC Power Good
SK4	PIN 1	+ Fan's power source (12 V @ 500 mA)
	PIN 2	- Fan's power source (12 V @ 500 mA)
SK5	PIN 1	+ Supervisory output supply (5 V @ 100 mA)
	PIN 2	- Supervisory output supply (5 V @ 100 mA)
SK7	PIN 1	+ Fan's power source (12 V @ 500 mA)
	PIN 2	- Fan's power source (12 V @ 500 mA)

MatingConnectors

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
SK7	Molex 22-01-3027 PINS: 08-50-0114
Artesyn Embedded Technologies Connector Kit #70-841-005, includes all of the above.	

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