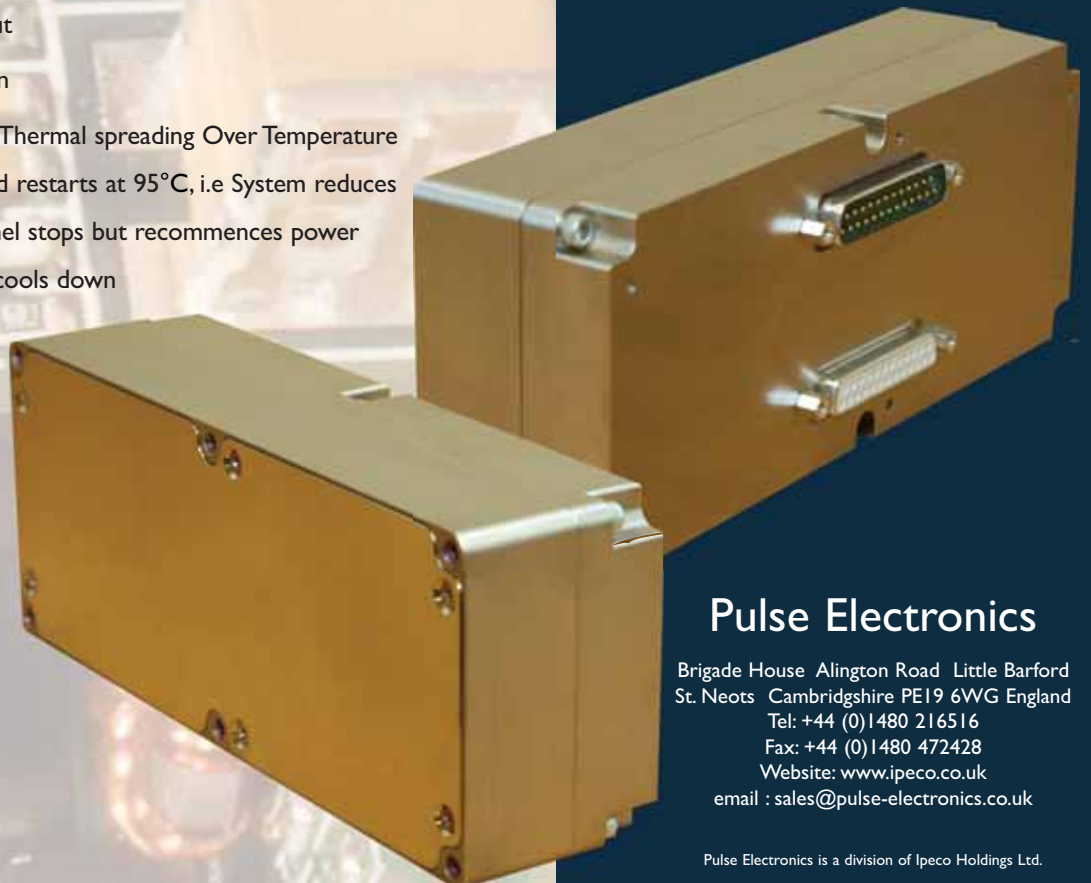


Lion Power Modules

- **Large Standard Footprint up to world class leading 1KW Output Power**
- **Complete Power System NOT JUST CONVERTER STAGE**
- **Transient Ride-through and input current limit active circuit**
- **Common mode and differential mode magnetic filters with associate X and Y filter capacitors**
- **Lightening Suppressors**
- **Up to Four Power Converter Channels each with system characteristics to Resolve Dormancy issues:**
 - Active Transient Ride-through
 - Input current limit
 - Automatic Power sharing with defined voltage output characteristics without Internal Single point of Failure system share line
 - Dual Input Capability
- **Aimed for EMC MIL-STD-461E or DEF-STAN 59-41 Pt.6**
- **TRUE N + 1 System Redundancy and Protection on Both Input and Output Terminals suitable for Battery Charging for Land vehicles**
- **Multi Channel Alarm Bite Monitors:**
 - Power Good on Output
 - Over Voltage Protection
 - Re-entrant Multi Alarm Thermal spreading Over Temperature protection at 105°C and restarts at 95°C, i.e System reduces power when one channel stops but recommences power provision as soon as it cools down
- **Ultimate System Mechanical Integrity associated with both internal and external connections**
- **Superior Shock Sustaining and Lowest weight Category using State of the Art Integrated Planar Magnetics**



Pulse Electronics

Brigade House Alington Road Little Barford
St. Neots Cambridgeshire PE19 6WG England
Tel: +44 (0)1480 216516
Fax: +44 (0)1480 472428
Website: www.ipeco.co.uk
email : sales@pulse-electronics.co.uk

Lion Series

Specifications



BS EN ISO 9001:2000

Input Characteristics

Module Input Options	115VAC 400Hz PFC* 270VDC* 28VDC (16V to 42V) *Dual I/P or 3PH I/P
----------------------	--

Input Transient (270VDC)	MIL-STD-704E+
(115VAC 400Hz)	MIL-STD-704E+
(28VDC)	MIL-STD-704E+

Notes: *Holdup depends on output configuration please see output characteristics

*Except Fig. 6, 9, 11 & 12 for undervoltage

Output Characteristics 1KW peak - Liquid Cooled or Substantial Heat sink

LI001K-DC270D-48/10-48/10-40/A4-40/A4

– Dual 270V DC Input for true N+I

LI001K-DC270S-48/10-48/10-40/A4-40/A4

LI001K-DC270D-24/20A8-24/20A8-40/A4-40/A4

– Dual 270V DC Input for true N+I

LI001K-DC270S-24/20A8-24/20A8-40/A4-40/A4

LI001K-DC270D-28/17A9-28/17A9-40/A4-40/A4

– Dual 270V DC Input for true N+I

LI001K-DC270S-28/17A9-28/17A9-40/A4-40/A4

LI500W-DC270D-5/50-3V3/50-12/2-12N/2-5/A5

– Dual 270V DC Input for true N+I

LI500W-DC270S-5/50-3V3/50-12/2-12N/2-5/A5

Load Regulation < 1% typical

Line Regulation < 0.3% typical

Ripple and Noise (20MHz BW) < 1% typical

General Input Options 28VDC 270VDC/115VAC

Efficiency	85%	90%
Isolation		
Input to Case	500V	1.4KV
Input to Output	500V	1.4KV
Output to Case	500V	500V

Protection Characteristics - Multi Channel

Output Over-voltage	115% of nominal
Output Over-current	115~140% of maximum
Over-temperature	105°C baseplate (retries at 95°C)- Each Channel
Reverse Input	28VDC Input Only
Zero Load Operation	Yes
Short Circuit	Latch or retry option
Input Over-current	150% of maximum

Alarms

Output Voltage Good, Input Voltage Good and Over-temperature

VME Bite and Start up signals ACFAIL, SYSRESET and SYSFAIL Compatible

Environmental Characteristics

Temperature -32°C to +70°C*

Notes: *Dependent on cooling method

Shock	MIL-STD-810-E
Vibration	MIL-STD-810-E
Acceleration	MIL-STD-810-E
Ingress	IP67
Mass	<900g

EMC Characteristics

270VDC & 115VAC	MIL-STD-461E (Aircraft use)
400Hz Input	CE102

28VDC Input	DEF-STAN 59-41 Pt. 6 DCE01
-------------	-------------------------------

Note: Integrated filtering already exists. Full compliance can be achieved via known filtering techniques, components and heatsinking enclosure fitted externally. Please ask factory for details.

Reliability

MTBF	400khrs as per MIL-STD-217 [F2] (Multiple redundancy)
------	--

Optional

Intelligent power control digital interface available. Please ask factory for details.



Dimensions

Width: 970mm Height: 68mm Depth: 45mm