

XL250 SERIES

Quad output

- UL, CSA and VDE approved
 - 110/230VAC input
 - Overvoltage protection (+5V output)
 - Power fail detect
 - Input surge current protection
 - · One floating output as standard
 - U bracket construction with cover for cased models

These medium power multi-output switchers offer 180 to 250 Watts of output power and are available in open frame and cased packages. The XL250 offers 180 Watts of continuous output power with convection cooling. With the open frame models and forced air cooling, the XL250 delivers 250 Watts. VDE safety and VDE/FCC level B conducted EMI compliance are standard and are approved by UL, CSA and VDE. A floating output on auxiliary output V4 is standard on all models. Auxiliary outputs have high current capabilities. This series will power medium sized disk drives, communications and other I/O devices.

[2 YEAR WARRANTY] ((LVD)

SPECIFICATION All specifications are typical at nominal input, full load at 25°C unless otherwise stated

OUTPUT SPECIFICATIONS								
Output voltage adjustability	+5V output Auxiliary outputs	4.75V to 5.75V ±5.0%						
Line regulation	LL to HL, all outputs	s ±0.3%						
Total regulation	Main output Auxiliary outputs	±1.0% max. ±6.0% max.						
Ripple pk-pk	0 to 50MHz	±1.0%						
Transient response	+5V (15A to 20A)	200mV pk settling to 1% in 1ms max.						
Temperature coefficient	+5V output Other outputs	±0.02%/°C max. ±0.03%/°C max.						
Overvoltage protection	+5V output	6.25V ±0.75V						
Output power limit		Pin 423W max. Pout 280W min. Pout 250W max.						
INPUT SPECIFICATIONS								
Input voltage range	110VAC 230VAC	90 to 132VAC 180 to 264VAC						
Input frequency range		47Hz to 63Hz						
Input surge current		45A						
Safety ground leakage current	110VAC, 60Hz 230VAC, 50Hz	0.34mA max. 0.6mA max.						

Conducted emissions	FCC VDE0871, EI	Level B N55022, EN55011 Level A						
GENERAL SPECIFICATIONS								
Hold-up time		60ms						
Efficiency		70% typical						
Isolation voltage	Input/output Input/chassis	3000VAC s 1500VAC						
Switching frequency	Variable	22 to 33kHz						
Approvals and standards	Safety \ C	/DE0805, EN60950, UL478 SA C22.2 No. 143 and 154						
Weight		2.05kg (52.1oz)						
MTBF	MIL-HDBK-2	217E 300,000 hours						
ENVIRONMENTAL SPECIFICATIONS								
Thermal performance	Operating Non-operatin 0°C to +50°C ambient, 300 50°C to +70°	0°C to +70°C ng -40°C to +85°C C, 250W CFM °C, 30CFM Derate 7W/°C						
Relative humidity	Non-conden	sing 5% to 95% RH						
Altitude	Operating Non operatir	10,000 feet max. 30,000 feet max.						
Vibration, See Note 6	5Hz to 500H	z 2.4G rms (approx.)						

ELECTROMAGNETIC COMPATIBILITY SPECIFICATIONS

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International Safety Standard Approvals

VDE0805/EN60950 Reg. File No. 1094

R UL478 Reg. File No. E131987

CSA C22.2 No. 143 and No. 154 File No. LR41062C

180 to 250 Watt AC/DC user-selectable input switch mode power supplies

OUTPUT POWER ⁽¹⁾	OUTPUT VOLTAGE AND CURRENT (1)			REGULATION (3,4)		PK-PK	MODEL		
	V1	V2	V3	V4 (2)	V1	OTHERS	NOISE	OPEN FRAME	CASED
250 (180)W	+5V@30A (22A)	+12V@7A (5A)	-12V@3.5A (2.5A)	±24V@7A (4A)	±1%	±6%	±1%	XL250-4602	XL250-4602C
250 (180)W	+5V@30A (22A)	+12V@7A (5A)	-12V@3.5A (2.5A)	±12V@6A (4A)	±1%	±6%	±1%	XL250-4603	XL250-4603C

Notes

- The values contained within the brackets indicate the rating with 1 convection cooling.
- 2 Output 4 is floating.
- Regulation in the output voltage and current table is defined as the static 3 output regulation at 25°C, including initial tolerance, line voltage within stated limits, and output voltages adjusted to their factory settings.
- 4 The following minimum loads are required to ensure operation within specified regulation limits: XL250-4602 : 5V/3A, +12V/500mA, -12V/500mA, ±24V/500mA
- XL250-4603 : 5V/3A, +12V/500mA, -12V/500mA, ±12V/500mA Peak currents in excess of the maximum indicated rating may be available 5
- on some outputs. However, this will effect output regulation. Consult factory for details.
- Three orthogonal axes, sweep at 1 octave per minute, 30 minute dwell at 6 each maior resonance.
- This product is only for inclusion by professional installers within other 7 equipment and must not be operated as a stand alone product.

Power Fail Detect

 $T_1 \ge 150$ ms to 750ms max.

 T_2' will vary with line and load conditions

 $T_3 \ge 6ms$

Pout : 250W

PFD will sink more than 40mA in the low-state

PFD will source at least 4mA in the high state



Mechanical notes

- A Connect JP1 to E1 for 110V operation.
- Connect JP1 to E2 for 230V operation. В
- Maximum screw penetration (0.125in) 3.2 mm. C D
- All dimensions shown are for reference only.

.41 (10.4)





ALL DIMENSIONS IN INCHES (mm)

Return, Common Term 6 Return, Common Term 7 V1 Output Term 8 Term 9 V1 Output TB1 AC Live Term 1 Term 2 AC Neutral Term 3 AC Ground

PIN CONNECTIONS

FUNCTION

P.F.D.

V3 Output

V2 Output

V4 Output

V4 Return

TB2

Term 1

Term 2

Term 3

Term 4

Term 5



