

AC/DC Plug & Play Power Supply Series 400W-1200W

Xcite

400W - 1200W

AC/DC Power Supply

Ultra-high efficiency 1U size

1.5V to 58V standard output voltages

All outputs fully floating

Extra low profile: 1U height (40mm)

Ultra high efficiency, up to 90%

Plug & Play Power

allows fast custom configuration

allow easy logistics

Reduced system heat dissipation

Few electrolytic capacitors (all long life)

Visual LED indicators

Series / Parallel of multiple outputs

5V bias standby voltage provided

Individual output control signals



patents pending



Applications include:

Industrial machines, Test and measurement, Automation equipment, Printing, Telecommunications

For Medical applications see Xvite

The Xcite family of power supplies provides up to an incredible 1200W in an extremely compact 1U x 260 x 127mm package. Boasting industry leading power density of 15W/in³ and efficiencies of up to 90%, the Xcite family employs an innovative plug & play architecture that allows users to instantly configure a custom power solution.

Ultra high efficiencies and high power density are made possible through the combination of low loss technologies and the best field-proven technologies in planarmagnetics and surface mount electronics. Significantly increased efficiency reduces system thermal load by more than 50%.

The Xcite family consists of 4 powerPac models ranging in power levels from 400W to 1200W. Each model may be populated with up to 6 powerMods selected from the table of powerMods shown below.

All configurations carry full safety agency approvals, UL60950, EN60950 and are CE marked.

powerMods*

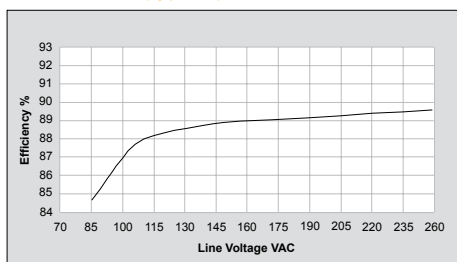
MODEL	Vmin	Vnom	Vmax	Imax	Watts*	
Xg1	1.5	2.5	3.6	50A	125W	
Xg2	3.2	5.0	6.0	40A	200W	
Xg3	6.0	12.0	15.0	20A	240W	
Xg4	12.0	24.0	30.0	10A	240W	
Xg5	28.0	48.0	58.0	6A	288W	
Xg7	5.0	24.0	28.0	5A	120W	
Xg8	v1	5.0	24.0	28.0	3A	72W
	v2	5.0	24.0	28.0	3A	72W

powerPacs

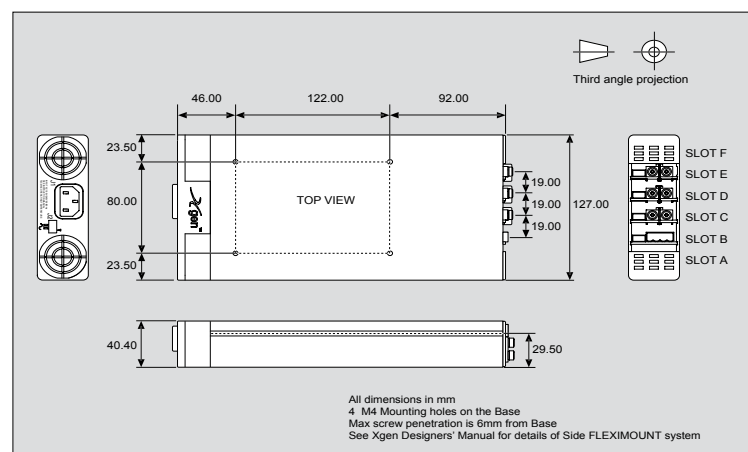
	MODEL	Watts
Xcite	XCA	400W
	XCB	700W
	XCC	1000W
	XCD	1200W

*see datasheet powerMods for full output module specifications powerMod ratings when used with Xcite powerPac

EFFICIENCY (typical)



MECHANICAL SPECIFICATIONS



SPECIFICATION applies to configured units consisting of powerMods modules plugged into the appropriate powerPac

INPUT					
Parameter	Conditions/Description	Min	Nom	Max	Units
Input Voltage Range	Universal Input	85 120		264 380	VAC VDC
Input Frequency Range		47		63	Hz
Power Rating				400	W
XCA				700	W
XCB	Derate linearly from 1000W at 100VAC to 850W at 85VAC			1000	W
XCC	Derate linearly from 1200W at 120VAC to 850W at 85VAC			1200	W
XCD					
Input Current			7.5		A
XCA	85VAC in 400W out		9.5		A
XCB	85VAC in 700W out		11.5		A
XCC, XCD	85VAC in 850W out				
Inrush Current	230VAC @ 25°C			20	A
Undervoltage Lockout	Shutdown	70		78	VAC
Fusing			F8A HRC		
XCA	250V		F10A HRC		
XCB	250V		F12A HRC		
XCC, XCD	250V				
OUTPUT					
Parameter	Conditions/Description	Min	Nom	Max	Units
powerMod Power	As per powerMod table				
Output Adjustment Range	Manual: Multi-turn potentiometer. As per powerMod table Electronic: See Xgen Designers' Manual				
Minimum Load			0		A
Line Regulation	For ±10% change from nominal line			±0.1	%
Load & Cross Regulation	For 25% to 75% load change			±0.2	%
Transient Response	For 25% to 75% load change			10	%
	Voltage Deviation			250	µs
	Settling Time			1.0	% pk-pk
Ripple and Noise	20MHz Bandwidth				
Overvoltage Protection	1st level: Vset Tracking. 2nd level: Vmax (Latching)	110		125	%
Overcurrent Protection	Straight line with hiccup activation at <30% of Vnom See powerMod datasheet and Designer's Manual for full details	110		120	%.
Remote Sense	Max. line drop compensation. (except Xg7, Xg8)			0.5	VDC
Overshoot				2	%
Turn-on Delay	From AC In / Enable signal			300 / 30	ms
Rise Time	Monotonic			5	ms
Hold-up Time	For nominal output voltages at full load. XCA,XCB,XCC / XCD	20 / 15			ms
Output Isolation	Output to Output / Output to Chassis	500 / 500			VDC
GENERAL					
Parameter	Conditions/Description	Min	Nom	Max	Units
Isolation Voltage	Input to Output Input to Chassis	3000 1500			VAC VAC
Efficiency	230VAC, 1200W @ 24V		90		%
Safety Agency Approvals	EN60950, UL60950, CSA22.2 No.950 UL File No. E181875				
Leakage Current	250VAC, 60Hz, 25°C			1.5	mA
Signals	See Xgen Series datasheet				
Bias Supply	Always ON. Current 250mA	4.9	5.0	5.1	VDC
Reliability	Failures per million hours at 25°C and full load See Designers' Manual. powerPac excludes fans			1.0 0.6	fpmh fpmh
					powerMod powerPac
EMC					
Parameter	Standard	Level		Units	
Emissions					
Conducted	EN55011, EN55022, FCC		Level B		
Radiated	EN55011, EN55022, FCC		Level B		
Harmonic Distortion	EN61000-3-2		Compliant		
Flicker and Fluctuation	EN61000-3-3		Compliant		
Immunity					
Electrostatic Discharge	EN61000-4-2		Level 4		
Radiated RFI	EN61000-4-3		Level 3		
Fast Transients - burst	EN61000-4-4		Level 4		
Input Line Surges	EN61000-4-5		Class 4		
Conducted RFI	EN61000-4-6		10		V/m
Voltage Dips	EN61000-4-11 (EN55024)		10		ms
ENVIRONMENTAL					
Parameter	Conditions/Description	Min	Nom	Max	Units
Operating Temperature	Full Load up to 50°C. See derating below.	-20		+70	°C
Storage Temperature		-40		+85	°C
Derating	2.5% per °C above 50°C				
Relative Humidity	Non-condensing	5		95	%RH
Shock	3000 Bumps, 10G (16ms) half sine				
Vibration	1.5G	10		200	Hz

NOTES

1. This product is not intended for use as a stand alone unit and must be installed by qualified personnel.
2. The specifications contained herein are believed to be correct at time of publication and are subject to change without notice.
3. All specifications at nominal input, full load, 25°C unless otherwise stated.