

Medical Low Noise Plug&Play Power Supply 400W-900W

Xzite

400W / 900W

AC/DC Low Noise Power Supply

Medically approved

Low Noise 1U size

Low Acoustic Noise 52dBA

UL2601-1 and EN60601-1 approved

Less than 300µA leakage current

4000VAC isolation

1.5V to 58V standard output voltages

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

Series / Parallel of multiple outputs

5V bias standby voltage provided

Individual output control signals



patents pending



Applications include: Clinical diagnostic equipment, Medical lasers, Dialysis equipment

For Standard applications see Xcite, Xqite

The Xzite family of low noise medically approved power supplies provides up to 900W in an extremely compact 1U x 260 x 127mm package. Boasting industry leading power density of 11W/in³ and efficiencies of up to 90%, the Xzite family employs an innovative plug & play architecture that allows users to instantly configure a custom power solution in less than 5 minutes!

Ideal for acoustic sensitive medical applications the Xzite family provides unmatched efficiency and high power density, made possible through the combination of low loss technologies and the best field-proven technologies in planar magnetics and surface mount electronics.

The Xzite family consists of 2 powerPac models ranging in power levels from 400W to 900W. 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, UL2601-1, EN60601-1 and are CE marked.

For alternative power interfaces contact Zentro - Elektrik

powerMods*

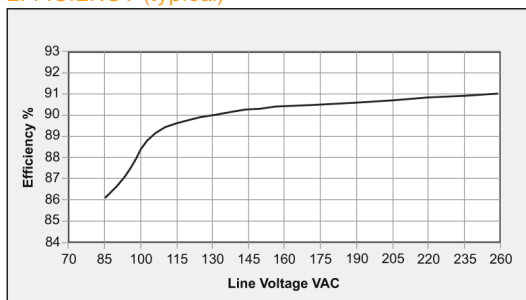
MODEL	Vmin	Vnom	Vmax	I _{max}	Watts*	
Xg1	1.5	2.5	3.6	50A	100W	
Xg2	3.2	5.0	6.0	40A	150W	
Xg3	6.0	12.0	15.0	20A	180W	
Xg4	12.0	24.0	30.0	10A	215W	
Xg5	28.0	48.0	58.0	6A	215W	
Xg7	5.0	24.0	28.0	5A	90W	
Xg8	v1	5.0	24.0	28.0	3A	55W
	v2	5.0	24.0	28.0	3A	55W

powerPacs

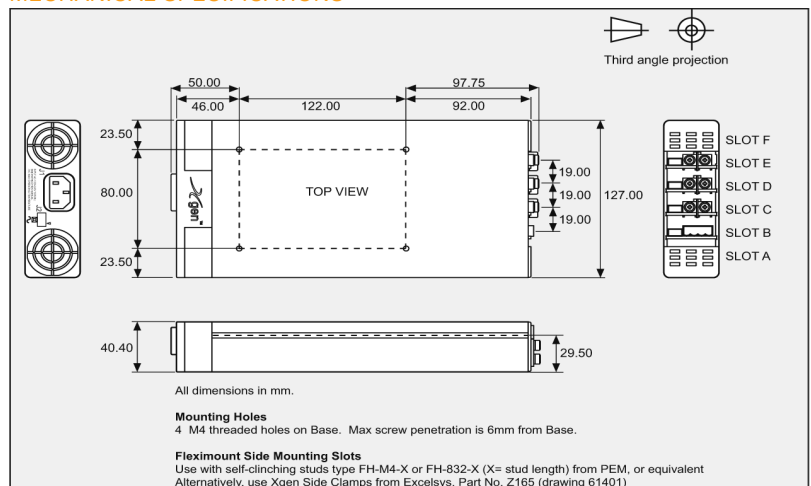
	MODEL	Watts
Xzite	XZA	400W
	XZB	900W

*see datasheet powerMods for full output module specifications powerMod ratings when used with Xlite 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 XZA XZB	Derate linearly from 900W at 120V AC to 600W at 85V AC			400 900	W W
Input Current XZA XZB	85VAC in 400W out 85VAC in 600W out		6.5 8.5		A A
Inrush Current	230V AC @ 25°C			25	A
Undervoltage Lockout	Shut down	65		74	VAC
Fusing XZA XZB	250V 250V		F10A HRC F12A HRC		
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 Settling Time			250	µs
Ripple and Noise	20MHz Bandwidth			1.0	% pk-pk
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 volt ages at full load. XZA / XZB	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	4000 1500			VAC VAC
Efficiency	230V AC, 900W @ 24V		90		%
Safety Agency Approvals	EN60601-1, UL2601-1, CSA601-1 UL File No. E230761				
Leakage Current	250V AC, 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. powerMod powerPac excludes fans			1.0 0.6	fpmh fpmh
EMC					
Parameter	Standard		Level		Units
Emissions					
Conducted	EN5501 1, EN55022, FCC		Level B		
Radiated	EN5501 1, 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	EN61000-4-1 1 (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
Acoustic Noise	Background noise <20dBA, Noise measured 1m from unit		52		dBA
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.