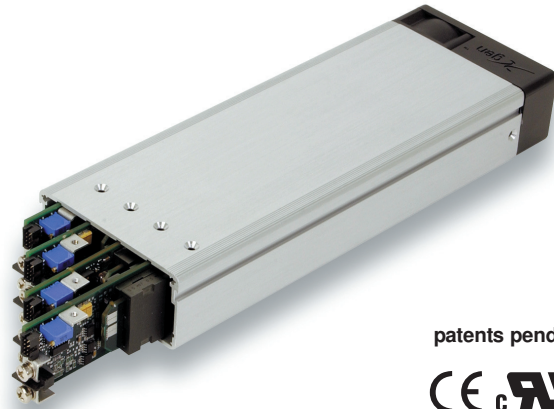




Slimline

Medical Power Supply
User Configurable 1U size



patents pending



PLUG & PLAY POWER
next generation power source

FEATURES

- EN60601-1 and UL2601-1 approved
- Less than 300µA leakage current
- 4000VAC isolation
- Slimmest 600W configurable power
- Extra low profile: 1U height (40mm)
- Ultra high efficiency, up to 89%
- Plug & Play Power
 - allows fast custom configuration
 - allow easy logistics
- FLEXIMOUNT Flexible mounting system
- Few electrolytic capacitors (all long life)
- Series / Parallel of multiple outputs
- 5V bias standby voltage provided
- Individual output control signals

APPLICATIONS INCLUDE

- Radiological imaging
- Clinical diagnostics
- Medical lasers
- Clinical chemistry
- For non-medical applications see Xlite

The Xmite family of medically approved power supplies provides up to 600W in a slimline 1U x 260 x 89mm package. The Xmite family carries full safety agency approvals to EN60601-1 and UL2601-1, meeting the stringent creepage requirements in this compact package. Providing up to 8 isolated outputs, the Xmite family is the most flexible power supply in its class and brings affordable configurable power to the 200-600W medical market.

The Xmite family consists of 3 *powerPac* models in 200W, 400W and 600W power levels. Each *powerPac* model may be populated with up to 4 *powerMods* selected from the table of *powerMods* shown below. Simply select your appropriate *powerPac* and *powerMods* to get your instant custom power solution.

This slimline product boasts unrivalled power density, providing significant system space savings. Combined with ultra-high efficiencies, the Xmite family provides system designers with flexible instant solutions that significantly shorten system design-in time. For alternative power interfaces contact support@excelsys.com

powerMods

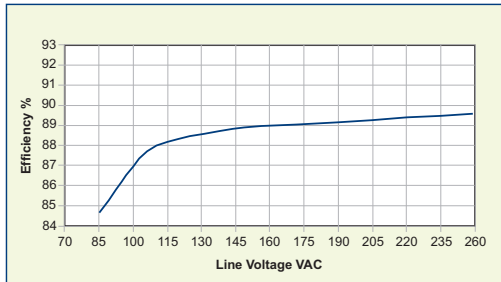
MODEL	Vmin	Vnom	Vmax	Imax	Watts*
Xg1	1.5	2.5	3.6	50A	125W
Xg2	3.2	5.0	6.0	40A	200W
Xg3	6.0	12.0	15.0	20A	240W
Xg4	12.0	24.0	30.0	10A	240W
Xg5	28.0	48.0	58.0	6A	288W
Xg7	5.0	24.0	28.0	5A	120W
Xg8	v1	5.0	24.0	3A	72W
	v2	5.0	24.0	3A	72W

powerPacs

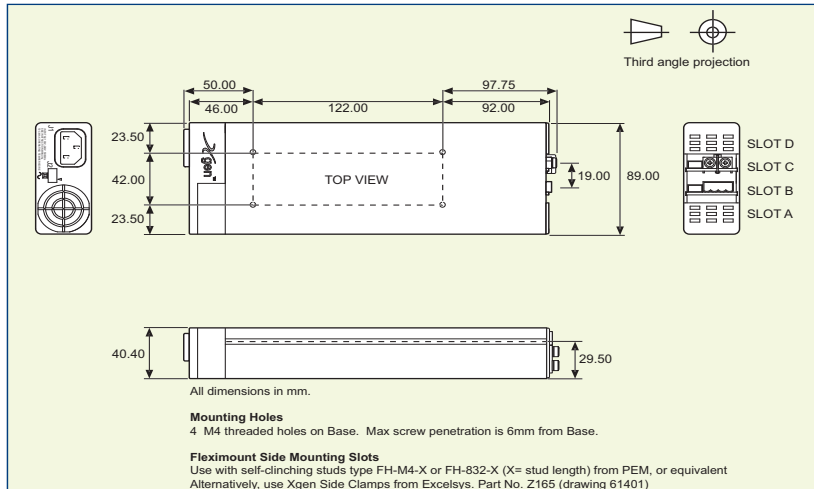
	MODEL	Watts
Xmite	XMA	200W
	XMB	400W
	XMC	600W

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

EFFICIENCY (typical)



MECHANICAL SPECIFICATIONS



200W/400W/600W Slimline Medically Approved Power Supply

Slimline

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		264	VAC
		120		380	VDC
Input Frequency Range		47		63	Hz
Power Rating	XMA			200	W
	XMB			400	W
	XMC	Derate linearly from 600W at 180VAC to 400W at 85VAC		600	W
Input Current	XMA	85VAC in 200W out	4.0		A
	XMB	85VAC in 400W out	7.5		A
	XMC	85VAC in 400W out	7.5		A
Inrush Current	230VAC @ 25°C			20	A
Undervoltage Lockout	Shutdown	70		78	VAC
Fusing	XMA	250V 5 x 20mm		F5A HRC	
	XMB	250V 5 x 20mm		F8A HRC	
	XMC	250V 5 x 20mm		F8A HRC	

OUTPUT					
Parameter	Conditions/Description	Min	Nom	Max	Units
<i>powerMod</i> Power	As per <i>powerMod</i> table				
Output Adjustment Range	Manual: Multi-turn potentiometer. As per <i>powerMod</i> table				
	Electronic: See Xgen Designers' Manual				
Minimum Load			0		A
Line Regulation	For ±10% change from nominal line			±0.1	%
Load Regulation	For 25% to 75% load change			±0.2	%
Cross Regulation				±0.2	%
Transient Response	For 25% to 75% load change Voltage Deviation Settling Time			10	%
				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 <i>powerMod</i> 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	20			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	4000			VAC
	Input to Chassis	1500			VAC
Efficiency	230VAC, 400W @ 24V		89		%
Safety Agency Approvals	EN60601-1, UL2601-1, CSA601-1 UL File No. E230761				
Leakage Current	250VAC, 60Hz, 25°C			300	µA
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			1.0	fpmh
	See Designers' Manual. <i>powerPac</i> excludes fans			0.5	fpmh

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.

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