

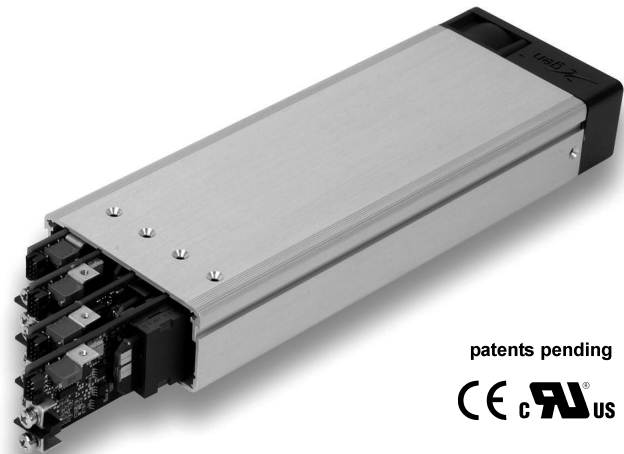
Low Noise Medically Approved Power Supply 200W - 400W

Xrite

200W / 400W

AC/DC Low Noise Power Supply
Medically approved
Low Noise 1U size

- Low Acoustic Noise 54dBA
- 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



patents pending



Applications include: Radiological imaging, Clinical diagnostics, Medical lasers, Clinical chemistry
 For non-medical applications see Xkite

The Xrite family of low noise medically approved power supplies provides up to 400W in a slimline 1U x 260 x 89mm package. Ideal for acoustoc sensitive medical equipment, the Xrite 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 Xrite family is the most flexible power supply in its class and brings affordable configurable power to the 200-400W medical market.

The Xrite family consists of 2 powerPac models in 200W and 400W 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 Xrite family provides system designers with flexible instant solutions that significantly shorten system design-in time. For alternative power interfaces contact Zentro - Elektrik.

powerMods*

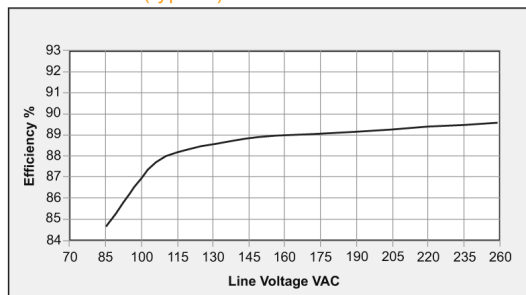
MODEL	Vmin	Vnom	Vmax	I _{max}	Watts*
Xg1	1.5	2.5	3.6	50A	125W
Xg2	3.2	5.0	6.0	40A	200W
Xg3	6.0	12.0	15.0	20A	240W
Xg4	12.0	24.0	30.0	10A	240W
Xg5	28.0	48.0	58.0	6A	288W
Xg7	5.0	24.0	28.0	5A	120W
Xg8	v1	5.0	24.0	3A	72W
	v2	5.0	24.0	3A	72W

powerPacs

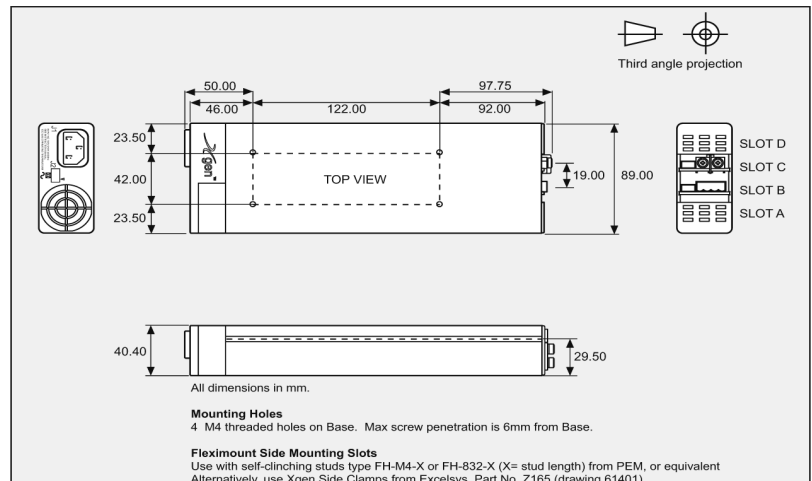
	MODEL	Watts
Xrite	XMA	200W
	XMB	400W

*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	XMA XMB			200 400	W W
Input Current	XMA XMB	85VAC in 200W out 85VAC in 400W out	4.5 5.5		A A
Inrush Current	230V AC @ 25°C			50	A
Undervoltage Lockout	Shutdown	65		74	VAC
Fusing	XMA XMB	250V 5 x 20mm 250V 5 x 20mm		F5A HRC F6.3A 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 Regulation	For 25% to 75% load change			±0.2	%
Cross Regulation				±0.2	%
Transient Response	For 25% to 75% load change			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 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	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 Input to Chassis	4000 1500			VAC VAC
Efficiency	230V AC, 400W @ 24V		89		%
Safety Agency Approvals	EN60601-1, UL2601-1, CSA601-1 UL File No. E230761				
Leakage Current	250V AC, 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 See Designer's Manual. powerPac excludes fans			1.0 0.5	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		-20		+70	°C
Storage Temperature		-40		+85	°C
Derating	2.5% per °C above 40°C. See Designers Manual for full deratings				
Relative Humidity	Non-condensing	5		95	%RH
Acoustic Noise	Background noise 28.6dBA, Noise measured 1m from unit		54		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.