LiteMod 4HC

Flexible 4-channel 2400W amplifier module

LiteMod 4HC is an extremely amplification versatile platform integrating PFC equipped power universal vlagus for mains operation and 4 output stages delivering up to 2400W total.

LiteMod 4HC boosts flexibility, being configurable as four, three, two channels, or single high power output channel and supporting 2Ω operation. It can be used in high channel count applications such as: three way and two way designs, subwoofer + satellite systems, and multichannel rack amplifiers.

The pristine sonic performance is obtained in conjunction with the ease of use, in a compact solution.

- ► Active Loudspeakers
- ▶ 3-Way Line Arrays
- ► Single Drive Subwoofers
- ► High Power Studio Monitors
- ► Sub + 2-way Satellites
- ▶ 2/4/8 channel OEM Rack Amps
- ► Thermal protections (Power limiting - Thermal shutdown)
- ► Short-circuit/overload/high frequency output protections
- ► Auxiliary output voltages
- ▶ Mute command
- Standby switch
- ▶ Optional DSP board

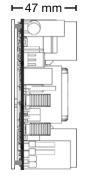


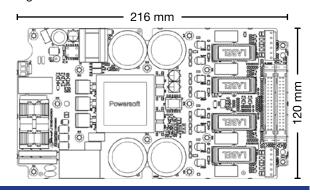




Output Power		
Maximum output power per channel @ 4Ω	4 x 750W @ 4Ω	
Maximum output power per channel - 3 Channel Mode	1 x 1400W @ 8Ω BTL + 2 x 750W @ 4Ω	
Maximum output power per channel - 2 Channel Mode	2 x 1400W @ 8 Ω BTL or 2 x 1400 W @ 2 Ω PTL	
Maximum output power - PBTL	1 x 2400W 4Ω	
Max Output Voltage and Current		
Single Ended	78 V _{peak} / 30 A _{peak}	
BTL	$156 V_{peak} / 30 A_{peak}$	
PBTL	156 V _{peak} / 60 A _{peak}	

- ▶ Efficiency and robustness, always and everywhere
 - ✓ Powersoft switching mode technology grants reliability, robustness and attention to detail. Accurate design of the Pulse Width Modulation block offers maximum performance, high predictability and immunity from intermodulation artifacts.
- ► Maximize performances, minimize consumption
 - ✓ automatic mains voltage selector for world wide operation;
 - ✓ latest generation single-stage patented Power Factor Correction;
 - √ 0.5 W low standby power consumption.
- Complete set of protections
 - ✓ thermal shutdown;
 - ✓ short circuit and overload protection;
 - ✓ stationary high frequency protection.
- Compactness
 - ✓ power supply, output stage and connectors are all included in a single, compact, lightweight chassis.







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Specifications

0 1		
General		
Maximum output power per channel @ 4Ω	750 W	
Maximum output power per channel @ 8Ω	400 W	
Maximum output power @ 8Ω bridge mode	1400 W	
Maximum output power @ 2Ω parallel mode	1400 W	
Maximum output power @ 4Ω parallel bridge mode	2400 W	
Maximum total power all channels driven	2400 W	
Max Output Voltage and Current		
Single Ended	78 V _{peak} / 30 A _{peak}	
BTL	$156 V_{peak} / 30 A_{peak}$	
PBTL	156 V _{peak} / 60 A _{peak}	

Audio		
Gain	26 dB	
Frequency Response ($\pm 1~\text{dB}$, 1 W @ 8 $\Omega)$	10 Hz - 30 kHz	
S/N (20 Hz - 20 kHz A-Weighted @ 8 Ω)	Typical > 115 dB	
Noise Floor	Typical -80 dBV (A)	
Crosstalk Separation (1 kHz)	Typical > 80 dB	
Input sensitivity	11 dBu	
Input impedance	$4.5~\text{k}\Omega$ balanced	
THD+N (from 0.1 W to 1/2 Power)	< 0.08% (typical < 0.05%)	
DIM (from 0.1 W to 1/2 Power)	< 0.2% (typical < 0.05%)	
Damping Factor	> 500 @ 1 kHz	

Construction	
Dimensions	216 x 120 x 47 mm
Weight	1100 g

AC Mains Power			
Power supply	Universal input, regulated Switch Mode with PFC		
Nominal voltage	100-240 V AC @ 50-60Hz		
Operating Voltage	85-264 V AC		
Power Factor	$\cos \varphi > 0.9 \ @ \ 4 \ \Omega$ full power		
Consumption			
Standby	< 1 W (with an aux load < 100 mW)		
Idle	≤ 10.2 W @ 100-240 V AC		
Rated Load (1/4 Max Power)	700 W		
AC Current	Nominal 7 A Max 25 A		
Inrush Current (230 V AC)	41 A _{peak}		

Aux Supplies	
Max aux supply current draw @ +12 V	1200 mA
Max aux supply current draw @ -12 V	300 mA
Max aux supply current draw @ +5V	50 mA
Fan plug - 12V Fan	200 mA

Thermal & Environment		
Operating temperature & Humidity	-20° to 65° C, 0 to 90% Non condensing	
Thermal Dissipation	Cooling Plate + Optional Variable Speed Fan	
1/8 Max Output Power @ 4Ω	Current Draw @ 230 V	2.2 A _{rms}
	Thermal Loss @ 230 V	241 BTU/h
	Current Draw @ 115 V	4.0 A _{rms}
	Thermal Loss @ 115 V	251 BTU/h
Vibration	ETSI EN 300 019-2-2	
EMC immunity	EN 55103-2	
EMC emissions	EN 55103-1	
Safety standards	IEC 60065	

Application Examples

Please note that the following configuration examples do not cover all possible applications.

Power ratings could vary depending on acoustic design and speaker specifications. Contact Powersoft for support in selecting the ideal solution for your specific needs.

