LiteMod 4HC

Flexible 4-channel 2400W amplifier module

LiteMod 4HC is an extremely versatile amplification platform integrating PFC equipped power supply for universal 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

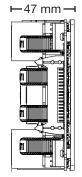


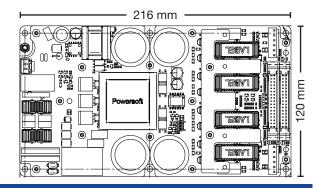




Output Power	
Maximum output power per channel @ 4Ω	4 x 750W @ 4Ω
Maximum output power per channel - 3 Channel Mode	1 x 1400W @ 8Ω BTL + 2 x 750W @ 4Ω
Maximum output power per channel - 2 Channel Mode	2 x 1400W @ 8 Ω BTL or 2 x 1400 W @ 2 Ω PTL
Maximum output power - PBTL	1 x 2400W 4Ω
Max Output Voltage 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

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	$156 \mathrm{V}_{\mathrm{peak}} / 30 \mathrm{A}_{\mathrm{peak}}$
PBTL	156 V _{peak} / 60 A _{peak}

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)	600 W
AC Current	Nominal 7 A Max 25 A
Inrush Current (230 V AC)	41 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 kΩ 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

Thermal & Environment		
Operating temperature & Humidity	-20° to 65° C, 0 to 90	0% 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	EN 60068-2-64: 2008 (Random Test) EN 60068-2-27:2009 (Shock Test)	
EMC immunity	EN 55103 EN 5503	
EMC emissions	EN 5503	32: 2015
EMC other	EN 61000-3-2: 2014 EN 61000-3-3: 2013	
Safety standards	IEC 60065:2014	

Aux Supplies	
Max aux supply current draw @ +12 V	1000 mA
Max aux supply current draw @ -12 V	300 mA
Max aux supply current draw @ +5V	50 mA
Fan plug - 12V Fan	200 mA

Construction	
Dimensions	216 x 120 x 47 mm
Weight	1100 g

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.

