

LiteMod 4HV

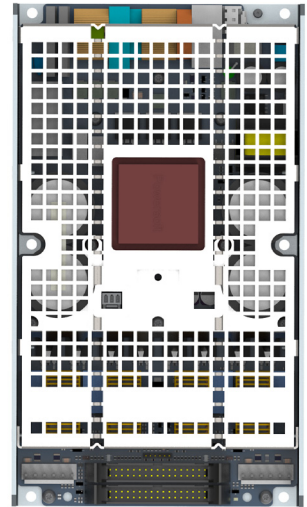
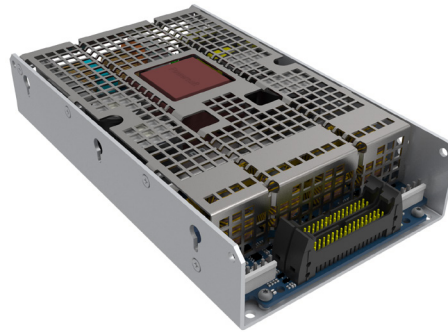
Flexible 4-channel 4000W amplifier module



LiteMod 4HV is an extremely versatile amplification platform integrating PFC equipped power supply for universal mains operation and 4 output stages delivering up to 4000W total.

LiteMod 4HV 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.

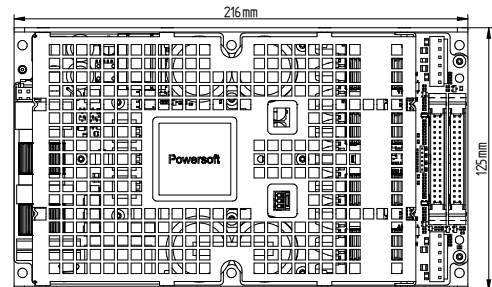
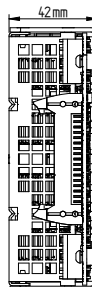
The pristine sonic performance is obtained in conjunction with the ease of use, in a compact solution.



- ▶ Active Loudspeakers
- ▶ 3-Way Line Arrays
- ▶ Single Drive Subwoofers
- ▶ High Power Studio Monitors
- ▶ Sub + 2-way Satellites
- ▶ 2/4/8 channel OEM Rack Amps
- ▶ 70-100V Amplifiers

- ▶ Thermal protections (Power limiting - Thermal shutdown)
- ▶ Short-circuit/overload/high frequency output protections
- ▶ Auxiliary output voltages
- ▶ Mute command
- ▶ Very low power in stand-by mode
- ▶ High Accuracy Output Current Monitor
- ▶ High Accuracy Output Voltage Monitor

- ▶ 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
 - ✓ 400 VAC temporary tolerant power supply
 - ✓ latest generation single-stage patented Power Factor Correction
 - ✓ 0.5 W low standby power consumption
- ▶ Complete set of protections
 - ✓ thermal shutdown
 - ✓ output DC protection
 - ✓ 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



LiteMod 4HV

Flexible 4-channel 4000W amplifier module

Specifications

Output Power, all channels driven symmetrically				
# of channels	4 ch	2 ch	2 ch	1 ch
Configuration	SE	BTL	PTL	PBTL
2 Ω	750 W	-	2000 W	3000 W
4 Ω	1000 W	1500 W	1500 W	4000 W
8 Ω	750 W	2000 W	800 W	3000 W
70 V	900 W	1200 W	1800 W	2400 W
100 V	-	1800 W	-	3600 W

Output Power, half channels at -6dB				
2 Ω	1100 W	-	2600 W	-
4 Ω	1300 W	2200 W	1800 W	-
8 Ω	900 W	2600 W	900 W	-
70 V	1400 W	1200 W	2800 W	-
100 V	-	2500 W	-	-
Maximum output voltage (typ.)	135 V _{peak}	270 V _{peak}	135 V _{peak}	270 V _{peak}
Maximum output current (typ.)	50 A _{peak}	50 A _{peak}	100 A _{peak}	100 A _{peak}

Audio	
Gain	26 dB
Frequency Response (±1 dB, 1 W @ 8 Ω)	10 Hz - 30 kHz
S/N (20 Hz - 20 kHz A-Weighted @ 8 Ω)	117 dB (A) Typ.
Noise Floor	-80 dBV (A) Typ.
Crosstalk Separation (1 kHz)	80 dB Typ.
Input sensitivity	16 dBu
Input impedance	6 kΩ balanced
THD+N (from 0.1 W to 1/2 Power)	< 0.08% (0.05% Typ.)
DIM (from 0.1 W to 1/2 Power)	< 0.2% (0.05% Typ.)
Damping Factor	> 500 @ 1 kHz

Construction	
Dimensions	216 x 125 x 42 mm
Weight	1300 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	cosφ > 0.9 @ 4 Ω full power
Consumption	
Standby	< 1 W (with an aux load < 100 mW)
Idle	14 W @ 100-240 V AC
Rated Load @ 1/8 Max Output Power	600 W
AC Current Avg./Short Term	Nominal 6 A Max 30 A

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 output (temperature controlled) @ +12V	200 mA

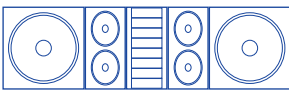
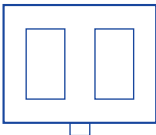
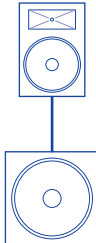
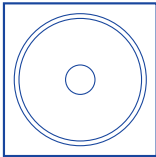
Thermal & Environment		
Operating temperature & Humidity	0° to 45° C, 0 to 90% Non condensing	
Thermal Dissipation	Cooling Plate + Optional Variable Speed Fan	
1/8 Max Output Power @ 4Ω	Current Draw @ 230 V	2.6 A _{rms}
	Thermal Loss @ 230 V	400 BTU/h
	Current Draw @ 115 V	5.2 A _{rms}
	Thermal Loss @ 115 V	420 BTU/h

Reference Standard	
Vibration	EN 60068-2-64: 2008 (Random Test) EN 60068-2-27:2009 (Shock Test)
EMC immunity	EN 55035:2017
EMC emissions	EN 55032:2012/AC:2013
EMC other	EN 61000-3-2:2014 EN 61000-3-3:2013 EN 61000-3-11:2000 EN 62368-1:2014
Safety standards	EN 62368-1:2014/AC:2015

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.

3-way line array	multi channel OEM amplifier	sub + 2-way satellite	sub
			
HF: 750 W @ 8Ω		HF: 750 W @ 8Ω	
MF: 1000 W @ 4Ω	8 x 1000 W @ 4Ω	MF: 1000 W @ 4Ω	
LF: 2 x 1000 W @ 4Ω		LF: 2000 W @ 8Ω BTL	LF: 4000 W @ 4Ω PBTL