

LiteMod

High Efficiency 2-Channel Class-D Amplifier Module

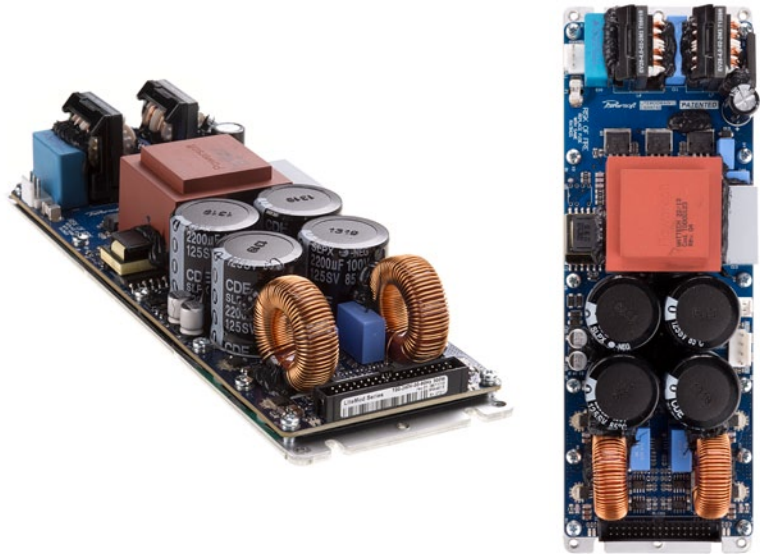


LiteMod is a compact and powerful switching mode amplifier module delivering up to 800 W + 400 W or 2 x 600 W in 2 channels mode or 1200 W in bridge mode.

LiteMod is a flexible platform designed to fit into active monitors, two ways loudspeakers and small/medium subwoofer.

Capable of unrivaled sonic performances, the highest dynamic range and low distortion, LiteMod provides high clean output power thanks to the last generation compact PFC power supply, guaranteeing reliability and consistency in all operating conditions and low power consumption (less than 0.55 W in standby).

Any custom optional DSP board can be easily plugged to the module, providing a complete solution in a compact package.

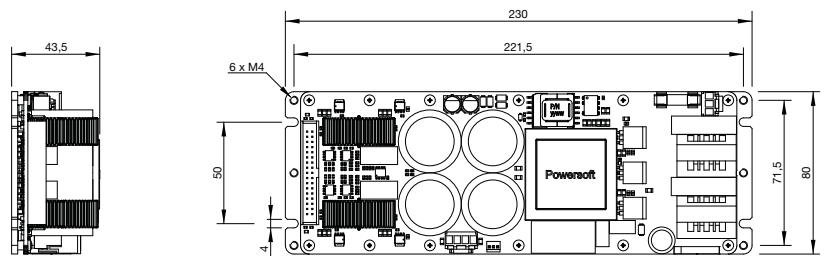


- ▶ Active Loudspeakers
- ▶ 2-way Stage Monitors
- ▶ Single Drive Subwoofers
- ▶ High Power Studio Monitors
- ▶ Small Power 2-way Single Cabinet/Line Array
- ▶ Small Power Active Mixers

- ▶ Thermal protections (Power limiting - Thermal shutdown)
- ▶ Short-circuit/overload/high frequency output protections
- ▶ Auxiliary output voltages
- ▶ Mute command
- ▶ Standby switch
- ▶ Optional DSP board

2 Ch. unbalanced load (e.g. 2-way speaker)	800 W @ 4 Ω + 400 W @ 8 Ω
2 Ch. balanced load (e.g. double sub)	600 W @ 4 Ω / Ch
Bridged mode (e.g. single subwoofer)	1,200 W @ 8 Ω
Max output voltage per channel	85 V _{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

Number of channels	2 in / 2 out
Output power	
2-channel mode	
4 Ω / Ch (balanced)	600 W
4 Ω + 8 Ω (unbalanced)	800 W + 400 W
bridged mode	
8 Ω / Ch pair	1200 W
Max output voltage	85 V _{peak}
Max output current	31 A _{peak}

AC Mains Power

Power supply	Universal, regulated switch mode
Nominal power requirement	AC 100 V - 240 V, 50/60 Hz with PFC
Operating voltage	AC 90 - 264 V
Power factor	cosφ = 0.9 @ 360 W
Consumption	
Standby	0.5 W
Idle	13.5 W
1/8 of max output power @ 8 Ω	220 W

AUX supplies

Fan plug (+12 V), max supply current draw	150 mA
Max aux supply current draw @ +12 V	500 mA
Max aux supply current draw @ -12 V	200 mA

Audio

Gain	26 dB
Frequency response	20 Hz - 33 kHz (+0/-1 dB) @ 1 W, 8 Ω
S/N ratio	115 dB
Crosstalk separation	85 dB @ 1 kHz
Input sensitivity @ 8Ω	3 V / 11.7 dBu
Input impedance	10 kΩ balanced
THD+N / DIM100	< 0.08% from 0.1 W to full power (typically <0.05%)
Slew rate	50 V/μs @ 8 Ω, input filter bypassed
Damping factor @ 8Ω	> 10000 @ 100 Hz

Construction

Dimensions (L x W x H)	230 mm x 80 mm x 43.5 mm 9" x 3.1" x 1.7"
Weight	870 g (1.92 lb)

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.

