

# MiniMod 4

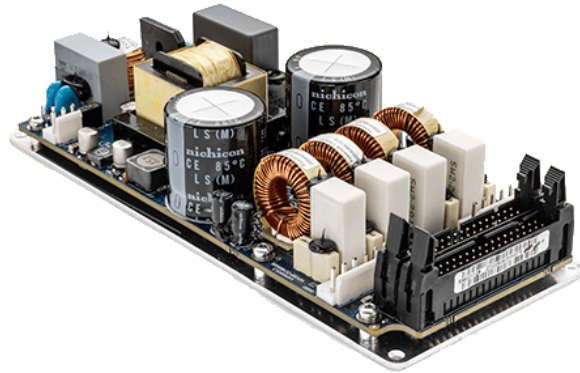
Compact and Flexible 4 x 150W Amplification Platform



MiniMod 4 is an integrated module offering universal mains switching mode power supply with PFC and a total of 600W of audio amplification.

MiniMod 4 boosts flexibility, being configurable as four, three, two channels, or single high power output channel. It can be used in high channel count applications, three way and two way designs, subwoofer + satellite systems.

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

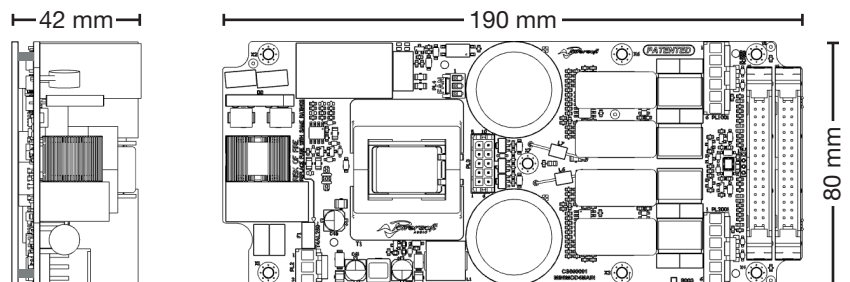


- ▶ Active Loudspeakers
- ▶ 3-way Line Arrays
- ▶ Bass Amps
- ▶ Studio Monitors
- ▶ Small Power Sub + Full Range Satellites
- ▶ Multi Channel/Zone OEM Rack Amplifiers

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

4 Channel Mode	4 x 150W @ 4Ω
3 Channel Mode	1 x 300W @ 8Ω BTL + 2 x 150W @ 4Ω
2 Channel Mode	2 x 300W @ 8Ω BTL or 2Ω PTL
1 Channel Mode	1 x 600W 4Ω PBTL
Max Output Voltage and Current	
Single Ended	35 V <sub>peak</sub> / 10 A <sub>peak</sub>
BTL	70 V <sub>peak</sub> / 10 A <sub>peak</sub>
PBTL	70 V <sub>peak</sub> / 20 A <sub>peak</sub>

- ▶ 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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Compact and Flexible 4 x 150W Amplification Platform

## Specifications

General	
Maximum output power per channel @ 4Ω	150 W
Maximum output power per channel @ 8Ω	75 W
Maximum output power @ 8Ω bridge mode	300 W
Maximum output power @ 2Ω parallel mode	300 W
Maximum output power @ 4Ω parallel bridge mode	600 W
Maximum total power all channels driven	600 W
Max Output Voltage and Current	
Single Ended	35 V <sub>peak</sub> / 10 A <sub>peak</sub>
BTL	70 V <sub>peak</sub> / 10 A <sub>peak</sub>
PBTL	70 V <sub>peak</sub> / 20 A <sub>peak</sub>

Audio	
Gain	26 dB
Frequency Response ( ±1 dB , 1 W @ 8 Ω)	10 Hz - 30 kHz
Noise Floor	Typical -80 dBV (A)
Crosstalk Separation (1 kHz)	Typical > 70 dB
Input sensitivity	4 dBu
Input impedance	13 kΩ balanced
THD+N (from 0.1 W to 1/2 Power)	< 0.1% (typical < 0.05%)
DIM (from 0.1 W to 1/2 Power)	< 0.1% (typical < 0.05%)

Construction	
Dimensions	190 x 80 x 42 mm
Weight	500 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	< 0.5 W
Idle	< 10 W
Rated Load (1/4 Max Power)	150 W
AC Current	Nominal 1.5 A   Max 7 A
Inrush Current	18 A <sub>peak</sub>

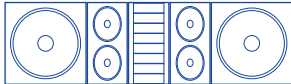
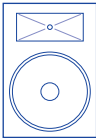
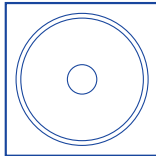
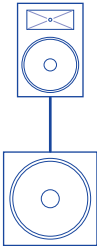
Aux Supplies	
Max aux supply current draw @ +12 V	800 mA
Max aux supply current draw @ -12 V	200 mA
Max aux supply current draw @ +5V	50 mA
Fan plug - 12V Fan	100 mA

Thermal & Environment	
Operating temperature & Humidity	-20° to 65° C, 0 to 90% Non condensing
Thermal Dissipation	Cooling Plate + Optional Fan @ 230 V
1/8 Max Output Power @ 4Ω	127 BTU/h @ 115 V
1/8 Max Output Power @ 4Ω	112 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.

3-way line array	2-way	bass amplifier	sub + full range satellite
			
HF: 150 W @ 4Ω			
MF: 150 W @ 4Ω	MF/HF: 300 W @ 8Ω BTL		MF/HF: 300 W @ 8Ω BTL
LF: 2 x 150 W @ 4Ω	LF: 300 W @ 8Ω BTL	LF: 600 W @ 4Ω PBTL	LF: 300 W @ 8Ω BTL