



FEATURES

- Power Factor Corrected
- PowerCon 20 AC In/Thru (90-240VAC)
- XLR Inputs
- Onboard DSP with 4 factory modes of loudspeaker processing
- Thermal protections (power limiting - thermal shutdown)
- Short-circuit/overload/high frequency output protections
- Clip limiter, permanent signal limiter
- Temperature controlled internal fans and output
- Optional DSP boards
- Drop-in compatible upgrade to all non-powered kiT Series products

The kiT+ Power Module is a two-channel amplifier module representing an important evolution in the kiT Series family of products.

Delivering up to 1600 W on 4 Ω per channel (3200 W on 8 Ω in mono-bridged mode), the kiT+ Power Module reaches a new level of excellence in terms of power consumption and sonic performance, guaranteeing reliability and consistency in all operating conditions thanks to a new power supply equipped with PFC and featuring Smart Rails Management.

The kiT+ Power Module shares the same compact mechanical layout of the kiT Series non-powered speaker cabinets allowing simple conversion and upgrade possibilities.

Efficiency and robustness, always and everywhere

Latest generation single-stage patented Power Factor Correction design allows achieving optimal and consistent performance in all operating conditions worldwide.

Maximize performance, minimize consumption

Patented SRM (Smart Rails Management) technology allows maximizing the efficiency of the system and drastically reducing power consumption at any load condition.

Premium Performance

Powersoft Class-D technology is an industry standard in terms of quality, reliability, robustness and attention to detail. Accurate design of the Pulse Width Modulation block guarantees maximum performance, high predictability and immunity from intermodulation artifacts.

Powerful and flexible signal processing tools

Using Powersoft DSP solutions: together with Armonia Pro Audio Suite™ Clair Brothers tailored the module's behavior to fit specific models within the kiT Series. Processing capabilities include standard Linkwitz-Riley crossovers to FIR filters, from Peak and RMS limiters to delays and everything in between.

Complete set of protections

Powersoft amp modules are equipped with extensive protection circuitry: power limiters, thermal shutdown, short circuit and overload, clip limiter.

Certification process made easy

Powersoft provides EMI/safety certifications, reports and documentation that will effectively cut certification costs on the final product.

Compact

Power supply, output stage, DSP and connectors are all included in a single, compact, lightweight and protected chassis.



SPECIFICATIONS

General					
Number of Channels	2 ins - 2 outs				
Output power	2-channel mode		mono-bridged mode		
EIAJ Test Standard, 1 kHz, 1% THD	4Ω / Ch	8Ω / Ch	16Ω / Ch	8Ω / Ch pair	16Ω / Ch pair
	1600 W	1100 W	600 W	3200 W	1600 W
Max output voltage	150 V _{peak} (106 V _{RMS})				
Max output current	54 A _{peak} (38 A _{RMS})				
Max aux supply current draw	500 mA				
AC Mains Power					
Power requirements	AC 100 V - 240 V ± 10%, 50/60Hz with PFC				
Efficiency	> 75% (typical)				
Power factor cos (φ)	> 0.90 @ 4Ω full power				
Power consumptions	1/8 of max power @ 8Ω bridged				
	600VA (5A @ 120V, 2.6A @230V)				
Thermal					
Max environmental operating temperature	40° C				
Thermal dissipation	Fan, variable speed, temperature controlled				
	115 V		230 V		
1/8 of max output power @ 4Ω	297 BTU/h	75 kcal/h	293 BTU/h	74 kcal/h	
1/4 of max output power @ 4Ω	587 BTU/h	148 kcal/h	556 BTU/h	140 kcal/h	
Audio					
Gain	32 dB				
Voltage gain	x 40				
Frequency response	10 Hz - 25 kHz (-3 dB) for 1 W @ 4Ω				
S/N ratio (amplifier section)	> 115 dBA (20 Hz - 20 kHz, A weighted)				
Crosstalk separation	-71 dB @ 1 kHz (4Ω)				
Input sensitivity @ 8Ω	1.6 V / +6 dBu				
Max input level	+10.8 dBu				
Input impedance	10 kΩ balanced				
THD+N / SMPTE IMD	< 0.05% from 0.1 W to full power (typically <0.02%)				
DIM100 IMD	< 0.05% from 0.1 W to full power (typically <0.02%)				
Slew rate	50 V/μs @ 8Ω, input filter bypassed				
Damping factor	> 10000 @ 100 Hz				
Output type	unbalanced to ground				
Presets					
	kiT12+	kiT15+	kiTCURVE12+	kiT-Sub+	kiT-Sub-mini+
Preset 1	FULL-RANGE	FULL-RANGE	HF +3dB	80Hz	80Hz
Preset 2	80Hz HPF	80Hz HPF	HF FLAT	100Hz	100Hz
Preset 3	100Hz HPF	100Hz HPF	HF -3dB	120Hz	120Hz
Preset 4	Vocal EQ	Vocal EQ	Vocal EQ	160Hz	160Hz
DSP & Networking (optional board)					
Connector	72-pin SIMM connector (DSP-C and DSP- 4 compatible)				
Configuration	Configurable with Sigma Studio™ or predefined layout				
Remote control	Fully supported by Powersoft Armonia™ Pro Audio Control Suite				
Construction					
Dimensions	216 mm x 122 mm x 79 mm (8.5" x 4.8" x 3.1")				
Weight	1550 g (3.4 lb)				