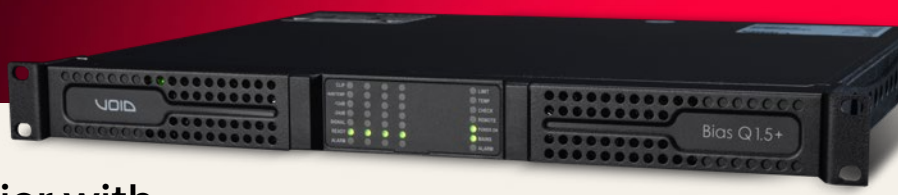
SPECIFICATION SHEET

Bias Q1.5+



Compact 4-channel amplifier with integrated DSP, delivering 600 W per channel in a lightweight 1U format

POWER
600 W per channel (8 Ω)

INPUT TYPE
Analog, AES67

COMPUTER CONTROL
DSP

NUMBER OF CHANNELS
4 channels

Galleries & Museums | Beach & Poolside | Residential | Retail | Gyms & Fitness

The Bias Q1.5+ builds on the compact design of the Q1+, delivering increased output while maintaining the same lightweight 1U format. It is well suited to systems requiring more headroom and higher performance, while still benefiting from efficient operation and reduced heat output.

A microprocessor-controlled power supply with built-in power factor correction ensures stable operation across a wide range of mains voltages. Combined with Smart Rails Management technology and support for both low and high-impedance systems, the Bias Q1.5+ delivers consistent and efficient performance across a variety of applications.

KEY FEATURES

- 4 channel amplifier delivering 600 W per channel (8 Ω)
- Full suite of DSP tools and monitoring via ArmoníaPlus software
- Highly efficient Class-D design with patented SRM (Smart Rails Management) technology
- DSP+ variants extend signal routing with integrated AES67 digital audio networking
- Automatic power sharing, optimising delivery for asymmetrical loads
- Access to Void preset marketplace, offering optimised frequency response, FIR-optimised phase response, and a suite of protection limiters
- Compatible with low-Z (from 2 Ω) and 70 V / 100 V distributed systems, supporting mixed low and high-impedance loads
- Universal mains operation (90–264 V AC)
- WM Touch compatible

SPECIFICATIONS

Channel Handling

Number of output channels	4 Hi-Z or Lo-Z (bridgeable per ch. pair)	Phoenix PC 5/8-STF1-7,62
Number of input channels:		
Analog	4	Phoenix MC 1,5/ 12-ST-3,81
AES67	4	1 x RJ45

Audio

Gain	26 dB	29 dB	32 dB	35 dB
Input sensitivity @ 8 Ω	3.54 Vrms	2.51 Vrms	1.78 Vrms	1.26 Vrms
Max input level	20 dBu			
Frequency Response (±0.5 dB , 1 W @ 8 Ω)			20 Hz - 20 kHz	
Crosstalk (1 kHz)			typical -70 dB	
S/N (32 dB gain, analog input 20 Hz - 20 kHz @ 8 Ω)			> 108 dB(A)	
Input impedance			20 kΩ balanced	
THD+N (from 0.1 W to Full Power)			< 0.1% (typical < 0.05%)	
DIM (from 0.1 W to Full Power)			< 0.05%	
Slew Rate (input filter bypassed @ 8 Ω)			> 50 V/µs	

DSP

AD converters	24 Bit Tandem™ @ 48 kHz 125 dB-A Dynamic Range - 0.005 % THD+N
DA converters	24 Bit Tandem™ @ 48 kHz 117 dB-A Dynamic Range - 0.003 % THD+N
Sample rate converter	24 Bit @ 44.1 kHz to 192 kHz 140 dB Dynamic Range - 0.0001 % THD+N
Internal precision	32 bit floating point
Latency	2.5 ms fixed latency architecture
Memory/Presets	128 MB (RAM) plus 512 MB flash for presets
Delay	2 s (input) + 100 ms (output) for time alignment
Equalizer	Raised-cosine, custom FIR, parametric IIR: peaking, hi/lo-shelving, all-pass, band-pass, band-stop, hi/lo-pass
Crossover	Linear phase (FIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR)
Limiters	TruePower™, RMS voltage, RMS current, Peak limiter
Damping control	Active DampingControl™ and LiveImpedance™ measurement

Output Stage

Maximum output power per channel @ 8 Ω	600 W
Maximum output power per channel @ 4 Ω	600 W
Maximum output power per channel @ 2 Ω	800 W
Maximum output power @ 4 Ω Bridged	1600 W
Maximum output power @ 8 Ω Bridged	1200 W
Maximum output power @ Hi-Z distributed line 100 V	600 W
Maximum output power @ Hi-Z distributed line 70 V	600 W
Maximum unclipped output voltage @ 8 Ω	100 V_{peak}
Maximum output current	45 A_{peak}

The power figure is calculated by driving and loading symmetrically all the channels: uneven loads allow to achieve higher performances.

AC Mains Power

Power supply	Universal regulated switch mode with PFC, SRM			
Nominal voltage (±10%)	100-240 V @ 50-60Hz			
Power factor (> 500 W ouput)	> 0.95			
Consumption/current draw	@ 115 V		@ 230 V	
Idle (DSP+D)	31.1 W	0.45 A	31.5 W	0.25 A
1/8 Max Output Power @ 4 Ω	405 W	3.7 A	405 W	2.1 A
AC Mains connector	IEC C20 inlet (20 A max) region-specific power cord provided			

Thermal

Operating temperature	-10° - 35° C / 14° - 95° F			
Cooling	Fan, continuously variable speed, temperature controlled, front to rear airflow			
Thermal dissipation	@ 115 V		@ 230 V	
Idle	106 BTU/h	26.7 kcal/h	107 BTU/h	27 kcal/h
1/8 Max Output Power @ 4 Ω	360 BTU/h	90.8 kcal/h	360 BTU/h	90.8 kcal/h

Construction

Dimensions	483 x 44.5 x 358 mm 19.0 x 1.75 x 14.1 in
Weight	7.0 Kg (15.4 lb)

Networking

Standards compliance	Auto-sensing Fast Ethernet (IEEE 802.3u, 100 Mbit/s)
Supported topologies	Star
Remote interface	ArmoníaPlus™