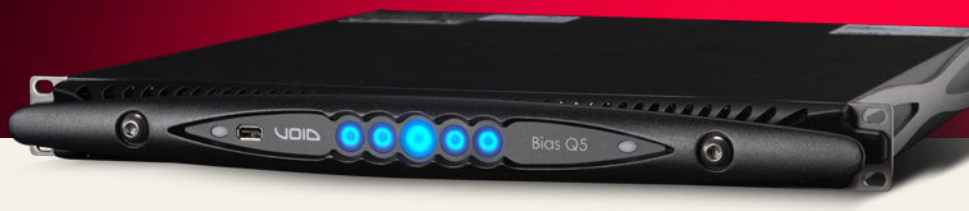
SPECIFICATION SHEET

Bias Q5



Compact 4-channel amplifier with integrated DSP, delivering up to 5200 W per channel in a compact 1U format

POWER
1600 W per channel (8 Ω)

INPUT TYPE
Analog, AES3

COMPUTER CONTROL
DSP

NUMBER OF CHANNELS
4 channels

Nightclubs & Bars | Festivals & Events

The Bias Q5 is designed to deliver the highest levels of output and control across large-scale systems. Combining powerful amplification with advanced DSP and system integration, it is well suited to touring, events and demanding installation environments where performance and reliability are critical.

With flexible routing, integrated DSP and full compatibility with ArmoníaPlus, the Bias Q5 enables complete system control and optimisation. Remote monitoring, input redundancy and advanced signal processing ensure consistent performance across complex system configurations.

KEY FEATURES

- 4 channel amplifier delivering 1600 W per channel (8 Ω)
- 3000 W per channel at 4 Ω
- Analogue and AES3 audio inputs
- Full suite of DSP tools and monitoring via ArmoníaPlus software
- Highly efficient Class-D design with patented SRM (Smart Rails Management) technology
- 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
- Universal mains operation (90–264 V AC) single phase
- Bi-phase and three-phase operation supported
- WM Touch compatible

SPECIFICATIONS

Channel Handling

Number of output channels:	4 mono, bridgeable per ch. pair
Number of input channels:	
Analog	4 (4x XLR)
AES3	4 (2x XLR)

Audio

Output Noise A-Weighted @ 8 Ω - Analog to Analog / Digital to Analog	< -70.0 dBV
Dynamic Range A-Weighted @ 8 Ω - Analog to Analog / Digital to Analog	114,3 dB
Damping Factor @ 8 Ω, 20Hz - 500Hz	> 5000
Slew Rate (input filter bypassed)	> 50 V/µs
Frequency Response (-3 dB , 1 W @ 8 Ω)	5 Hz - 30 kHz
Crosstalk (1 kHz)	-70 dB
THD+N (from 0.1 W to Full Power)	< 0.5% (typical < 0.01%)
DIM (from 0.1 W to Full Power	< 0.5% (typical < 0.01%)
Input Impedance	20 kΩ Balanced
Input Acceptance	+27 dBu

DSP

AD converters	24 Bit Tandem™ @ 96 kHz 129 dB Dynamic Range - 0.00056 % THD+N
DA converters	24 Bit Tandem™ @ 192 kHz 121 dB Dynamic Range - 0.00084 % THD+N
Sample rate converter	24 Bit @ 44.1 kHz to 192 kHz 140 dB Dynamic Range - 0.0001 % THD+N
Internal precision	40 bit floating point
Delay	2 s + 100 ms 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), hybrid (FIR-IIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR)
Limiters	TruePower™, RMS voltage, RMS current, Peak limiter
Damping control	Active DampingControl™

Construction

Dimensions	483 mm x 44.5 mm x 495 mm 19.0 in x 1.75 in x 19.5 in
Weight	15 kg (33.0 lb

Output Stage

Maximum output power per channel @ 8 Ω	1600 W
Maximum output power per channel @ 4 Ω	3000 W
Maximum output power per channel @ 2 Ω	5200 W
Maximum output power @ 8 Ω bridged	6000 W
Maximum output power @ 4 Ω bridged	10400 W
Peak total output, all channels driven	20000 W
Maximum unclipped output voltage	175 V_{peak}
Maximum output current	130 A_{peak}

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

AC Mains Power

Single-Phase		
Nominal Voltage	100 - 240 V @ 50/60Hz	
Operating Range	90 - 264 V from DC to 200Hz	
Power Factor 1/8 Maximum Output Power @ 4 Ω	> 0.9	
Current Draw 1/8 Maximum Output Power @ 4 Ω	18 A_{rms} @ 100V	9 A_{rms} @ 240V
Suggested circuit breaker	C16	
Three-Phase		
Nominal Voltage**	208Y / 120 - 416Y / 240 V, 3~, 3W+N+PE @ 50/60Hz 200 V~, 3W+PE @ 50/60Hz	
Power Factor 1/8 Maximum Output Power @ 4 Ω	> 0.9	
Current Drawn from Each Single Phase 1/8 Maximum Output Power @ 4 Ω	6 A_{rms} @ 208Y	3 A_{rms} @ 416Y
Suggested circuit breaker (per phase)	C10	
Bi-Phase		
Nominal Voltage	200/100 V, 2W+PE @ 50/60Hz	
Idle Consumption (all AC MAINS cases)	< 100 W	
Max Consumption (all AC MAINS cases)	< 3500 W	

** Note: 208Y/120 V = 208 V phase-to-phase, 120 V phase-to-neutral

Thermal

Operating temperature	0° - 15°C / 32° - 113°F	
Cooling	Fan, continuously variable speed, teperature controlled	
Thermal dissipation		
Single phase	115V	230V
1/8 Maximum Output Power @ 8 Ω	1127 BTU/h	1058 BTU/h
1/4 Maximum Output Power @ 8 Ω	2124 BTU/h	1639 BTU/h