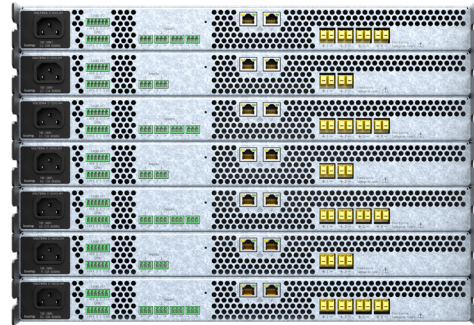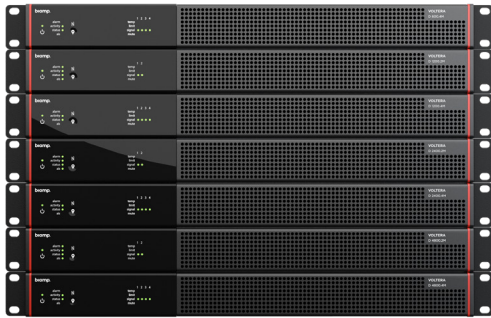# DATA SHEET
VOLTERA D M
AMPLIFIED LOUDSPEAKER CONTROLLER

Voltera D M Series seamlessly integrates amplification into a powerful loudspeaker controller, while also adding a fully programmable DSP onboard with enough headroom to handle even complex audio processing and distribution needs.

A host of one-of-a-kind features drive flexibility, reliability and extraordinary audio performance. The combination of integrated DSP, high power and channel density, high efficiency and low idle power — along with support for power sharing and networked audio — delivers significant space and cost savings.

Available in 2 and 4 channel configurations from 600 to 4800 W, Voltera D M amplified loudspeaker controllers are perfect for smaller venues where their ability to replace an external DSP can have a significant proportional impact on the total system cost. However, larger systems can also benefit when more DSP power is needed.

100% software configurable, by either Tesira or Biamp VenueTune software, depending on user preference and audio network protocols, Voltera D M amplified loudspeaker controllers make setup and use easier.

FEATURES

- Powerful onboard DSP with ample headroom for large systems – the equivalent of a TesiraFORTÉ
- Up to 4800W and 4 channels in single RU
- No central resource to limit system size
- High peak voltage output capability (up to 237Vpk)
- Power sharing provides up to 100% of total power through any single channel
- Each model supports AVB, Dante, and AES67
- Each channel can drive low impedance (2.7, 4, 8, and 16 ohm), 70V, or 100V
- Onboard processing means system cost scales with power requirements
- The ALAMOS loudspeaker profile library, with nearly 700 unique profiles covering over 200 Biamp models, streamlines commissioning when using Tesira or VenueTune software

- Group-controlled raised cosine EQ making it attractive for large systems
- Accurate raised cosine EQ for the entire frequency band
- Comprehensive limiter scheme avoids protective mutes and shutdowns
- Processor can be sustained through POE – no main power required and no reboots
- Support for failover-to-analog operation
- 5-year warranty
- Compliant with the US Trade Agreement Act (TAA)
- Biamp Workplace Ready

VOLTERA D M SPECIFICATIONS

Model	D 1200.2M	D 2400.2M	D 600.4M	D 1200.4M	D 2400.4M	D 4800.2M	D 4800.4M
General							
Number of amplifier channels	2	2	4	4	4	2	4
Total output all channels driven	1200 W	2400 W	600 W	1200 W	2400 W	4800 W	4800 W
Maximum output voltage	145 Vpk	160 Vpk	145 Vpk	145 Vpk	160 Vpk	237 Vpk	237 Vpk
Maximum output current	35 Apk	40 Apk	23 Apk	29 Apk	40 Apk	65 Apk	57 Apk
Power per channel all channels driven							
Hi-Z (70 / 100 V)	600 W	1200 W	150 W	300 W	600 W	2400 W	1200 W
16 ohm	600 W	1200 W	150 W	300 W	600 W	2400 W	1200 W
8 ohm	600 W	1200 W	150 W	300 W	600 W	2400 W	1200 W
4 ohm	600 W	1200 W	150 W	300 W	600 W	2400 W	1200 W
2.7 ohm	600 W	1200 W	150 W	300 W	600 W	2400 W	1200 W
Max power per channel using power sharing[1]							
100 V	1000 W	2000 W	450 W	900 W	1800 W	4660 W	3600 W
70 V	1000 W	2000 W	450 W	900 W	1800 W	3300 W	3300 W
16 ohm	650 W	800 W	450 W	650 W	800 W	1750 W	1750 W
8 ohm	1000 W	1600 W	450 W	900 W	1600 W	3500 W	3500 W
4 ohm	1000 W	2000 W	450 W	900 W	1800 W	4800 W	3600 W
2.7 ohm	1000 W	2000 W	450 W	900 W	1800 W	4800 W	3600 W

[1]Available on any channel

Network	
Ports	2 1000Base-T ports
Networked media formats supported	Dante, AES67 and AVB
Network modes supported	Converged, split or redundant
PoE+ support	If port 1 is connected to a PoE+ switch with a UPS, then the Voltera D will not reboot when mains power is lost
Network latency	AVB: 2 ms, Dante : 1 / 2 ms
Sample rates supported	96 and 48 kHz
Remote interface	Tesira, VenueTune
Third party interface	TTP
Processing	
Latency (analog input to output)	2.65 ms (includes look-ahead delay in zero overshoot peak limiters)
Default gain (analog input to output)	29 dB
Per input	Supports input redundancy and failover to analog sources Multilayered group control of raised cosine EQ, gain, delay (≤2 s), polarity and mute
Per output	Very comprehensive processing supporting loudspeaker profiles including • 2048 tap FIR, 24 biquads • Dynamic EQ • Peak and thermal limiters with side chains
Startup time with PoE+	<1 s
Audio performance	
THD+N (1000 Hz, at 1 dB below max output)	<0.05%
THD+N (20 - 20000 Hz for 1 W)	<0.05%
Frequency response	+/-0.5 dB (20 - 20000 Hz, 8 ohm, unweighted)
Channel separation (crosstalk at 1 kHz)	>70 dB
Dynamic range	117 dB
Back panel interface	
Control and monitoring IO	Mute all channels (input), Health (output), Sleep mode status (output), Sleep mode (input)
Programmable GPIO	4 logic/voltage control pins, defined using Tesira software
Analog input connectors	3-pin terminal block connectors with 0.15″ (3.81 mm) pitch
Output connectors	2-pin terminal block connectors rated for 41 Arms. Can take up to 8 mm^2 (8.2 AWG) cables
Detachable mains connector	3-pin IEC C14 inlet for C13 cables
Front panel interface	Tamper proof design
Locate	Bi-directional locate funtionality
System status indicator	Shows if there are faults within the greater system
Device status indicators	Status, activity and faults
Channel status indicators	Mute, signal, limit and temp
Power and environmental	
Cooling	Variable speed fans, front to back airflow
Operating temperature	32-104F (0-40C)
Relative humidity	0-95% non-condensing altitude 0 - 2000 m (0-6562 ft)
Nominal Voltage	100-240 VAC, 50/60 Hz

Mechanical	
HxWxD (rack rail to rear panel)	1.7 x 17.5 x 16.9 inches (44 x 444 x 430 mm)

	D 1200.2M	D 2400.2M	D 600.4M	D 1200.4M	D 2400.4M	D 4800.2M	D 4800.4M
Weight	16.8 lbs (7.6 kg)	17 lbs (7.7 kg)	17 lbs (7.7 kg)	17 lbs (7.7 kg)	17.2 lbs (7.8 kg)	17.2 lbs (7.8 kg)	18.3 lbs (8.3 kg)
Included accessories	Rear support kit for 19″ 1 RU mount						

The power figures are measured using a 25 ms burst repeated every 400 ms with a sustained average at 1/8th power (i.e. a 12 dB crest factor)

Biamp strives to improve its products on a continual basis. Specifications are therefore subject to change without notice.