VERSA SERIES ED

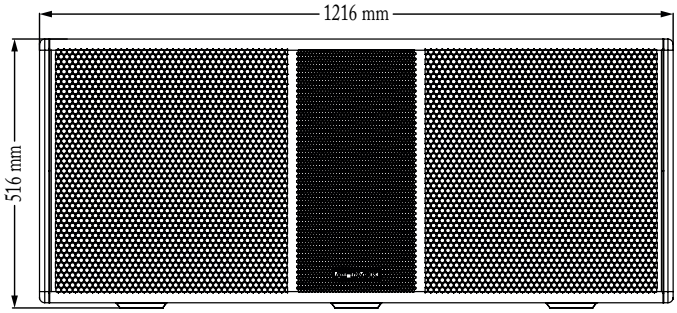
VSS218A Subwoofer

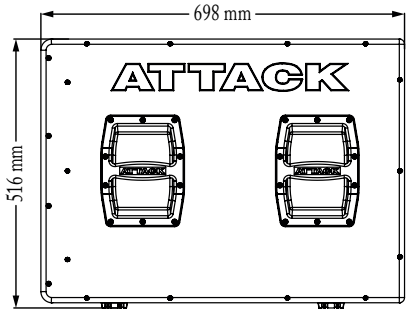
DATASHEET

ATTACK AUDIO SYSTEM

HEAR THE DIFFERENCE

Dimensions	516 mm x 1216 mm x 698 mm (HxWxD)
Weight	79.4 kg
Enclosure	MadeFibra®
Finish	Textured black polyester
Protective Grille	Hex-stamped steel
	Black textured paint coating
Audio connection	Female XLR and Male XLR loop thru
AC connection	IP65-3P with Looping Output
	NBR14.136 - 20A Output





The VSS218A is a self-powered high performance subwoofer. It was designed for medium areas, with high performance and exceptional coverage. The extended headroom, continuous operation with high pressure levels, and high transient information capability with minimal distortion make the VSS218A the ideal choice for low-frequency reproduction in small and medium-sized systems.

It was designed to achieve the highest efficiency of each part of the system, resulting in a subwoofer capable of reproducing low frequencies without much effort. The transducers, amplifier and processing were designed as a single set to optimize performance and achieve the extreme power and SPL. Flexibility and practicality in the assembly of the system are guaranteed by the use of materials of high safety standard and mechanical resistance.

The VSS218A subwoofer features an efficiently tuned enclosure with two 18-inch speakers designed for great excursion capability, operating from 30 Hz to 120 Hz.

The VSS218A incorporates a high-power class-D amplifier. A dedicated limiter that protects and extends transducers life at very high power levels and prevents non-linear operating situations. The amplification system is mounted in an individual unit that allows for an extremely easy in-field exchange. The amplifier is powered by a switching mode supply that boasts a PFC circuit capable of providing constant power from 100 to 240 V AC.

The enclosure is built with a special humidity resistant fiberboard "Madefibra®" coated with highly robust polyester painting that ensures great durability. It has a hex-stamped steel protective grille, coated with electrostatic paint.

Options for the VSS218A include white polyester paint (custom-made), structure for stacking and transporting multiple units EMV-VSS218A.

KEY FEATURES

- Possibility of stacking.
- Extremely low distortion and high sound clarity.
- Extreme peak power with excellent transient reproduction.
- Possibility of transporting multiple units using the accessory EMV-VSS218A.

APPLICATIONS

- Shows and small to medium-sized concert halls.
- Sports centers, theaters, churches and clubs.
- Movie theaters.

Acoustical

Operating frequency range[1]	30 Hz - 120 Hz
Frequency response[2]	35 Hz - 110 Hz -6 dB
Phase response	35 Hz (+150º) - 100 Hz (-108º)
Maximum linear average SPL[3]	
Free field	116 dB (Z) @ 1m
Ground plane	122 dB (Z) @ 1m
Maximum linear peak SPL[4]	
Free field	128 dB (Z) @ 1m
Ground plane	134 dB (Z) @ 1m

Coverage

360º (One unit). Varies according to the quantity and configuration

Transducers

Two 18-inch speakers / Nominal impedance 4Ω / Voice coil diameter 4-inch

Audio input

Type	Differential, electronically balanced
Connectors	Female XLR and Male XLR loop thru
Input impedance	10 kΩ Unbal and 20 kΩ Bal
Connection	Pin 2: signal + / Pin 3: signal - / Pin 1: ground
CMRR	>50 dB, typically 70 dB (50 Hz - 500 Hz)
Nominal input sensitivity	+4 dBu (1.23 V rms - 1.74 Vp) continuous is typically the beginning of signal limitation with noise or music
Maximum input level	+20 dBu

Amplifier

Type	Class D
THD - IMD	<0.1%

AC Power

Power supply type	PFC pre-regulator and Half-Bridge converter
Connectors	IP65-3P with Looping Output, NBR14.136-20A Output
Operating range	100 - 240 V AC rms, minimum starting voltage 100 V AC rms
Standby current consumption (mA rms)	300mA@100 V AC / 270mA@127 V AC / 200mA@220 V AC
Maximum continuous current consumption for long periods (A rms)(>10seg)[5]	4.0A@100 V AC / 3.5A@127 V AC / 2.0A@220 V AC

General information

Indicators	Led Power / Led Signal / Led Limiter / Led CSD
Protections	Overvoltage, undervoltage, short-circuit, temperature, DC, limiter, audio starting fader
Ventilation	Micro silent fan with speed control as a function of temperature

NOTES

[1] Recommended maximum operating frequency response. The frequency response depends on the acoustics conditions of the environment.

[2] Measured with 1/3 octave frequency resolution in semi-anechoic chamber at four meters of distance. Frequency response with maximum variation of ±3dB.

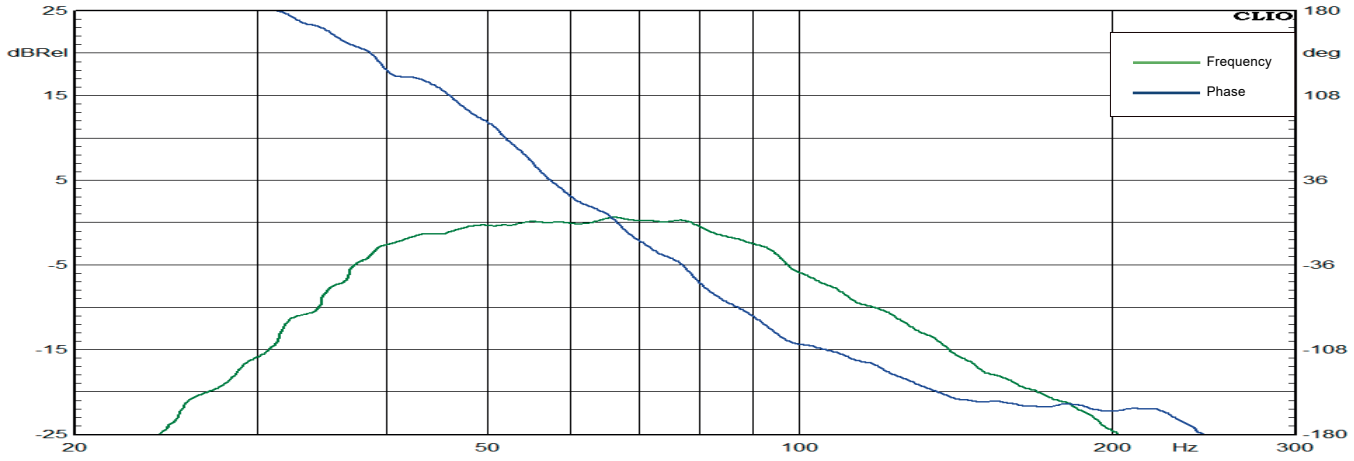
[3] Measured with pink noise (FC=12dB), linear average SPL maintained for at least one hour, microphone on the axis. The average SPL value (measured with Z-weighted curve) in free field is used in the GLL file for use in prediction in the Ease Focus and Ease softwares.

[4] Measured with pink noise (FC=12dB), linear peak SPL maintained for at least one hour, microphone on the axis.

[5] The AC power cable must have a gauge compatible with the current transmission capacity required by the loudspeaker in continuous current consumption regime, otherwise it will not deliver the specified power to the transducers. Maximum current value measured with pink noise (FC=12dB).

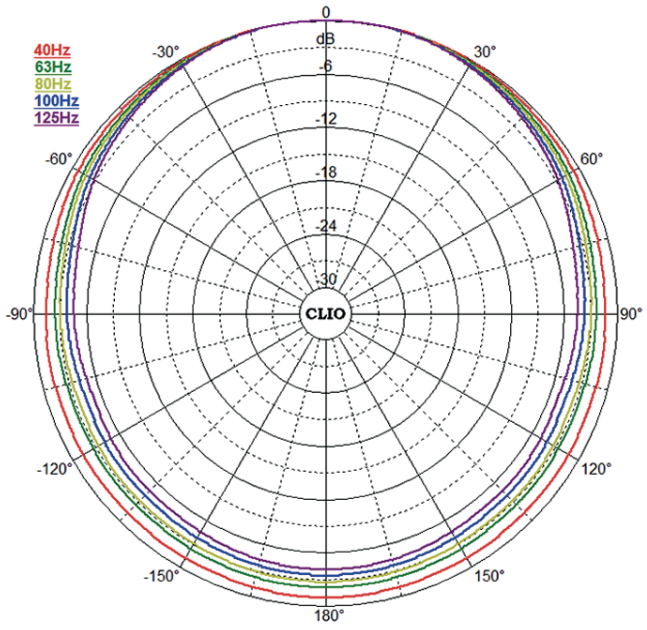
ACOUSTIC CHARACTERISTICS

Frequency and phase response



Measured in a semi-anechoic chamber, on axis and 1/3 octave resolution

Polar diagram



Measured in a semi-anechoic chamber, on axis and 1/3 octave resolution