

SUBTECH 218 SP

SUBTECH 218



TECHNICAL SPECIFICATIONS

Frequency Response (-10 dB) (±3 dB)	26Hz ÷ 500Hz (sugg. max 180Hz) 35Hz ÷ 350Hz
Average Dispersion	Quasi-omnidirectional
Impedance (Ohms)	Tot (min) 4 (3.5 @ 32Hz)
Max Sensitivity (dB SPL 1W 1m)	102 (Free-field) 105 (Half-space)
Power - Watts AES	<i>Cont. Peak</i> 1500 6000
SPL Max Output Level (calculated)	<i>Cont. Peak</i> 134 140 (Free-field) 137 143 (Half-space)
Loudspeakers and Loading	LF: 2x18" high-pass vented box
For SP version ONLY	
Amplifier Power - Watts RMS	3000 Watts @ 4 Ohms
Required AC Mains	110 - 230 VAC - 50/60 Hz versions

PHYSICAL PROPERTIES

Product Type	High efficiency, high-power system for low frequency reproduction
Enclosure Material and Finish	Rectangular enclosure in 15 mm phenolic glued birch plywood with internal bracing, rounded corners and integral handles. Scratchproof paint. Water resistant unit.
Standard Accessories	"Fast Hanger" hanging system; highly resistant vibration-free protective perforated aluminium grill covered in black foam; 10 handles; ready to be fitted with trolley. Neutrik Speakon NL4FC connector. <i>(for SP version ONLY)</i>
Optional Accessories	"Unify" accessories and protective cover. "Trolley" for road use. SubTech 218 SP is ready to be fitted with the "Outline Wireless Lan Kit", an optional device that enables control via PC and adjustment of the on-board DSP system's parameters. <i>(for SP version ONLY)</i>
Speaker Protection	Electronic, only when the dedicated Outline processors are used with limiter or EQ functions. The self-powered version includes sophisticated limiting function for top performance and reliability. <i>(for SP version ONLY)</i>
Amplifier Protection and Features <i>(for SP version ONLY)</i>	Over-heating power limiting Soft clipping and clip limiter Short-circuit overload protection Soft startup Under-voltage protection
Weight (kg) <i>Net (gross)</i>	80 (88) <i>SP version</i> 81 (89)
Dimensions (cm) <i>Height (with packing)</i> <i>Width (with packing)</i> <i>Depth (with packing)</i>	110 (117) 65 (75) 60 (68)

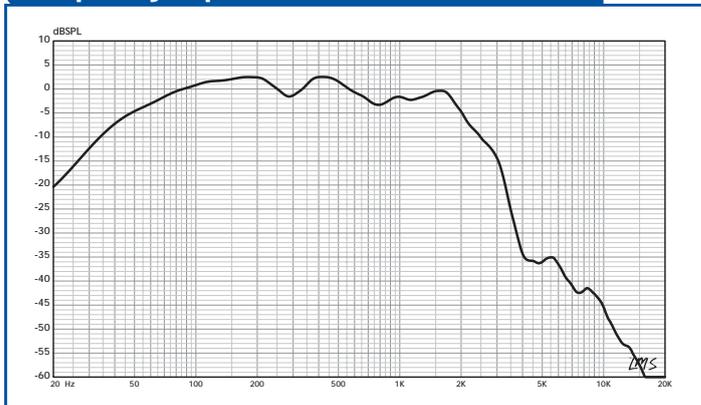
FEATURES

- High efficiency high-power self-powered subwoofer with two 18" long-throw woofers with special aligner to maintain performance through the years.
- Very high power handling (6000 Watts AES peak) and maximum sound pressure (143 dB SPL peak at 1 metre). Also available in passive format with the same possible standard performance.
- The woofers are fitted in separate chambers to ensure operation even in the event of the breakage of one component; it is possible to connect two different signals, stereo and/or the use of two separate amplification channels.
- Equipped with Outline's proprietary "Fast Hanger" hanging system for fast reasonably priced flying.
- The cabinet is internally braced to ensure the utmost sturdiness, free from harmful sound "colouring" due to resonance; an optional trolley with sturdy smooth-running wheels facilitates transport, even on relatively uneven surfaces.
- Preset for use with an "Outline Wireless Lan Kit", an optional device that enables control via PC and adjustment of the on-board DSP system's parameters. *(for SP version ONLY)*

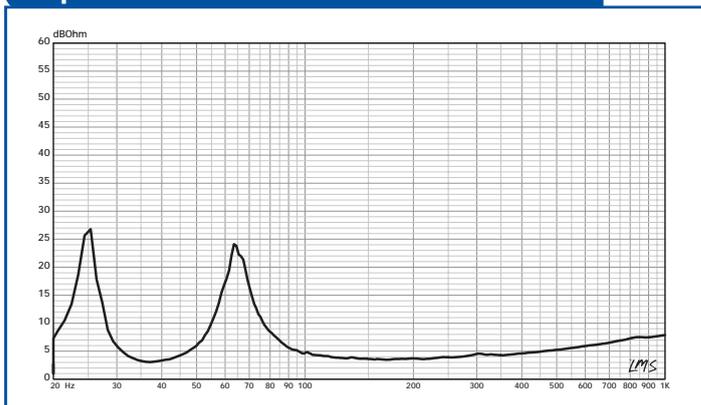
APPLICATIONS

- No-nonsense use in "live" concerts of all sizes, floor or stage mounted and combined with other units of the same type for sound reinforcement of low and ultra-low frequencies.
- High quality permanent indoor or outdoor installations. An ideal match for all Outline loudspeaker systems.

frequency response



impedance



DESCRIPTION

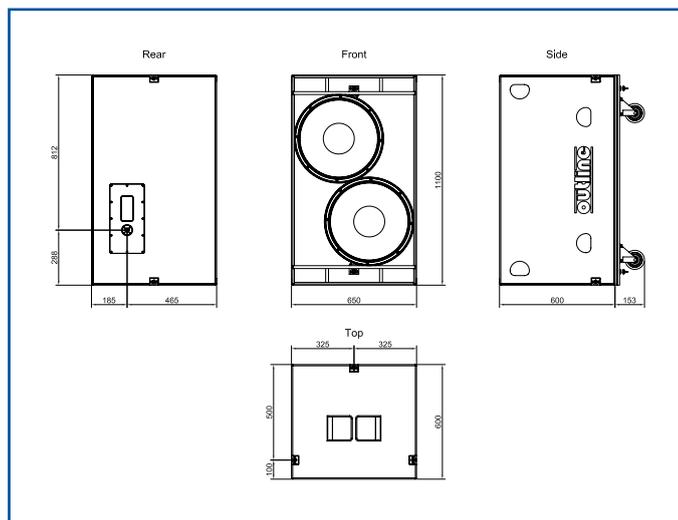
Loudspeaker system suited to high-quality sound reinforcement of low and ultra-low frequencies. Both versions of SubTech 218, uses two 46 cm woofers with a special aligner to keep their resonance frequency steady through the years - an important parameter on which the unit's performance depends.

Loading is of the phase inversion type with the enclosure tuned at a rather low frequency by a long port with a large surface area. The peculiarity of this loading, commercially known as "Extended Bass", consists in obtaining a wide passband and a considerable extension towards the bottom end of the frequency response. The useable band is therefore set towards the bottom end of the audio spectrum, as should be the case with subwoofers, and is sufficiently wide to reproduce all types of music. The performance is very high considering the components used, thanks to the careful choice of the reflex alignment and the construction of the cabinet. Both versions of SubTech 218 with two loudspeakers, have a useable frequency range at -10 dB of from 26 Hz to 500 Hz, while the response is just +/-3 dB from 35 Hz to 350 Hz. Sound pressure level in free-field according to AES Standards is 102 dB with 1W at 1m, while in half-space it rises to 105 dB. Maximum continuous AES power, 1500W at the minimum impedance of 3.5 Ohms, gives 134 dB SPL in free-field and 137 dB SPL in half-space, while peak values even reach 143 dB SPL. The rectangular shaped system is built in sturdy phenolic-glued 15 mm Baltic birch plywood to ensure total weather protection. Inside, as well as the bracing, which stiffens the panels and avoids vibration, the long tuning ports, which have a large surface area, also double as bracing. The black external finish is in special high quality wear- and weather-resistant paint. The connectors on the SubTech 218 SP are XRL (signal) and Powercon (mains power).

In the passive version, SubTech 218 is fitted with Neutrik NL4 with separate contacts for each loudspeaker.

In the event of damage to one of the two woofers (SubTech 218 SP and SubTech 218), as well as increasing structural sturdiness, the cabinet's separate chamber design allows it to continue to work without the risk of damaging the other woofer; it is also possible to connect two different signal, stereo, and/or the use of two separate amplification channels. The front of both models is protected by an anti-resonant steel grille covered with sound-transparent foam. Ten strategically positioned integral handles in the side panels facilitate handling and an optional set of sturdy smooth-running wheels (mounted on a trolley) facilitate transport, even on uneven surfaces. The commercial name of the Self Powered version is SubTech 218 SP, and SubTech 218 for the passive version.

Like all other current and future Outline self-powered enclosures, SubTech 218 SP can also be supplied with an "Outline Wireless Lan Kit", an optional device that enables control via PC and adjustment of the on-board DSP system's parameters.



loudspeakers

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outline

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