

Uniline Series

Line Array main elements

Three acoustic ways
2 x 10" Neodymium (w/3" voice coil)
6,5" MF + 1" HF neodymium drivers,
mounted coaxially

Features

Constant horizontal directivity
Progressive vertical directivity
Exceptional acoustical and mechanical modularity
Integrated, intuitive and quick rigging system

Applications

Compact, medium and high power sound system
High definition sound reinforcement
Medium to long throw application

System Specifications

65 Hz - 19 kHz (wide band mode)
LO/MID: 800 W AES
99 dB SPL @ 1W at 1m
MID/HI: 300 W AES
108 dB SPL @ 1W at 1m
Max SPL@ 1m 137 dB
10.4" x 27.6" x 26" (264 x 700 x 660 mm)

Bi-amplified operation
Digital processor mandatory
LF reinforcement with UL115B (optional)
VLF reinforcement with 18" subs (optional)

The UL210 Uniline "line array" incorporates 3-way bi-amplified design. The low-mid section is fitted with two 10" cone drivers loaded in compression. Mid/Hi coherency comes from coaxially aligned 6,5" and 1" Neodymium drivers mounted to an ISOTOP10™ waveguide.

This Isotop load employs an active annular horn and iso-phase technology to achieve acoustic impedance adaptation and performance comparable to traditional compression drivers, but with greatly increased bandwidth and power handling. Twin 10" loudspeakers serve Lo/Mid bandwidth between 80Hz and 450 Hz. The mid-range 6,5" speaker displays ultra-low distortion and extends from 450 Hz to 4 KHz. The 1" HF driver operates smoothly from 4 KHz to 19 KHz. Directivity control, compression, transducer phase alignment and protection are all established through the UL210's advanced acoustic horn.

The mechanical system is totally integrated and allows the use of Uniline either flown or stacked. Six recessed handles allow UL210 enclosures to be easily handled during transport, rigging and installation.

UL210D speaker is the "downfill" element of the UNILINE technology. UL115B enclosures id the dedicated Low Frequency reinforcement options that offers specific ergonomics for cardioids LF pattern control. APG "TB" subs allow infra bass extension. Use of an APG digital processor is required.

UL210



UL210 Line Array Speaker

The UNILINE is a highly modular line array system composed of 3 speakers: UL210, UL210D, UL115B. Thanks to an unlimited acoustic and mechanical modularity it is adapted to a very large field of applications from medium to very high power. The APG Uniline UL210 main "line array" element is designed for medium to long-range sound reinforcement applications requiring high power, maximum clarity and exceptional pattern control. The UL210's Neodymium Mid/Hi speakers, yield unrivalled, high fidelity output. 85° horizontal coverage is constant across the whole frequency range. The ISOTOP10™, vertical 10° iso-phase waveguide produces exceptionally precise, uniform acoustic coverage. Rugged, ergonomic rigging hardware provides especially secure system focus. Fast, accurate inter-enclosure angle adjustment are available in one-degree steps, between of 0° to 10°.

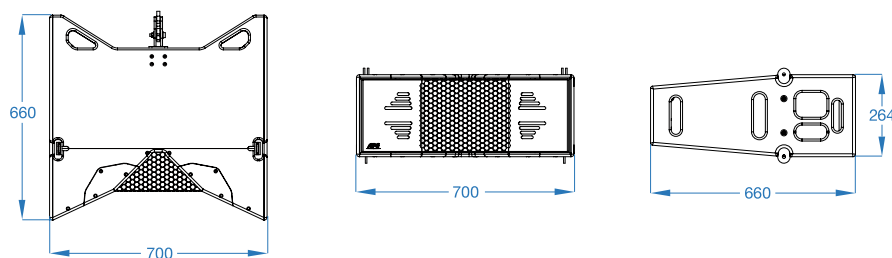
The same ULTRUSS accessory is used for ground stacking and rigging. APG offers a choice of transportation systems for the UL210 either on trays with wheels or in Flight-cases.

UL210 and UL210D speakers are engineered for medium power, broadband voice and music applications either in full range mode or coupled with UL115B. For the largest systems, requiring very low frequency reinforcement, APG recommends TB118S and TB218S subwoofers.

APG

UL210

Technical specifications



Features

UL210

	lo/mid	mid/high
Frequency response, 2 way (1)	65 - 450 Hz	0,45-19 kHz
Frequency response, 3 way (1)	{80 - 110} - 450 Hz	0,45-19 kHz
Frequency response, 4 way (1)	{80 - 110} - 450 Hz	0,45-19 kHz
Efficiency 1W @ 1m	99 dB SPL	108 dB SPL
Max level @ 1m	129 dB SPL	131 dB SPL
Peak level dB SPL @ 1m	135 dB SPL	
Directivity, angles to -6 dB (2)	85 °H	85 °H x 10 °V
Nominal Impedance	16 Ohm	16 Ohm

Enclosure Components

Transducers	2 x 10"	1x6.5"/1xHF1" coaxially mounted
Coil diameters of	75 mm	50 mm (2") & 45 mm (1.75")
Type of load	Bass Reflex	Isotop™ and constant directivity horn

Power Requirements

Recommended amplifiers (3)	800 to 1600 W	300 to 600 W
Peak	2400 W	900 W
AES (3)	800 W	300 W

Construction and characteristics

Cabinet	15 mm plywood birch
Coating	Black, aquarethane, impact-resistant finish
Front finish	2 mm, acoustically transparent, perforated grill
Connectors	2 x Speakon NL4MP (5)
Handles	6 x internally recessed handles
Rigging System	Captive 3-point system, 0° to 10° angulation (1° step)
Dimensions (H, L, W)	10.4" x 27.6" x 26" (264 x 700 x 660 mm)
Net weight per enclosure	83 lb (38 kg)

Options et Accessories

UL210WB	Wheel Board/Dolly for transport of UL210 (1 to 6 stacked speakers)
FCUL210H3	Bell flight case for 3 x UL210 on dolly
FCUL210V2	Flight case for 2 x UL210 enclosures in vertical
ULTRUSS	Versatile steel frame for Uniline rigging and stacking
FC2ULTRUSS	Flight case for 2 x ULTRUSS

Signal Processing

The dedicated APG processors allow combination of different types of subwoofers with top speakers. These processors provide with active crossover, EQ, speakers protection, standard filtering functions for a stereo system including subwoofers. For digital processors, APG provides an exhausted bank of presets of system configuration allowing creative, quick and secure deployment and offering a high level of stock modularity and compatibility.

(1) In standalone mode, the UL210D low frequency cut-off is approximately 65 Hz but it depends on the number speaker of clusters. In extended mode and in complete mode the frequency crossover is adjustable between 80 Hz and 110 Hz depending on the configuration of the system.

(2) The 85° horizontal directivity is constant from 350 Hz up to high frequencies. In the vertical plane, the index directivity increases (and the acoustic opening decreases) progressively when the frequency grows. By consequence, the vertical coupling is non-interferential up to the high bandwidth. However we can define an 10° average value for the vertical acoustic opening.

(3) In order to take full benefit of the dynamic performance, sonic quality and reliability of the speakers, the recommended amplification must at least correspond to the AES rating. Lesser amplification is acceptable for applications requiring less power (near-field, distributed systems,...), whilst not being less than half the AES rating.

(4) The AES power handling corresponds to a 2 hour test using weighted pink noise (peak factor of 6dB) through a frequency range of one decade.

(5) The 4 pins SPEAKON connectors are wired 1+, 1- for back input connectors.

5 YEARS WARRANTY
*A five years warranty covers passive filters, transducers and compression drivers. The warranty does not cover cosmetic damages and damages due to misuse, improper installation, or damages caused by alterations.

Diffusion : November 2013

APG has a policy of research and development aimed at improving its products. As such, new materials, manufacturing methods and changes in principle can be introduced without prior warning. As a result, an APG product may differ in some aspects to its published description. However, unless otherwise indicated, measurements and features will only exceed previously published data...