

5210C 10" Coaxial driver



- Designed for high SPL applications where precise 90° conical coverage in a compact coaxial system is required
- ideal for small cinema rooms surround systems for immersive digital audio formats
- 750 W continuous program power
- LF with 3" high performance VC
- dual magnet design with independent magnetic gaps eliminates flux modulation and dramatically reduces intermodulation distortion in HF range
- 1" HF driver diaphragm made from proprietary hardened aerospace grade Aluminum alloy with highest tensile strength to weight ratio and superior long term fatigue resistance
- heat stabilized polymer suspension ensures low distortion at high peak SPL and long term stability in most demanding applications
- high performance edge-wound ribbon wire voice coils for maximum reliability
- extended to 27 kHz frequency range
- high transparency and resolution
- optional premium XO
- optional matching 70V transformers
- HF driver with 16 ohms impedance option

SPECIFICATIONS GENERAL/LF

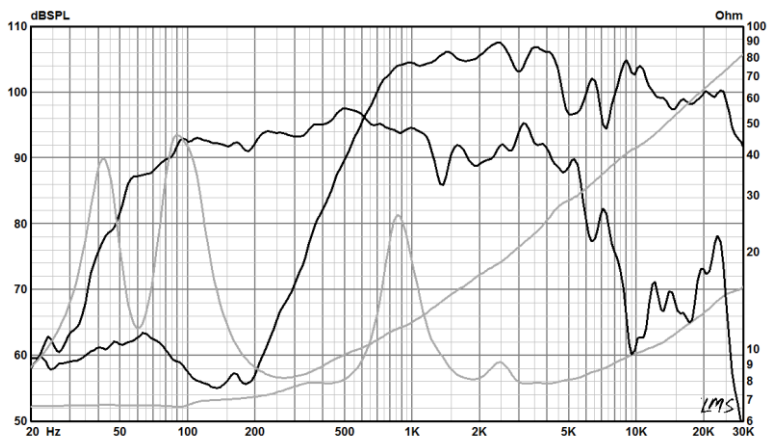
Nominal diameter	10"/254mm
Rated impedance	8 Ω
Power handling ¹	375 W
Continuous program power ²	750 W
Sensitivity ³	96 dB
Effective frequency range ⁴	50 Hz – 27 kHz
Coverage angle ⁵	90° conical
Recommended max. XO frequency	1.5 kHz
Minimum impedance	8.0 Ω
Cone material	Paper/Kevlar composite
Voice coil diameter	76.2 mm (3")
Voice coil winding	edge wound ribbon
Voice coil wire	copper clad Aluminum
Voice coil former	Fiberglass
Displacement limit for VC	17 mm
Voice coil winding height	16 mm
Magnetic gap height	9.5 mm
Suspension	M-roll, Poly-cotton
Magnet	Ferrite ring
Frame	Cast Aluminum

Thiele-Small parameters

Fs	67 Hz
Sd	342.0 cm ²
Re	5.9 Ω
Qms	9.8
Qes	0.39
Qts	0.38
Vas	24.6 dm ³ (L)
Cms	0.15 mm/N
Mms	38.5 g
BL	15.5 N/A
Le	0.92 mH
Xmax ⁶	5.6 mm

SPECIFICATIONS HF

Nominal exit diameter	1"/25.4 mm
Rated impedance	8 Ω (16 Ω optional)
Power handling ¹	40 W
Continuous program power ²	80 W
Sensitivity ³	105 dB
Effective frequency range ⁴	800 Hz – 25 kHz
Min. XO frequency (12dB/oct.)	1.2kHz
Dome/surround material	Aluminum alloy/polymer
Voice coil diameter	44.5 mm (1.75")
Voice coil winding	edge wound ribbon
Voice coil wire	Aluminum
Magnet	Ferrite ring



Frequency response and impedance of individual drive units
in 30 L/Fb=60Hz vented box, free field.

Mounting parameters

Overall diameter	266.7 mm (10.5 in)
Bolt circle diameter	247.7 mm (9.75 in)
Baffle cut-out diameter	233 mm (9.19 in)
Overall depth	156.0 mm (6.13 in)
Net weight	6.0 kg (13.2 lbs.)

Optional Accessories

Crossover	5210-XO
70V matching transformer	TR-6070,TR-10070

Specifications notes

1. As per AES2-1984 Rev.2003. Radian Audio tests power using voltage levels calculated based on rated impedance, according to AES and IEC 60268-5 standards, as better reflecting real life operating conditions. To be distinguished from power specification approach that uses minimum impedance, resulting in inflated power rating.
2. Continuous program power is defined at 3dB higher than AES power and reflects power handling capacity for typical music and cinema content reproduction.
3. Driver mounted in specified test box, measured at 1m, at 2.83V in simulated free field conditions as per AES 2-2012 and IEC 60268-5 (Ed.3.1 2007-09). Sensitivity is calculated based on SPL frequency response averaged in reference octave bands, 500Hz-1kHz for LF and 1.5 kHz – 3 kHz for HF as per IEC 60268-5 and scaled, when necessary, to 1W/1m conditions based on driver rated impedance.
4. Specified for complete coaxial unit with recommended XO, mounted in specified test box. Measured in accordance with IEC 60268-5 (Ed. 3.1 2007-09), defined at -10 dB below combined SPL, averaged in 300 Hz-5kHz range.
5. Coverage angle is specified for complete unit with recommended XO. Defined at -6dB, averaged on octave band points in 500-10000Hz range.
6. Xmax is defined as $X_{max} = (H_{vc} - H_{gap}) / 2 + H_{gap} / 4$ and based on actual BL linearity data measured for each driver by laser based analyser with 82% BL reduction limit from normalized maximum at voice coil rest position. Hvc – voice coil height, Hgap – active magnetic gap height.