12" 123NPM

Mid-Woofer

Key features:

- **HIGH SENSITIVITY, EXTENDED FREQUENCY RESPONSE**
- **3 DEMODULATION RINGS, POWERFUL MOTOR STRUCTURE, DUAL AIR-GAP**
- **HIGH POWER HANDLING**

Design notes:

The 123NPM is a truly unique full range woofer. We have designed cutting edge product, using the best avail-able materials and highly optimized design for the best performance in its class. It delivers very high efficiency, (96 dB 1watt / 1 meter), incredibly linear frequency response characteristics with extended HF frequency response, extreme high power handling capability, while generating ultra low harmonic distortion artifacts. The 123NPM uses a lightweight carbon fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength, high efficiency and a peak to peak linear excursion of 21mm.

Magnetic Circuit
The magnetic circuit features two aluminum shorting rings, double air-gap front plate. The cooling system and the air flow has been designed using the modern FEM techniques and further optimized to provide the highest levels of cooling efficiency. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

Specifications:

General specs	
Nominal Diameter:	12 "
Rated Impedance:	8 ohm
Power handling	
AES Power:	800 watts
Program Power:	1600 watts
Peak Power:	3200 watts
Voice Coil	
Diameter:	101.6 mm
Former:	TIL
Winding height:	23 mm

T/S Parameters	
Resonant frequency:	58 Hz
Re:	4.7 ohm
Qes:	0.45
Qms:	12.6
Qts:	0.43
Vas:	31.6 liters
Sd:	551 cm²
Sensitivity:	95.82 dB
Mms:	100 grams
Bl:	19.6
Le:	0.71 mH

Design details	
Surround Material:	fabric
Cone material:	Paper GF
Spider:	Nomex
Plate thickness:	12.5 mm
Overall diameter:	320.35 mm
Bolt circle diameter:	299 mm
Baffle cutout dia.:	281.9 mm
Mounting holes:	8
Depth:	140.5 mm
Net weight:	6.2 kg

Ordering codes:

DR-12-021-8R-B2-C0001

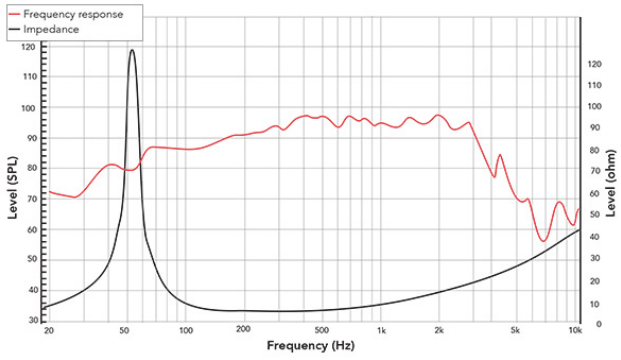
Legacy code: **123NPMX8-185**

Recone kits:

RC123NPMX8-185

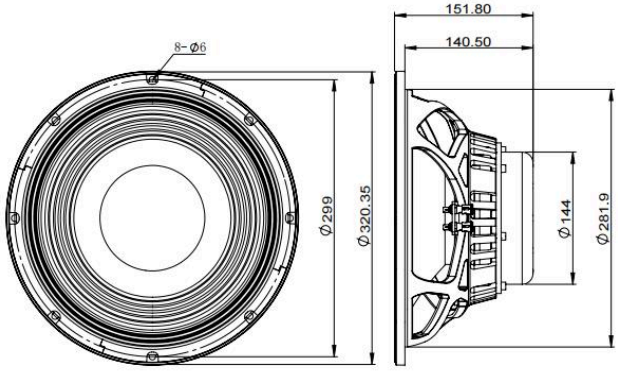
In many cases REDCATT produces 4, 8 and 16 ohm versions — indicate what impedance you need in your request.

Frequency response & Impedance



Frequency response measured on IEC baffle

2D drawing



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