



### 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 available materials and highly optimized design for the best performance in its class. It delivers very high efficiency, (96 dB 1 watt / 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: 4 in.  
Winding wire: Aluminum Sq.  
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 cm<sup>2</sup>  
Sensitivity: 96 dB  
Mms: 100 grams  
Bl: 19.6  
Le: 0.71 mH

#### Design details

Surround Material: Fabric  
Cone material: Paper  
Spider: Nomex  
Plate thickness: 13 mm  
Peak to peak linear cone displacement: 21.2 mm  
Overall diameter: 320.35 mm  
Bolt circle diameter: 299 mm  
Baffle cutout dia.: 281.9 mm  
Number of mounting holes: 8  
Depth (flange to rear): 140.5 mm  
Net weight: 6.2kg

#### Ordering codes:

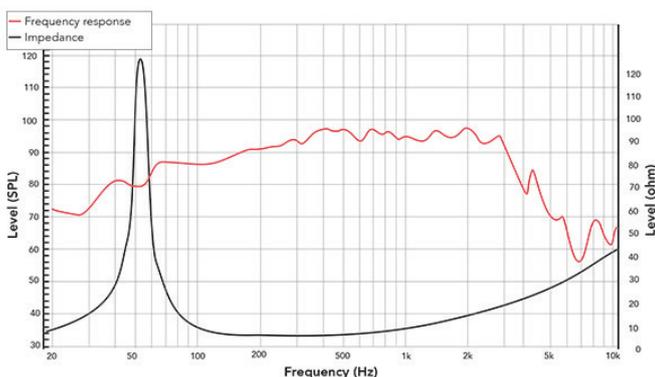
123NPM-X8 ohm-185

#### Recone kits:

RC123NPMX-185

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

### Frequency response & Impedance



Frequency response measured on IAC baffle

### 2D drawing

