

8"**81NPM****Mid-woofer****REDCAT****Key features:**

- EXTENDED FREQUENCY RESPONSE
- 2 DEMODULATION RINGS POWERFUL MOTOR STRUCTURE
- DESIGNED FOR 2-WAY AND MULTI-WAY SPEAKER SYSTEMS

Design notes:

The 81NPM was designed for good reproduction of voice. With an extended low-frequency response, this mid-woofer is highly suitable for two-way and multi-way systems. Its high power handling capabilities extend the ideal usage as a mid-range driver in line-array systems. The 81NPM uses a lightweight half-pressed paper cone reinforced by our proprietary cone treatment, which also works as weatherization protection. The used high-quality

components ensure long-lasting performance even in high powered applications. The chosen material combination provides remarkable strength, high efficiency and sustained output under extreme conditions.

Power Handling

The voice coil sports Kapton former material capable of withstanding peak temperatures above 300°C, well beyond

the thermal requirements of modern audio systems. Former strength provides the ideal transfer of power between the voice coil and the cone assembly and assists in reducing distortion artifacts. By combining this material with state of the art adhesives and our winding voice coil technology, the 81NPM delivers incredibly high performance.

Specifications:**General specs**

Nominal Diameter: 8"

Rated Impedance: 8 ohm

Power handling

AES Power: 200 watts

Program Power: 400 watts

Peak Power: 800 watts

Voice Coil

Diameter: 3 in.

Winding wire: CCAW

Former: Glass Fiber

Winding height: 18.6 mm

T/S Parameters

Resonant frequency: 69 Hz

Re: 7.1 ohm

Qes: 0.29

Qms: 4.84

Qts: 0.28

Vas: 10.3 liters

Sd: 219 cm²

Sensitivity: 93 dB

Mms: 34.2 grams

Bl: 0.5

Le: 0.75 mH

Design details

Surround Material: Fabric

Cone material: Paper

Spider: Nomex

Plate thickness: 11 mm

Peak to peak linear cone displacement: 12.8 mm

Overall diameter: 210 mm

Bolt circle diameter: 195.5 mm

Baffle cutout dia.: 186.88 mm

Number of mounting holes: 8

Depth (flange to rear): 101.3 mm

Net weight: 3.2kg

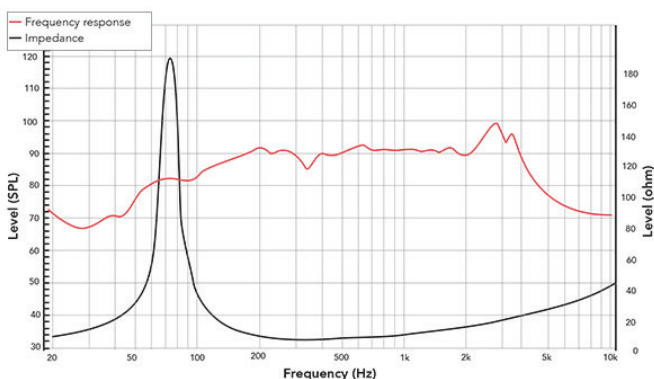
Ordering codes:

81NPM-X8 ohm-373A

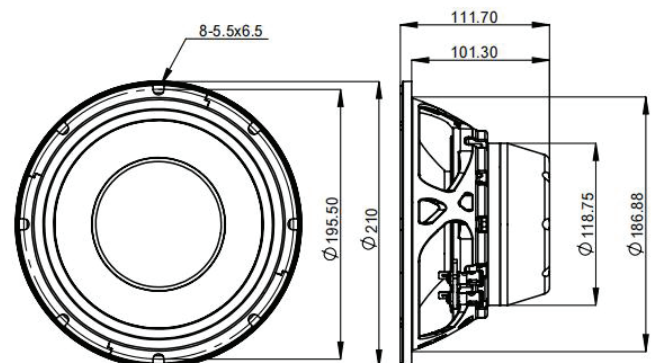
Recone kits:

RC81NPMX-373A

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 drawinginfo@redcatt.netwww.redcatt.net