

**8"****81NPM**

# Neodymium Mid-Woofer



## 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: 400 watts  
Program Power: 800 watts  
Peak Power: 1600 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 cm<sup>2</sup>  
Sensitivity: 93.05 dB  
Mms: 34.2 grams  
Bl: 19.3  
Le: 0.75 mH

### Design details

Surround Material: Fabric  
Cone material: Paper  
Spider: Nomex  
Plate thickness: 11 mm  
Peak to peak linear cone displacement: 6.4 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

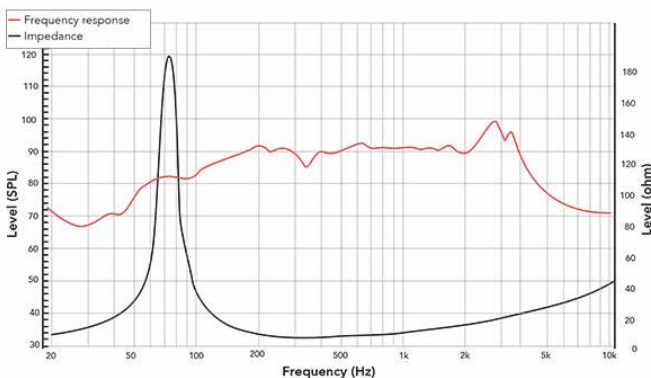
### Ordering codes:

81NPMX8-373A

### Recone kits:

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

