# 12" | 12NPM

# Neodymium Mid-Woofer

REDCAT

## Key features:

- CARBON FIBER LOADED PAPER CONE
- VERY HIGH EFFICIENCY
- LIGHTWEIGHT MECHANICAL STRUCTURE

## Design notes:

The 12NPM is a high efficiency, (98.5 dB 1watt / 1 meter) 12-inch mid bass woofer with incredibly linear frequency response characteristics, extreme high power handling capability while generating low harmonic distortion artifacts.-
The 12NPM uses a lightweight carbon fiber loaded cone assembly along with a precision double roll constant geometry surround. This combination provides remarkable strength, high efficiency and a excursion linearity of 7.5mm.

Magnetic Circuit
REDCATT engineers have developed a lightweight, inside-neodymium slug based magnetic circuit capable of delivering the highest level of performance providing a consistent, high integrity magnetic flux gap, ultra low distortion characteristic and high efficiency cooling system. 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: | 450 watts |
| Program Power: | 900 watts |
| Peak Power: | 1800 watts |

| Voice Coil | |
|---|---|
| Diameter: | 3 in. |
| Winding wire: | CCAW |
| Former: | Glass Fiber |
| Winding height: | 18.6 mm |

| T/S Parameters | |
|---|---|
| Resonant frequency: | 49 Hz |
| Re: | 4.7 ohm |
| Qes: | 0.32 |
| Qms: | 9.95 |
| Qts: | 0.31 |
| Vas: | 63.6 liters |
| Sd: | 531 cm2 |
| Sensitivity: | 97.99 dB |
| Mms: | 65.6 grams |
| Bl: | 17.3 |
| Le: | 0.65 mH |

| Design details | |
|---|---|
| Surround Material: | Fabric |
| Cone material: | Paper |
| Spider: | Nomex |
| Plate thickness: | 11 mm |
| Peak to peak linear cone displacement | 9.1 mm |
| Overall diameter: | 315 mm |
| Bolt circle diameter: | 298 mm |
| Baffle cutout dia.: | 285 mm |
| Number of mounting holes: | 8 |
| Depth (flange to rear): | 142.5 mm |
| Net weight: | 4.1kg |

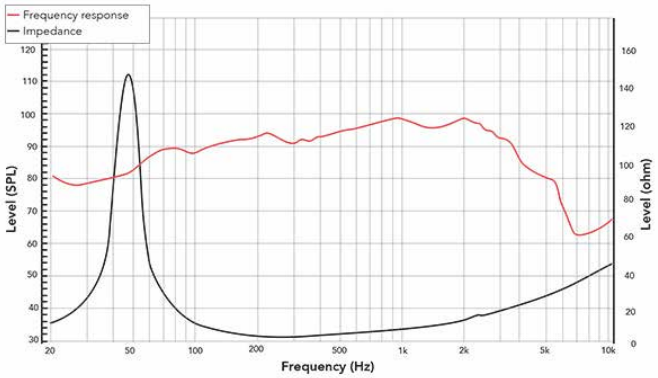
**Ordering codes:**

12NPMX8-054

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