

3"**31NFR**

Neodymium Full-Range



Key features:

- EXTENDED FREQUENCY RESPONSE
- HARD ANODIZED ALUMINUM CONE
- USAGE IN HI-FI, COLUMNS, OUTDOOR AND PORTABLE PRODUCTS

Design notes:

The 31NFR is a high efficiency, (84dB 1watt / 1 meter) 3-inch full range speaker with very linear frequency response characteristics and high power handling capability. The 31NFR uses a lightweight anodized aluminum cone assembly along with a NBR single roll geometry surround. The combination provides high efficiency, extended high frequency response and sustained output under variety of conditions, while generating low harmonic

distortion over the working range of this speaker.

Copper demodulation cup is assembled over the t-pole.

Magnetic circuit design
REDCATT engineers have developed neodymium based magnetic circuit with small form factor, high integrity magnetic flux gap and low distortion characteristic. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

Specifications:

General specs

Nominal Diameter: **3"**
Rated Impedance: **8 ohm**

Power handling

AES Power: **30 watts**
Program Power: **60 watts**
Peak Power: **120 watts**

Voice Coil

Diameter: **1 in.**
Winding wire: **Aluminum**
Former: **Kapton**
Winding height: **7.4 mm**

T/S Parameters

Resonant frequency: **115 Hz**
Re: **6.3 ohm**
Qes: **0.94**
Qms: **15.1**
Qts: **0.88**
Vas: **0.85 liters**
Sd: **28.3 cm²**
Sensitivity: **84.49 dB**
Mms: **2.5 grams**
Bl: **3.5**
Le: **0.09 mH**

Design details

Surround Material: **Rubber**
Cone material: **Aluminum**
Spider: **Nomex**
Plate thickness: **4 mm**
Peak to peak linear cone displacement: **2.9 mm**
Overall diameter: **78.7 mm**
Bolt circle diameter: **84 mm**
Baffle cutout dia.: **71.5 mm**
Number of mounting holes: **4**
Depth (flange to rear): **45.3 mm**
Net weight: **0.18kg**

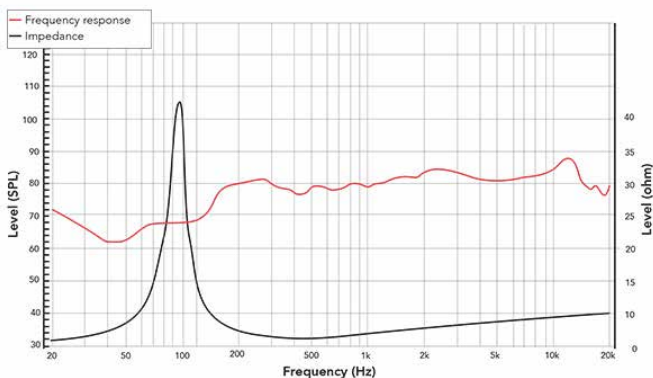
Ordering codes:

31NFRX8-229

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

