



Key features:

- 5.3" DIAMETER VOICE COIL, HIGH POWER HANDLING
- IMPROVED COIL AND MAGNET AIR-VENTILATION SYSTEM, HIGH TEMP. CAPABLE VOICE COIL WINDING
- CARBON FIBER REINFORCED PAPER CONE, TRIPLE SILICONE SPIDER

Design notes:

The 181NPW is a high efficiency, (95 dB 1watt / 1 meter) 18-inch woofer with incredibly linear frequency response characteristics, extreme high power handling capability while generating low harmonic distortion artifacts. The 181NPW 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 maximum

excursion of 30.5mm.

Power Handling

At the core of the 181NPW is it's voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 350C, well beyond the thermal requirements of modern professional audio systems. The 181NPW delivers incredible performance.

REDCATT has implemented a triple layer/ silicone spider design to ensure long term shape memory, consistency and diminish anomalies associated with spider deterioration.

Specifications:

General specs

Nominal Diameter: 18"
Rated Impedance: 4 ohm

Power handling

AES Power: 1500 watts
Program Power: 3000 watts
Peak Power: 6000 watts

Voice Coil

Diameter: 5.3 in.
Winding wire: Copper
Former: Glass Fiber
Winding height: 32.8 mm

T/S Parameters

Resonant frequency: 28 Hz
Re: 3.2 ohm
Qes: 0.25
Qms: 15.8
Qts: 0.25
Vas: 167.7 liters
Sd: 1225.4 cm²
Sensitivity: 95 dB
Mms: 391.2 grams
Bl: 29.7
Le: 1.76 mH

Design details

Surround Material: Fabric
Cone material: Paper
Spider: Nomex
Plate thickness: 15 mm
Peak to peak linear cone displacement: 30.4 mm
Overall diameter: 468 mm
Bolt circle diameter: 442 mm
Baffle cutout dia.: 426 mm
Number of mounting holes: 8
Depth (flange to rear): 210 mm
Net weight: 13.9kg

Ordering codes:

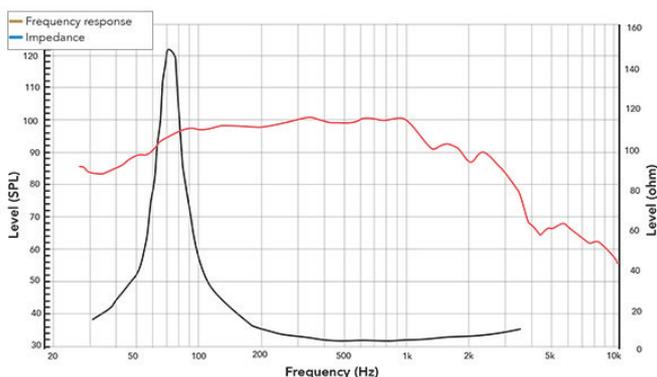
181NPW-X4 ohm-099

Recone kits:

RC181NPWX-099

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

