



### 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 1 watt / 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 its voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 350°C, 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 cm<sup>2</sup>

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:

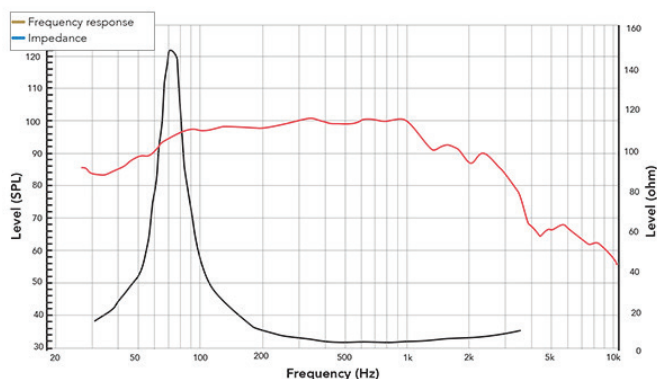
181NPW-X4 ohm-099

#### 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

