



### 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 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 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:

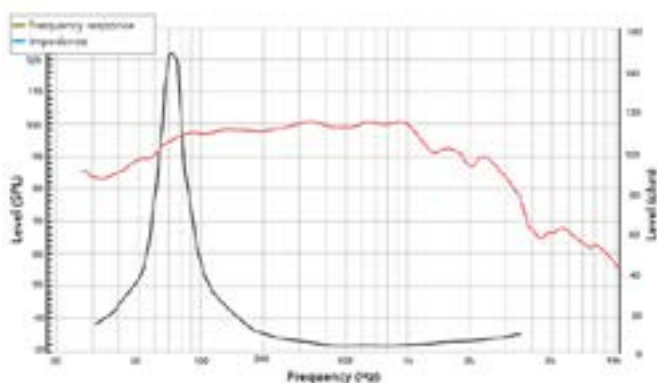
181NPW-X4 ohm-099

#### 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

