



**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, LARGE WATER-PROOF SURROUND

**Design notes:**

The 181NPW is a high efficiency, (97 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 maxi-

mum excursion of 35mm.

**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: 94.8 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: 15.2 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

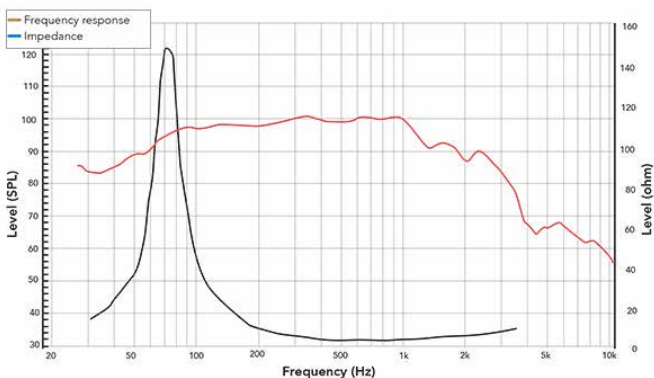
**Ordering codes:**

181NPWX4-099

**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**

