

Ordering code: 181NPW-099

Neodymium Low Frequency Woofer

Cont. Power	Sens.	Fs	Freq. Range	VC Dia.	VC Wire	Cone/Surround/Dome	Magnet type
3000 watts	97 dB	30 Hz	25 Hz - 1.5 kHz	5.3" 1in/3out	Copper	Paper w. CF/ Fabric	Neodymium



The 181NPW is a high efficiency, (97 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 50mm (2in).

Power Handling

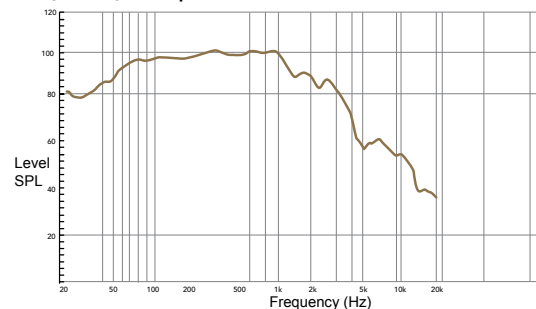
At the core of the 181NPW is it's voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 350C, well beyond the thermal requirements of modern professional audio systems. The 181NPW delivers incredible performance.

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

General Specifications

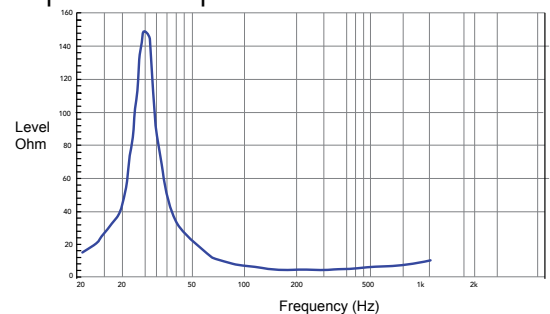
Nominal Diameter:	460 mm (18 in.)
Rated Impedance:	4 Ohm
Power Handling:	
AES Power:	1500 Watts
Power Compression @-10dB	0.7dB
Power Compression @-10dB	1.5dB
Power Compression @Max Power	2.2dB
Maximum Recommended Xover Freq.:	1,000Hz
Recommended Enclosure Volume:	150 - 350 Liters 4 - 12 cuft.
Cone Design:	Strght Gmtry, Redcatt Cell.
Fs	30 Hz
Re	3.23 Ohm
Sd	1257 cm ² (195 in. ²)
Qms	8.14
Qes	0.22
Qts	0.21
Vas	173 Liters
Mms	350 g
BL product (force factor)	31.5 Tm
Peak to Peak displacement (mm)	36 mm
Le (mH @1kHz)	1.84
Overall diameter	467.9 mm (18.42 in.)
No. Of mounting holes	8
Bolt circle diameter	442 mm (17.4 in.)
Front mount baffle cutout dia.	428mm (16.85 in.)Nominal
Rear mount baffle cutout diameter	430 mm (16.92 in.)Nominal
Total depth	230 mm (9.1 in.)
Flange and gasket thickness	22 mm (0.86 in.)
Net weight	13.8 kg (30.4 lbs.)
Shipping weight	16.1 kg (35.5 lbs.)
Packing Dimensions	52x 52x 27 cm

Frequency Response



Frequency response measurement with transducer mounted in a 140 liter vented enclosure tuned to 35Hz

Impedance Response



Impedance measured free air

