



Code: 181NPWX4-099

Woofer/18inch/Neo/Paper/1500W/4ohm

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

QUICK SPECS

Impedance	Program Power
4 Ω	3000 W
Sensitivity	Fs
94.80 dB	28.00 Hz
Magnet	Voice Coil
Neodymium	134.6 mm

 2D Drawing

 3D Model (STEP)

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.

GENERAL SPECS

Nominal Diameter	18"
Rated Impedance	4 Ohm
Magnet	Neodymium
Basket Material	Aluminum

VOICE COIL

Diameter	134.6 mm
Winding Wire	Copper
Former	Glass Fiber
Winding Height	32.8 mm

POWER HANDLING

AES Power	1500 W
Continuous Power	3000 W
Peak Power	6000 W

T/S PARAMETERS

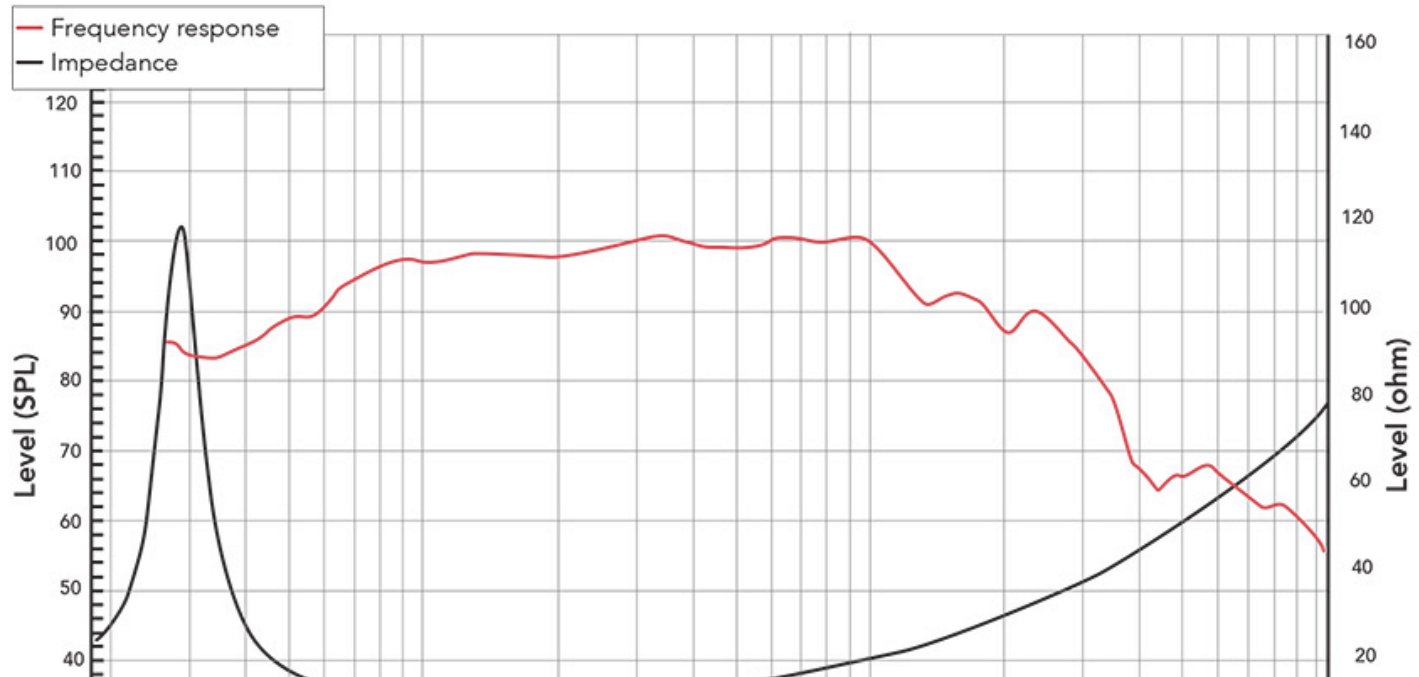
Resonant Frequency (Fs)	28.00 Hz
Re	3.20 \u00a9
Qes	0.250
Qms	15.80
Qts	0.250
Vas	167.70 liters
Sd	1225.40 cm\u00b2
Mms	391.20 grams
Rms	4.35
Cms	0.0800
Bl	29.70 T\u00b7m
Le	1.760 mH
Sensitivity	94.80 dB

Cone and Material	Paper	Product Code	15 IN W X 4 000
Cone/Dome Material	Paper CF		
Spider	Nomex		
T-Plate	15 mm		
Xmax (peak)	8.9 mm		
Xmech	23.9 mm		
Overall Diameter	468.00 mm		
Bolt Circle Diameter	442.00 mm		
Baffle Cutout Dia.	426.00 mm		
Mounting Holes	8		
Depth (flange to rear)	210.00 mm		
Net Weight	13.90 kg		

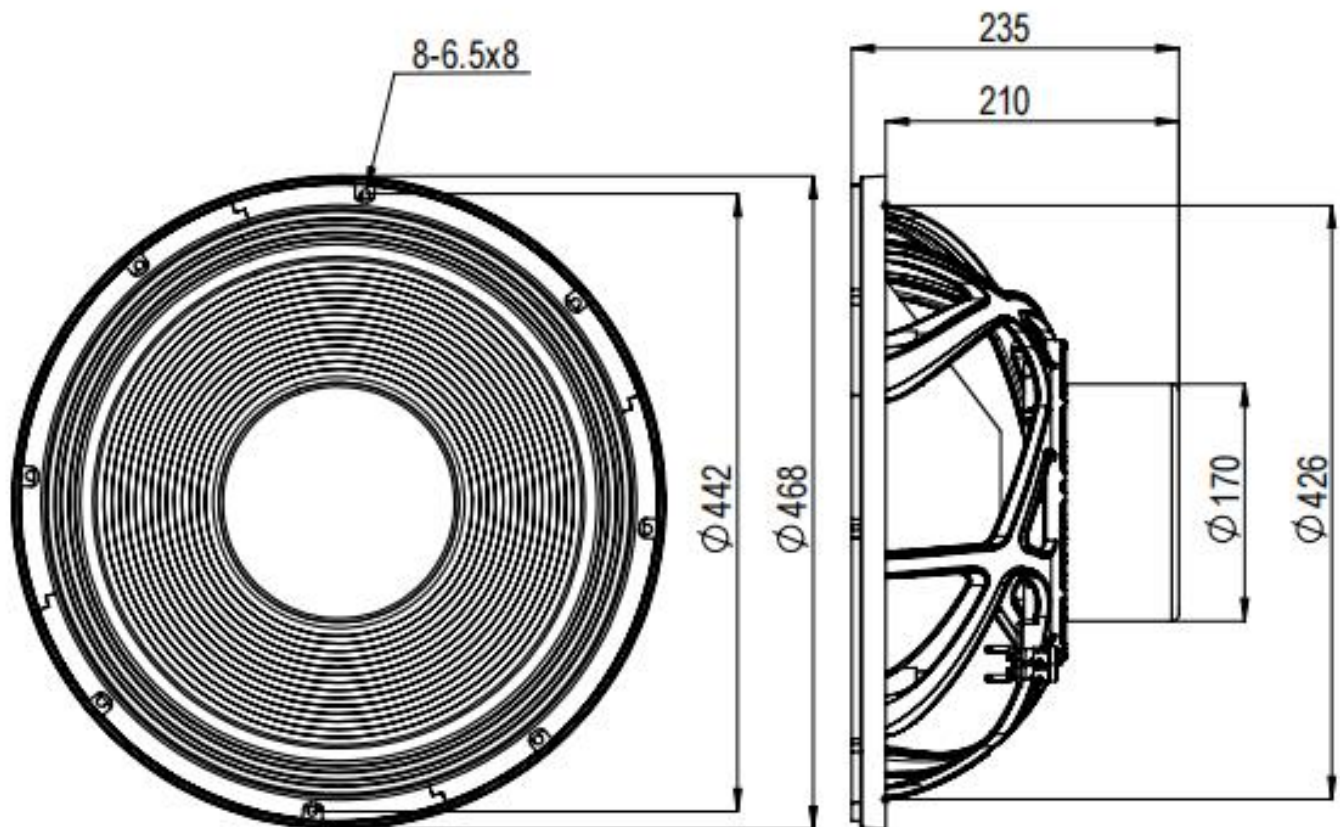
DOWNLOADS

 2D Drawing (PDF)  3D Model (STEP)

Frequency Response & Impedance



2D Drawing



Enclosure Recommendations

Recommended enclosure alignments (bass reflex):

- 200 liters tuned to 26 Hz: high output, strong mid-bass, reduced excursion; -3 dB approx. 22 Hz, HP filter 25 Hz
- 235 liters tuned to 23 Hz: balanced response, general-purpose (recommended); -3 dB approx. 20 Hz, HP filter 22 Hz
- 275 liters tuned to 20 Hz: extended low-frequency, requires HP filter protection; -3 dB approx. 17 Hz, HP filter 20 Hz

What are the key features of the 181NPW?



What enclosure is recommended for the 181NPW?



What applications is the 181NPW suited for?



What are the power and sensitivity specs of the 181NPW?



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