18" | 18NPW

Neodymium Woofer

REDCAT

Key features:

- STRONG GLASS FIBER LOADED CONE
- HIGH TEMPERATURE VOICE COIL, DOUBLE LAYER SILI-CONE SPIDER
- HIGH POWER HANDLING

Design notes:

The 18NPW is a high efficiency, (98 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 18NPW uses a lightweight, but strong, glass 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 30mm.

Power Handling
At the core of the 18NPW is it‚Äôs 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 18NPW delivers incredible performance.

REDCATT has implemented a double layer/silicone spider design to ensure long term Fs memory, consistency and diminish anomalies associated with spider deterioration. The sealed spider works as a air pump and pushes the air trough out motor to increase heat transfer and cooling of the parts.

Specifications:

General specs	
Nominal Diameter:	18"
Rated Impedance:	8 ohm

Power handling	
AES Power:	1200 watts
Program Power:	2400 watts
Peak Power:	4800 watts

Voice Coil	
Diameter:	4 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	23.7 mm

T/S Parameters	
Resonant frequency:	36 Hz
Re:	5.1 ohm
Qes:	0.28
Qms:	8.39
Qts:	0.278
Vas:	211.5 liters
Sd:	1257 cm2
Sensitivity:	99.14 dB
Mms:	199.4 grams
Bl:	27.3
Le:	1.51 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	14 mm
Peak to peak linear cone displacement	10.7 mm
Overall diameter:	468 mm
Bolt circle diameter:	442 mm
Baffle cutout dia.:	426 mm
Number of mounting holes:	8
Depth (flange to rear):	189 mm
Net weight:	9.4kg

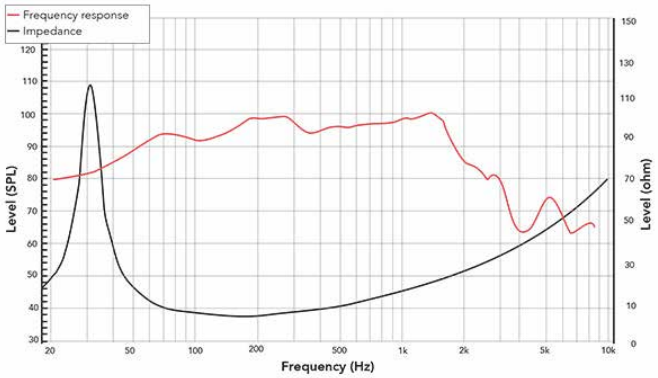
Ordering codes:

18NPWX8-017

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