

21" | 21XR

Woofer



Key features:

- LINEAR CONE EXCURSION 60MM PEAK TO PEAK !!
- UNPARALLEL LOW DISTORTION AT LOW FREQUENCIES
- PATENTED DESIGN, INNOVATIVE MAGNETIC STRUCTURE & VENTING SYSTEM

Design notes:

The 21XR is a high efficiency, (96 dB 1 watt / 1 meter) 21-inch woofer with incredibly linear frequency response characteristics. Our new and patented ground up motor design is a new approach to high-excursion woofers. The voice coil winding is always in the magnetic gap that is extremely wide. This feature ensures extremely low distortion across whole working range of this unique driver.

Motor Design

The magnetic design incorporates large neodymium magnets placed along the voice coil winding. This has allowed us to push the cone excursion to 50mm peak to peak. Unique gap venting ensures good air circulation and greatly improves the reliability of this driver. We have also developed a new technique for manufacturing deep copper caps that are implemented in this design and covering the whole voice coil move-

ment..

The design further utilizes triple, uncommonly large, spiders, spaced with spacers, hot-pressed tinsel wires onto the top spider, reinforced cone edge, reinforced surround to cone joint, reinforced spider to basket joints, etc.

Specifications:

General specs

Nominal Diameter: 21"

Rated Impedance: 8 ohm

Power handling

AES Power: 1800 watts

Program Power: 3600 watts

Peak Power: 7200 watts

Voice Coil

Diameter: 5.3 in.

Winding wire: Copper

Former: Glass Fiber

Winding height: 21 mm

T/S Parameters

Resonant frequency: 32.3 Hz

Re: 4.5 ohm

Qes: 0.51

Qms: 16.79

Qts: 0.5

Vas: 152.79 liters

Sd: 1662 cm²

Sensitivity: 96 dB

Mms: 488.58 grams

Bl: 29.37

Le: 0.65 mH

Design details

Surround Material: Fabric

Cone material: Paper

Spider: Nomex

Plate thickness: 67 mm

Peak to peak linear cone displacement: 49.6 mm

Overall diameter: 549 mm

Bolt circle diameter: 525 mm

Baffle cutout dia.: 503 mm

Number of mounting holes: 8

Depth (flange to rear): 287 mm

Net weight: 23.8kg

Ordering codes:

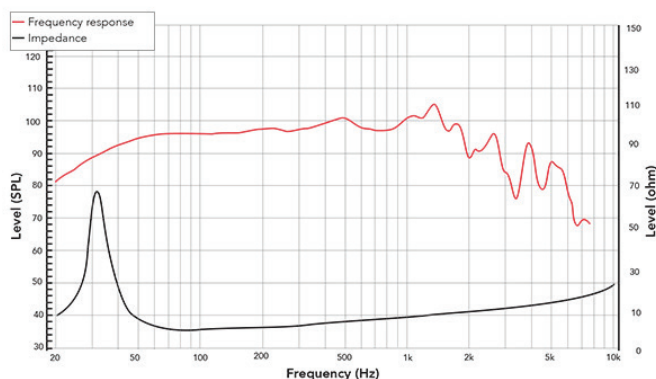
21XR-X8 ohm-347A

Recone kits:

RC21XR-347A

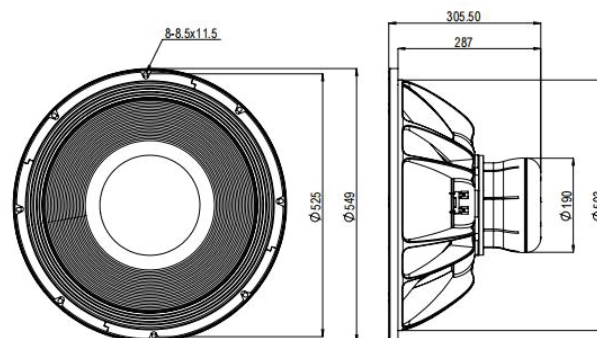
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



info@redcatt.net

www.redcatt.net