

The 82165 is a 6.5-inch pro midbass woofer tailored for professional applications. With a powerful 100W AES rating and an 8-ohm impedance, this driver promises exceptional performance. Its core strength lies in its 1.5-inch copper voice coil, and 28oz vented ferrite motor, ensuring superior sound quality and durability. The water-resistant treated paper cone body, coupled with a resilient cloth surround, offers a unique blend of rigidity and flexibility, enhancing sound accuracy. The paper dust cap further complements the woofer's design, contributing to its aesthetic appeal and acoustic efficiency. Optimized for a frequency range of 100Hz-5kHz, the 82165-X1 delivers a balanced and vivid audio experience, making it an ideal choice for high-fidelity audio systems.

### **Key Specifications:**

- 6.5 inch (165.1 mm) diameter
- 8 ohm, 100 watts
- 92.9 dB SPL
- 1.5 inch copper voice coil with Kapton former
- Ferrite magnet pressed steel basket
- Water-resistant paper cone, cloth surround



#### **Primary Specifications**

Size, Nominal (inch & mm)	6" (152 mm)
Rated Impedance ( $\Omega$ )	8
Frequency Range (Hz)	100 - 5000
Resonant Frequency (Fs) (Hz) +/- 15%	106





# **More Specifications**

Application	High-End Audio and Home Theater, Home Audio
RoHS Compliant	No
DC Resistance (Re) ( $\Omega$ )	7.05

## **Small Signal Parameters**

Nominal Impedance (Z) ( $\Omega$ )	8
DC Resistance (Re) (Ω)	7.05
Voice Coil Inductance (Le) (mH)	0.27
Resonant Frequency (Fs) (Hz) +/- 15%	106
Mechanical Q Factor (Qms)	1.85
Electrical Q Factor (Qes)	0.55
Total Q Factor (Qts)	0.42

## **Material Descriptions**

Basket Type	Pressed Steel
Voice Coil Diameter (mm)	38.1
Voice Coil Wire Material	Copper
Voice Coil Former Material	Kapton
Magnet Material	Ferrite
Magnet Weight (g)	793.787
Cone Body Material	Paper
Cone Surround Material	Cloth
Dust Cap Material	Paper

