

Oberton 15 MB 500



KEY FEATURES:

- 100 db 1W / 1m average sensitivity
- 77 mm high temperature aluminium voice coil
- 1000 W AES program power
- Powerful, vented 180 mm magnet structure
- Double aluminium demodulating ring for lower distortion and improved heat dissipation
- Double silicone spiders for improved excursion control and linearity

Application : Midbass

15MB500 is a high power 15" midbass loudspeaker, with very high efficiency and very good linearity. It features a 3" aluminum voice coil, 180 mm vented magnet structure, double silicone spider assembly, vented aluminium frame with integrated double aluminum demodulating ring that reduces distortions and improves cooling of the voice coil. **15MB500** is suitable for use in high power portable and fixed installation professional loudspeaker boxes.

SPECIFICATIONS

Nominal Diameter	15"/385 inch/mm
Impedance	8 Ohm
Minimum Impedance	6.27 Ohm
Power Capacity AES ¹	500 W
Program Power ²	1000 W
Sensitivity	(200-2000 Hz) 100 dB/W/m
Frequency Range	50 – 3000 Hz
Voice Coil Diameter	77 mm
Voice Coil Material	Aluminum
Voice Coil Former	Kapton™
Voice Coil Winding Depth	21 mm
Magnet Gap Depth	11 mm
Cone Material	Paper with glassfiber
Basket	Die Cast Aluminium
Magnet	Ferrite
Flux Density	1.20 T

1. AES standard. Power is calculated on rated minimum impedance. Measurement is in 120 L box enclosure tuned 56 Hz using a 40-400 Hz band limited pink noise test signal applied continuously for 2 hours.

2. Program power is defined as 3db greater than AES Power Capacity.

* Linear Mathematical Xmax is calculated as: $(Hvc - Hg)/2 + Hg/4$ where Hvc is the voice coil depth and Hg is the gap depth.

THIELE-SMALL PARAMETERS

Resonance Frequency	41.50 Hz
Mechanical Efficiency Factor (Qms)	12.85
Electrical Efficiency Factor (Qes)	0.349
Total Q (Qts)	0.339
Equivalent Air Volume (Vas)	161.54 Litres
Diaphragm mass ind. airload (Mms)	87.50 grams
Voice Coil Resistance Re	5.25 Ohms
Effective Diagram Area (Sd)	829.6 cm ²
Peak Linear Displacement of Diaphragm (Xmax)*	± 7.75 mm
Mechanical Compliance of Suspension (Cms)	0.168 mm/N
BL Product (BL)	18.54 T.m
V.C. Inductance at 1 kHz (Le)	0.92 mH

MOUNTING INFORMATION

Overall Diameter	388 mm
Baffle Hole Diameter	354 mm
Number of Mounting Holes	8 with dia. 7mm
Bolt Circle Diameter	370/372 mm
Overall Depth	169 mm
Net Weight	7.8 kg

Frequency Responce

