

# Oberton 10 M 250



## KEY FEATURES:

- 97 db 1W / 1m average sensitivity
- 64 mm high temperature aluminium voice coil
- 500 W AES program power
- Powerful, ferrite 169 mm magnet structure

## Application : Power midrange speaker

The **10M250** loudspeakers is designed as a power midrange speaker, providing high output and low distortion midrange from 250 Hz to 3 kHz. It features aluminium die cast frame, 169 mm magnet structure and curvilinear cone. **10M250** is suitable for application as the high power midrange in 3 way boxes including horn loading application.

## SPECIFICATIONS

Nominal Diameter	10"/262 inch/mm
Impedance	8 Ohm
Minimum Impedance	7.17 Ohm
Power Capacity AES <sup>1</sup>	250 W
Program Power <sup>2</sup>	500 W
Sensitivity	(500-5000 Hz) 97 dB/W/m
Frequency Range	70 - 5000 Hz
Voice Coil Diameter	64 mm
Voice Coil Material	Aluminium
Voice Coil Former	Kapton™
Voice Coil Winding Depth	10 mm
Magnet Gap Depth	9 mm
Cone Material	Paper
Basket	Die cast aluminium
Magnet	Ferrite
Flux Density	1.40 T

## THIELE-SMALL PARAMETERS

Resonance Frequency	76.65 Hz
Mechanical Efficiency Factor (Qms)	14.62
Electrical Efficiency Factor (Qes)	0.285
Total Q (Qts)	0.280
Equivalent Air Volume (Vas)	23.05 Litres
Diaphragm mass ind. airload (Mms)	26.82 grams
Voice Coil Resistance Re	6.09 Ohms
Effective Diaphrag Area (Sd)	317.3 cm <sup>2</sup>
Peak Linear Displacement of Diaphragm (Xmax)*	± 2.75 mm
Mechanical Compliance of Suspension (Cms)	0.161 mm/N
BL Product (BL)	16.61 T.m
V.C. Inductance at 1 kHz (Le)	0.60 mH

1. AES standard. Power is calculated on rated minimum impedance. Measurement is in 30 L box enclosure tuned 60 Hz using a 50-1000 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.

## MOUNTING INFORMATION

Overall Diameter	262 mm
Baffle Hole Diameter	228 mm
Number of Mounting Holes	8 with dia. 7 mm
Bolt Circle Diameter	244 mm
Overall Depth	122.5 mm
Net Weight	6.6 kg

## Frequency Response

