

# Oberton 10 MB 300



## KEY FEATURES:

- 99 db 1W / 1m average sensitivity
- 77 mm high temperature aluminium voice coil
- 800 W AES program power
- Powerful, ferrite 180 mm magnet structure
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## Application : Power midbass speaker

The **10MB300** loudspeaker is primary designed to be used in medium and long throw horn loaded systems. The special Kevlar paper cone guarantees reliable using in horns with compression chamber with ratio up to 3.5:1.

### SPECIFICATIONS

Nominal Diameter	10"/262 inch/mm
Impedance	8 Ohm
Minimum Impedance	6.52 Ohm
Power Capacity AES <sup>1</sup>	400 W
Program Power <sup>2</sup>	800 W
Sensitivity	(200-2000 Hz) 99 dB/W/m
Frequency Range	80 - 2500 Hz
Voice Coil Diameter	77 mm
Voice Coil Material	Aluminium
Voice Coil Former	Kapton™
Voice Coil Winding Depth	15 mm
Magnet Gap Depth	9 mm
Cone Material	Kevlar Paper
Basket	Die cast aluminium
Magnet	Feritte
Flux Density	1.33 T

### THIELE-SMALL PARAMETERS

Resonance Frequency	64.70 Hz
Mechanical Efficiency Factor (Qms)	9.66
Electrical Efficiency Factor (Qes)	0.251
Total Q (Qts)	0.244
Equivalent Air Volume (Vas )	22.75 Litres
Diaphragm mass ind. airload (Mms)	38.13 grams
Voice Coil Resistance Re	5.43 Ohms
Effective Diagram Area (Sd)	317.3 cm <sup>2</sup>
Peak Linear Displacement of Diaphragm (Xmax)*	±5.25 mm
Mechanical Compliance of Suspension (Cms)	0.159 mm/N
BL Product (BL)	18.32 T.m
V.C. Inductance at 1 kHz (Le)	0.72 mH

### 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	120 mm
Net Weight	6.8 kg

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.

# Frequency Response

