

Oberton 10 M 300



KEY FEATURES:

- 100 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 midrange speaker

The **10M300** loudspeakers is designed as a power midrange speaker, providing high output, low distortion midrange from 250Hz to 3,5 kHz. It features aluminium die cast frame, 180 mm magnet structure and curvilinear cone. **10M300** 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	6.67 Ohm
Power Capacity AES ¹	400 W
Program Power ²	800 W
Sensitivity	(200-3000 Hz) 100dB/W/m
Frequency Range	75-3500 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	Paper
Basket	Die cast aluminium
Magnet	Ferrite
Flux Density	1.33 T

THIELE-SMALL PARAMETERS

Resonance Frequency	59.79 Hz
Mechanical Efficiency Factor (Qms)	8.47
Electrical Efficiency Factor (Qes)	0.255
Total Q (Qts)	0.248
Equivalent Air Volume (Vas)	19.43 Litres
Diaphragm mass ind. airload (Mms)	32.30 grams
Voice Coil Resistance Re	5.48 Ohms
Effective Diagram Area (Sd)	317.3 cm ²
Peak Linear Displacement of Diaphragm (Xmax)*	± 5.25 mm
Mechanical Compliance of Suspension (Cms)	0.136 mm/N
BL Product (BL)	18.22 T.m
V.C. Inductance at 1 kHz (Le)	0.60 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 Responce

