# Oberton 18 XB 800

## KEY FEATURES:

- **97.5 db 1W / 1m average sensitivity**
- **100 mm high temperature sandwich voice coil**
- **2200 W AES program power**
- **Powerful, vented 220 mm magnet structure**
- **Aluminium demodulating ring for lower distortion and improved heat dissipation**
- **Double silicone spider for improved excursion control and linearity**
- **Water protected cone**

### Application : High Power Bass

The **18XB800** bass loudspeaker is specially designed to deliver high impact bass response, with exceptional high power capacity. It incorporates an 30 mm long, 4`` sandwich voice coil, kevlar paper cone, a powerful, vented 220 mm magnetic structure with higher energy than 18XB700,die cast vented aluminium frame which reduced power compression, and double silicone spider assembly. This results in an incredible high efficient transducer for subwoofer applications, with the ability to handle high excursion with low distortion and reduced thermal power compression.

### SPECIFICATIONS

| | |
|---|---|
| Nominal Diameter | 18"/461 inch/mm |
| Impedance | 8 Ohm |
| Minimum Impedance | 6.95 Ohm |
| Power Capacity AES [1] | 1100 W |
| Program Power [2] | 2200 W |
| Sensitivity | (50-200 Hz) 97.5 dB/W/m |
| Frequency Range | 35 - 500 Hz |
| Voice Coil Diameter | 100 mm |
| Voice Coil Material | Copper |
| Voice Coil Former | Glassfiber |
| Voice Coil Winding Depth | 30 mm |
| Magnet Gap Depth | 14 mm |
| Cone Material | Water protected Kevlar paper |
| Basket | Die cast aluminium |
| Magnet | Ferrite |
| Flux Density | 1.00 T |

### THIELE-SMALL PARAMETERS

| | |
|---|---|
| Resonance Frequency | 35.83 Hz |
| Mechanical Efficiency Factor (Qms) | 8.76 |
| Electrical Efficiency Factor (Qes) | 0.353 |
| Total Q (Qts) | 0.339 |
| Equivalent Air Volume (Vas ) | 162.78 Litres |
| Diaphragm mass ind. airload (Mms) | 208.66 grams |
| Voice Coil Resistance Re | 5.02 Ohms |
| Effective Diagram Area (Sd) | 1110 $cm^2$ |
| Peak Linear Displacement of Diaphragm (Xmax)* | ± 11.5 mm |
| Mechanical Compliance of Suspension (Cms) | 0.0893 mm/N |
| BL Product (BL) | 27.85 T.m |
| V.C. Inductance at 1 kHz (Le) | 1.87 mH |

*1. AES standard. Power is calculated on rated minimum impedance. Measurement is in 180 L box enclosure tuned 43 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.*

### MOUNTING INFORMATION

| | |
|---|---|
| Overall Diameter | 461 mm |
| Baffle Hole Diameter | 416 mm |
| Number of Mounting Holes | 8 eliptic 7 x 8,5 mm |
| Bolt Circle Diameter | 438/441 mm |
| Overall Depth | 202.5 mm |
| Net Weight | 12.9 kg |

Frequency Responce