

# 8 IT 200 MID

**SWETON®**



## 8 IT 200 MID – Precision Midrange for Pure Performance

Introducing the 8 IT 200 MID, a robust 8-inch midrange transducer engineered to deliver outstanding clarity, tight response, and low distortion. Designed using Klippel Analyzer System and CLIO 12.5, this driver features a high-efficiency motor with a BI factor of 11.23 N/A and a light moving mass for superb transient accuracy.

Its  $F_s$  of 79 Hz and  $Q_{ts}$  of 0.51 ensure balanced operation in both sealed and vented enclosures, while the smooth frequency response from 100 Hz to 4.5 kHz makes it perfect for vocal-rich applications.

Built for professional PA systems, stage monitors, and high-fidelity 2-way systems, the 8IT200 is tested and validated under Klippel's rigorous nonlinear and thermal stress protocols.

## Enclosure Recommendation

Type	Design Goal	Volume (Liters)	Tuning (Hz)
Sealed	Tight mid-bass	8–12 L	N/A
Vented	Punchy response	15–18 L	~75 Hz

## Crossover Recommendations

Filter Type	Frequency	Slope
High Pass (HPF)	80–100 Hz	12 dB/oct (2nd order)
Low Pass (LPF)	4.5–5 kHz	12–18 dB/oct (2nd–3rd order)

## Application Recommendations

- Midrange in 2-way or 3-way PA systems
- Ideal for vocal reproduction in PA, monitor, and stage speakers
- Indoor and outdoor performance use
- Compatible with crossover-based sound systems and DSPs

## Why Choose 8 IT 200 MID?

- **Crystal-Clear Midrange:** Optimized frequency response from 100 Hz to 4.5 kHz ensures natural vocals and mid.
- **Robust & Reliable:** High BI (11.23 N/A) and  $Q_{ms}$  (9.82) deliver powerful, accurate response with long-term durability.
- **Versatile Design:** Works great in sealed or vented enclosures with easy crossover.

## SPECIFICATIONS & PARAMETERS

### Specifications

Nominal Diameter	209 mm
Nominal Impedance	8 $\Omega$
Nominal Power Handling (AES)	200 W
Program Power	400 W
Sensitivity (1W/1m)	95 dB
Frequency Range	84 - 5500 Hz
Magnet Material	Ferrite
Voice Coil Diameter	51.2 mm (2 in)
Winding Material	CCAW
Former Material	Kapton
Winding Type	In/Out

### Mounting Info

Overall Diameter	209 mm
Bolt Circle Diameter	208 mm
Baffle Cutout Diameter	175 mm
Depth	95 mm
Flange and Gasket Thickness	11 mm
Gross Weight	3.72 Kgs

### Parameters

Resonant Frequency	Fs	79 Hz
DC Resistance	Re	7.2 $\Omega$
Electrical Q	Qes	0.54
Mechanical Q	Qms	9.82
Total Q	Qts	0.51
Compliance Equivalent Volume	Vas	13.71 Ltrs
Peak Diaphragm Displacement Volume	Vd	0.03 Ltrs
Effective Surface Area of Cone	Sd	213.8 cm <sup>2</sup>
Reference Efficiency	$\eta_0$	1.18%
Moving Mass including air load	Mms	19.20 gms
Motor Strength	Bl	11.23 T-m
Voice Coil Inductance	Le	0.31 mH
Efficiency Bandwith Product	EBP	146 Hz
Voice Coil Overhang	Xmax	$\pm 1.5$ mm

### Recone Kit

Recone Kit Number	REC8IT200MID
-------------------	--------------

$Z(f, x=0)$  Impedance

