



# IMPERIUM 18XL

SUB BASS DRIVER

**18" / 457.2 mm**  
CHASSIS DIAMETER

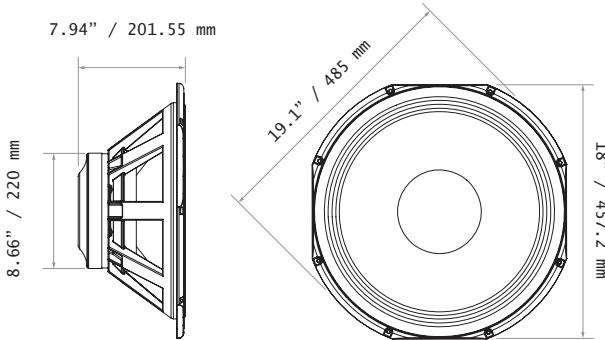
**2600 W**  
PROGRAM POWER

**30 Hz - 2 kHz**  
FREQUENCY RESPONSE

**5" / 127 mm**  
VOICE COIL DIAMETER

**96 dB**  
SENSITIVITY (1W/1m)

**10.5 mm Xmax**  
MAX. LINEAR EXCURSION



- + Lightweight Y35 ferrite motor design. Only weighs 13 kg.
- + New 18-Inch vented cast aluminium chassis design.
- + Aluminium core heat sink and large motor venting provides reduced power compression and effective temperature regulation.
- + Powerful and accurate low frequency sound reproduction.
- + Peak to peak maximum excursion of 52 mm.
- + Dual 'spaced' suspension system and advanced materials offers ultra-linearity, mechanical stability and superior acoustic performance at high levels of excursion.
- + Suitable for bass reflex or horn loaded designs.
- + 5-Inch Copper voice coil.

### GENERAL SPECIFICATIONS

Nominal Chassis Diameter	18" / 457.2 mm
Nominal Impedance <sup>(1)</sup>	8 Ohm
Minimum Impedance Zmin	6.5 Ω
AES Power Handling <sup>(2)</sup>	1300 W (A.E.S.)
Program Power	2600 W
<b>Peak Power</b> (6dB Crest Factor)	<b>5200 W</b>
Frequency Range <sup>(3)</sup>	30 Hz - 2 kHz
<b>Sensitivity</b> (1W/1m)	<b>96 dB</b>
<b>Magnet Material</b>	<b>Ferrite</b>
Magnet Weight	105.8 oz
Magnetic Gap Depth	0.35" / 9 mm
Flux Density	0.98 Tesla
Former Material	Glass Fibre
Voice Coil Material	Copper
Coil Winding Height	0.98" / 25 mm
<b>Voice Coil Diameter</b>	<b>5" / 127 mm</b>
Cone/ Dust Dome Material	Paper / Paper
Surround / Edge Termination	Polyvinyl Damped Multi Roll. Poly Cotton

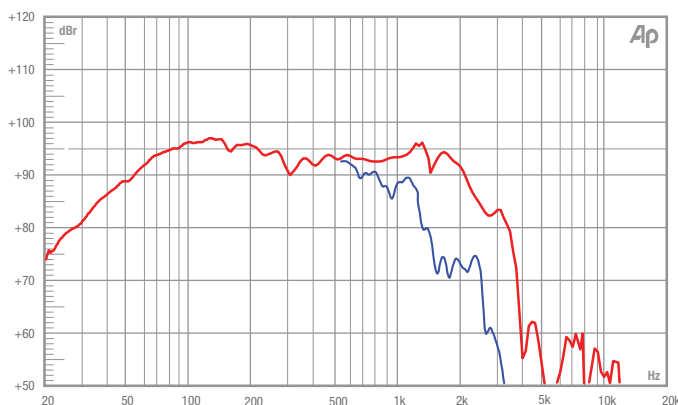
### TECHNICAL & THIELE SMALL PARAMETERS

Fs	36 Hz
Re	5.9 Ω
Qms	11.1
Qes	0.56
Qts	0.53
Vas	205 Litres
Vd	1.19 Litres
Cms	0.11 mm/N
Bl	20.36 T/m
Mms	174 g
Xmax	10.5 mm
Sd	1134 cm <sup>2</sup>
Efficiency	1.65 %
Le (1k Hz)	2.9 mH
EBP	64.29 Hz
Effective Piston Diameter	15.68" / 398.27 mm
Rec. Enclosure Volume	60 - 230 Litres

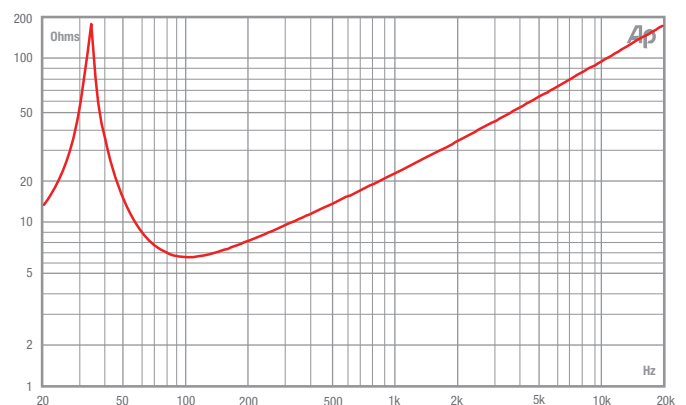
### MOUNTING / SHIPPING INFORMATION

Overall Diameter	19.1" / 485 mm
Width Across Flats	18" / 457.2 mm
Depth	7.94" / 201.55 mm
Flange Height	0.465" / 11.8 mm
Baffle Hole Diameter F/M	16.53" / 419.86 mm
Baffle Hole Diameter R/M	16.33" / 414.78 mm
<b>Chassis Material</b>	<b>Die-cast Aluminium</b>
Gasket Supplied	Front
Outer Fixing Holes	8x ø 7 mm on 468 mm PCD
Inner Fixing Holes	8x ø 7 mm on 438.15 mm PCD
Connectors <sup>(4)</sup>	Push-button Spring Terminals
<b>Weight</b>	<b>28.85 lb / 13.09 kg</b>
Shipping Weight	31 lb / 14.06 kg
Packing Carton Dimensions (mm)	(W) 495 (D) 495 (H) 255

### FREQUENCY RESPONSE DATA<sup>(3)</sup>



### IMPEDANCE



(1) Please enquire about alternative impedances.

(2) A.E.S. power handling test. Pink noise bandpass filtered at 12 dB per octave with cut-off frequencies of 35 Hz and 350 Hz. Driver mounted in free air, test signal applied at rated power for two hours.

(3) Half space response measured in a 975 Litre sealed box. Blue line = fundamental 45° off-axis. Please note that the frequency response measurements are supplied for comparison only and are not a measure of the low frequency performance which may be achieved in a fully optimised system.

(4) Positive voltage at red terminal causes forward motion of cone.