SOVEREIGN 12-250TC
FULL RANGE DRIVER

12” / 304.8 mm
CHASSIS DIAMETER

500 W
PROGRAM POWER

45 Hz - 17 kHz
FREQUENCY RESPONSE

2” / 50.8 mm
VOICE COIL

100 dB
SENSITIVITY (1W/ 1m)

3.5 mm Xmax
MAXIMUM LINEAR EXCURSION

+ Triple cone configuration and geometry provides genuine, unrivalled extended frequency range up to 17 kHz.
+ The finest option for full range output in compact PA systems.
+ Superb when deployed for house of worship applications offering well defined vocal presence and clarity.
+ Optimised cone pulp offers increased strength, durability and performance.
+ 2-Inch Copper clad aluminium voice coil.

GENERAL SPECIFICATIONS
Nominal Chassis Diameter 12” / 304.8 mm
Nominal Impedance (1) 8 Ohm
Minimum Impedance Zmin 7.4 Ω
AES Power Handling (2) 250 W (A.E.S.)
Program Power 500 W
Peak Power (4dB Creep Factor) 1000 W
Frequency Range (+dB) 45 Hz - 17 kHz
Sensitivity (1W/ 1m) 100 dB
Magnet Material Ferrite
Magnet Weight 56 oz
Magnetic Gap Depth 0.31” / 7.87 mm
Flux Density 1.1 Tesla
Former Material Glass Fibre
Voice Coil Material Copper Clad Aluminium Wire
Coil Winding Height 0.43” / 10.92 mm
Voice Coil Diameter 2” / 50.8 mm
Cone/ Dust Dome Material Paper / Paper
Surround / Edge Polyvinyl Damped Dbl.
Termination Half Roll Linen

TECHNICAL & THIELE SMALL PARAMETERS
Fs 50 Hz
Re 7.2 Ω
Qms 7.6
Qes 0.72
Qts 0.64
Vas 78.06 Litres
Vd 0.165 Litres
Cms 0.195 mm/N
Bi 13 T/m
Mms 52 g
Xmax 3.5 mm
Sd 530.9 cm²
Efficiency 1.3 %
Le (1k Hz) 1.56 mH
EBP 69.44 Hz
Effective Piston Diameter 10.31” / 261.87 mm
Rec. Enclosure Volume 1.05 - 2.64 ft³ / 30 - 75 Litres

MOUNTING / SHIPPING INFORMATION
Overall Diameter 12” / 304.8 mm
Width Across Flats N/A
Depth 5.43” / 137.92 mm
Flange Height 0.27” / 6.9 mm
Baffle Hole Diameter F/M 11.25” / 285.75 mm
Baffle Hole Diameter R/M 11.25” / 285.75 mm
Chassis Material Pressed Steel
Gasket Supplied Front & Rear
Outer Fixing Holes 8x ø 7.0 mm on 11.75” / 298 mm PCD
Inner Fixing Holes N/A
Connectors (3) Solder Tag
Weight 9.47 lb / 4.3 Kg
Shipping Weight 11.35 lb / 5.15 Kg
Packing Carton Dimensions (mm)(W) 330 (D) 330 (H) 170

FREQUENCY RESPONSE DATA (3)

(1) Please enquire about alternative impedances.
(2) A.E.S. power handling test. Pink noise bandpass filtered at 12 dB per octave with cutoff frequencies of 50 Hz and 500 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.