



PHL Audio HP2513NdS

8 inches low - mid driver

Nominal Diameter	8 " / 20 cm
Rated Impedance	16 Ω
Reference efficiency (1W @ 1m)	95.5 dB SPL
Power Handling Capacity	250 W AES
SPL max (continuous)	116 dB SPL
Usable frequency range	70 - 3000 Hz
Speaker net mass	2.45kg

Architecture highlights :

- Neodymium magnet system with symmetric BL(x) and Le(x)
- Natural convection Intercooler System
- High compliance double half-roll Fabric Surround for low Fs
- Double side Coated diaphragm (Tropical withstanding)
- Very high sensitivity

Motor architecture

Voice coil diameter	mm	51
Voice coil length	mm	13
Air gap height	mm	8

Typical characteristics

Rated impedance	Z	Ω	16
Half space sensitivity (1W@1m)	-	dB SPL	95.5
Usable freq. range	-	Hz	70- 3000
Power handling capacity (AES)	-	W	250
Max Sound Pressure Level	SPL _{max}	dB SPL	116
Min. impedance modulus	Z _{min}	Ω @Hz	14.3@410
Voice-coil inductance @ 1kHz	Le _{1k}	mH	2.431
Voice-coil inductance @ 10kHz	Le _{10k}	mH	1.116
BL product	BL	N/A	28.0
Moving mass	Mms	kg	0.028

Thiele-Small parameters

Resonance frequency	Fs	Hz	70 (± 10)
DC Resistance	Re	Ω	11.3 (± 1.1)
Mechanical quality factor	Qms	1	4.93
Electrical quality factor	Qes	1	0.18
Total quality factor	Qts	1	0.17
Suspension compliance	Cms	10 ⁻⁶ .m/N	180
Effective piston area	Sd	m ²	0.0219
Equivalent Cas air load	Vas	m ³	0.0124
Max linear excursion	Xmax	mm	± 4.0
Linear displacement volume	Vd	10 ⁻³ .m ³	0.0876
Reference efficiency	η_0	%	2.3
Unity load volume	Vas.Qts ²	10 ⁻³ .m ³	0.4

Absolute maximum ratings

Short term max. input voltage	Vmax	V	125
Max.excursion before damage	Xdam	mm	± 10.0
Ambient operating temperature	Ta	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environmental withstanding			Tropical



Mounting information

Air volume occupied by the driver	10 ⁻³ .m ³	0.50
Speaker net mass	kg	2.5
Baffle cut-out diameter (front mounting)	mm	185.0
Bolt number & Metric diameter	-	4x M5
Bolt circle diameter	mm	217.0
Max overall dimension (on ears)	mm	234.0
Max overall dimension (out of ears)	mm	205.0
Flange height	mm	9.5
Max magnet diameter	mm	97.0
Max depth (front mounting)	mm	92.0
Recommended reflex box	Lts / Hz	7L / 85Hz
Electrical connection	6.35x0.8 + 4.8x0.5 FASTON	

