



PHL Audio HP1220

6.5 inches bass driver

Nominal Diameter	17 cm / 6.5 "
Rated Impedance	8 Ω
Reference efficiency (1W @ 1m)	91.5 dB SPL
Power Handling Capacity	100 W AES
SPL max (continuous)	108 dB SPL
Usable frequency range	50 - 4000 Hz
Speaker net mass	2.15 kg

Architecture highlights :

- Studio Monitoring version of PHL Audio 1180
- High excursion S roll rubber surround
- High definition ultra light CCAR Voice coil
- Natural convection Intercooler System
- Both side coated curvilinear cone

Motor architecture			
Voice coil diameter	mm	38	
Voice coil length	mm	13	
Air gap height	mm	6	

Typical characteristics			
Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	91.5
Usable freq. range	-	Hz	50 - 4000
Power handling capacity (AES)	-	W	100
Max Sound Pressure Level	SPL _{max}	dB SPL	108
Min. impedance modulus	Z _{min}	Ω @Hz	6.6@360
Voice-coil inductance @ 1kHz	Le _{1k}	mH	0.638
Voice-coil inductance @ 10kHz	Le _{10k}	mH	0.229
BL product	BL	N/A	8.3
Moving mass	Mms	kg	0.012

Thiele-Small parameters			
Resonance frequency	Fs	Hz	45 (± 6)
DC Resistance	Re	Ω	6.1 (± 0.6)
Mechanical quality factor	Qms	1	3.08
Electrical quality factor	Qes	1	0.30
Total quality factor	Qts	1	0.27
Suspension compliance	Cms	10 ⁻⁶ .m/N	1040
Effective piston area	Sd	m ²	0.0143
Equivalent Cas air load	Vas	m ³	0.0299
Max linear excursion	Xmax	mm	± 4.0
Linear displacement volume	Vd	10 ⁻³ .m ³	0.0573
Reference efficiency	η_0	%	0.9
Unity load volume	Vas.Qts ²	10 ⁻³ .m ³	2.2

Absolute maximum ratings			
Short term max. input voltage	Vmax	V	55
Max.excursion before damage	Xdam	mm	4.0
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	2.15
Baffle cut-out diameter (front mounting)	mm	146.0
Bolt number & Metric diameter	-	4x M5
Bolt circle diameter	mm	172.0
Max overall dimension (on ears)	mm	187.5
Max overall dimension (out of ears)	mm	162.5
Flange height	mm	8.0
Max magnet diameter	mm	117.5
Max depth (front mounting)	mm	68.5
Recommended reflex box	Lts / Hz	15L / 58Hz
Electrical connection	6.35x0.8 FASTON	

