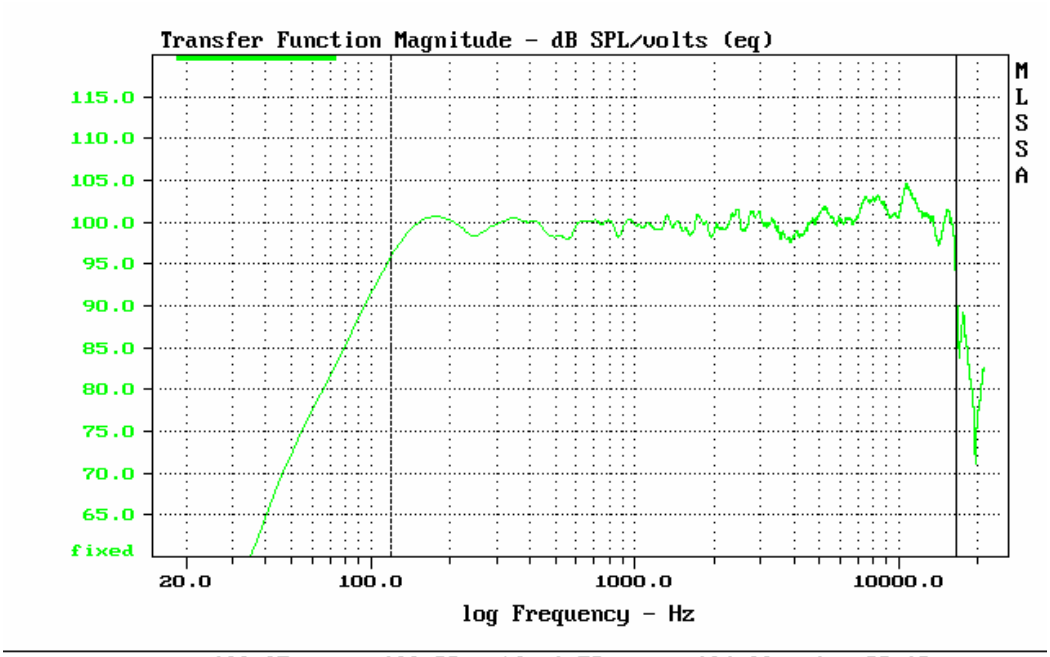
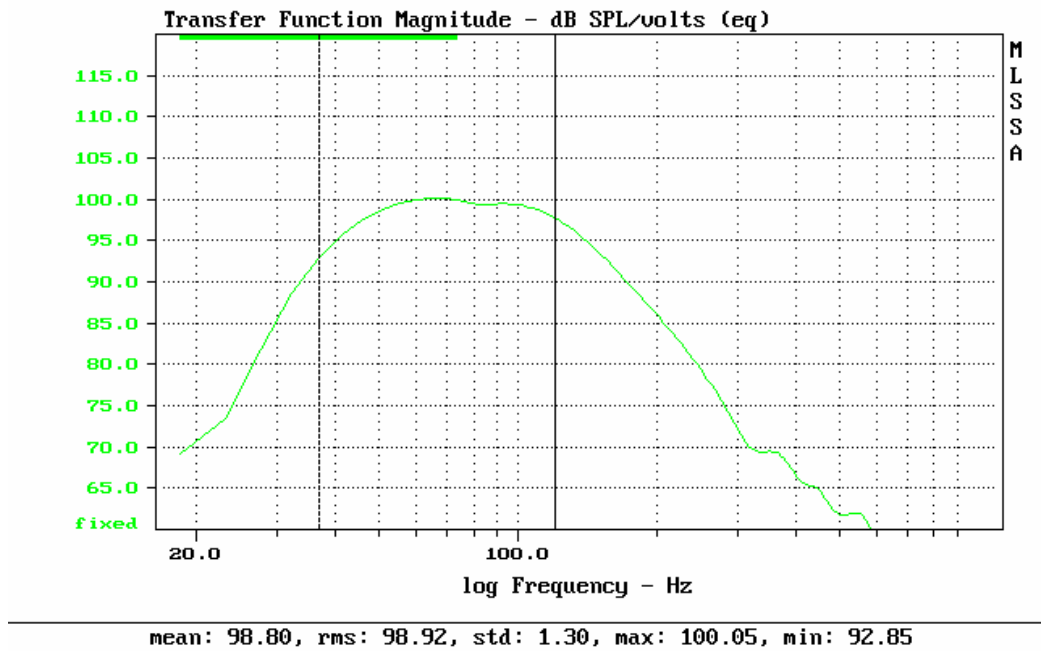
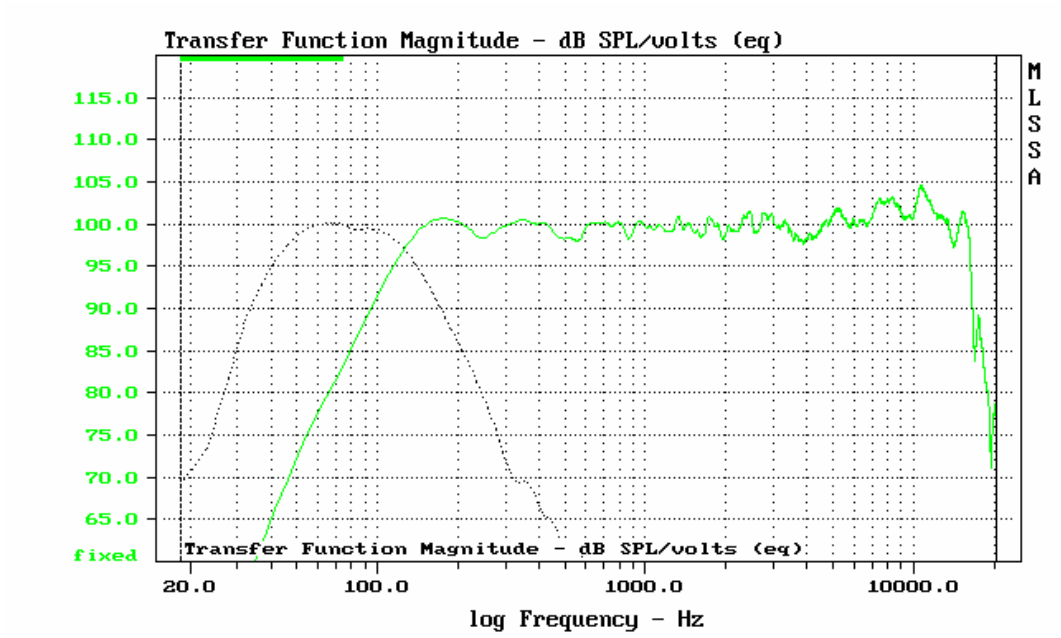
SELF-POWERED KANGURO 1215A – technical information



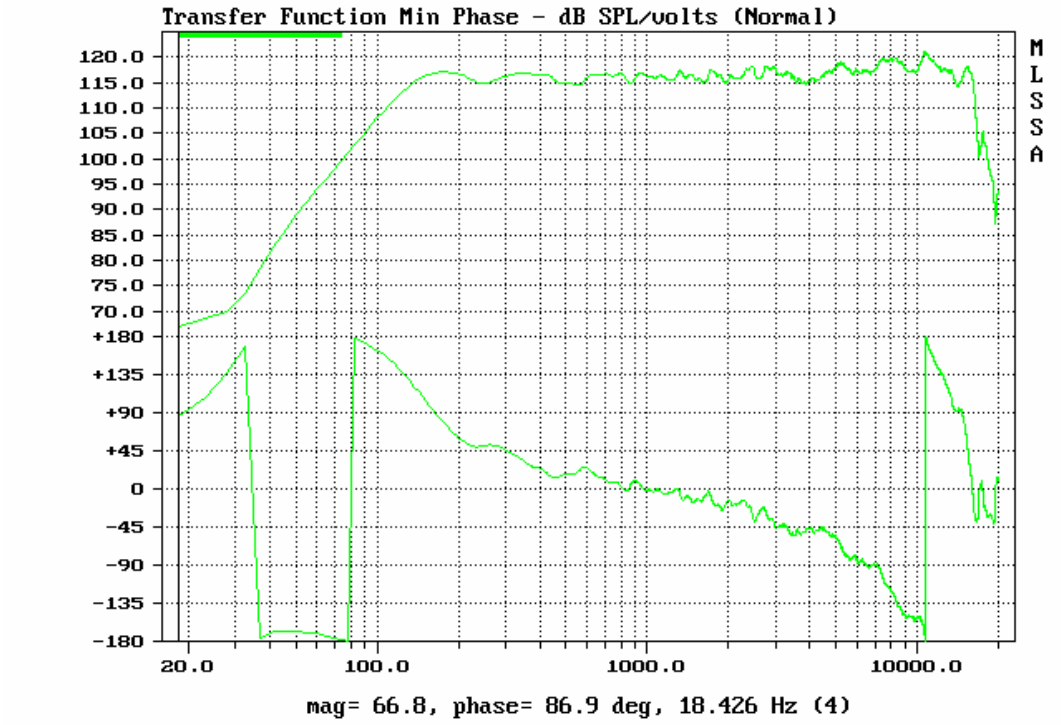
mean: 100.67, rms: 100.83, std: 1.53, max: 104.66, min: 92.18



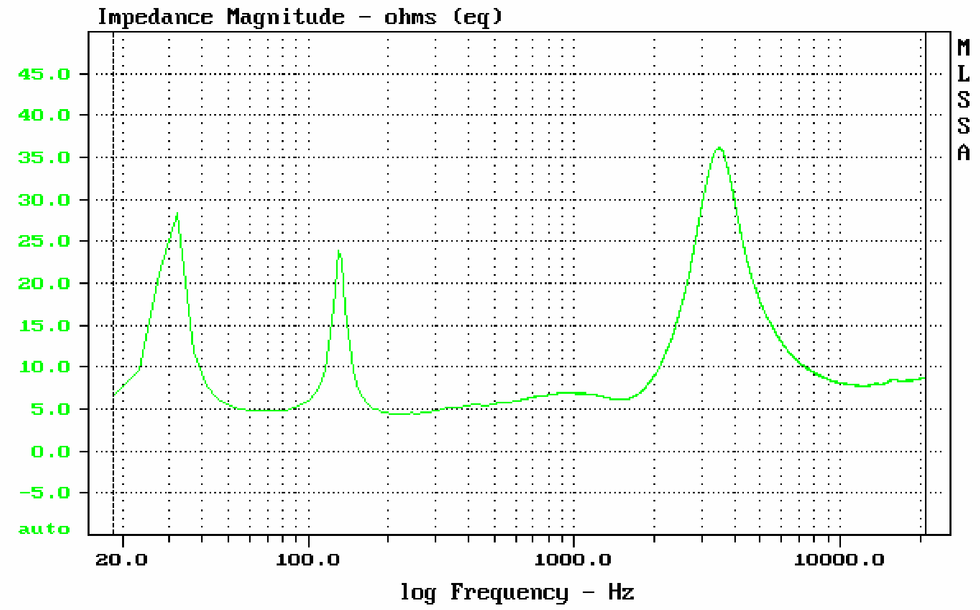
mean: 98.80, rms: 98.92, std: 1.30, max: 100.05, min: 92.85



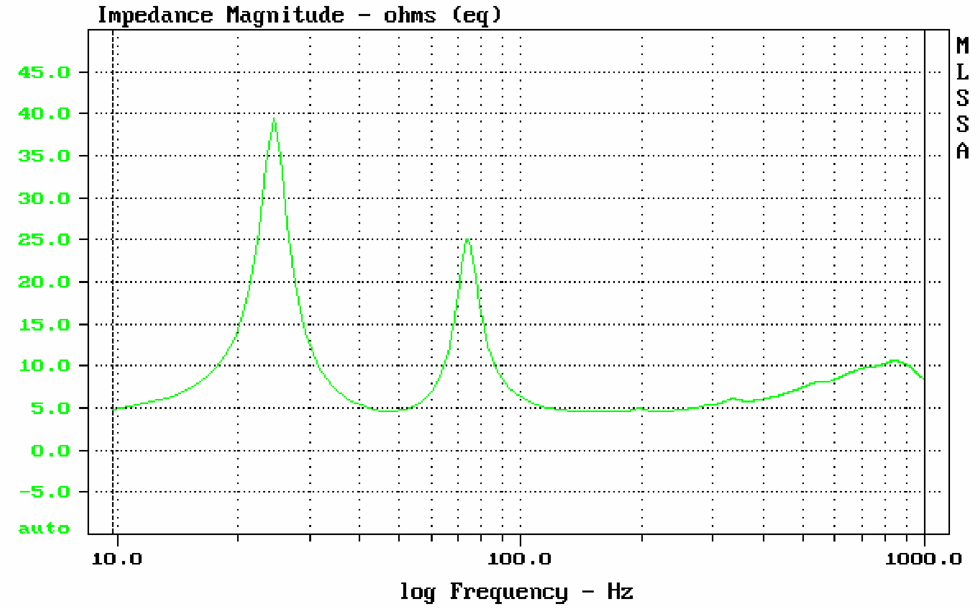
Kanguro K-1201A & K-1501A



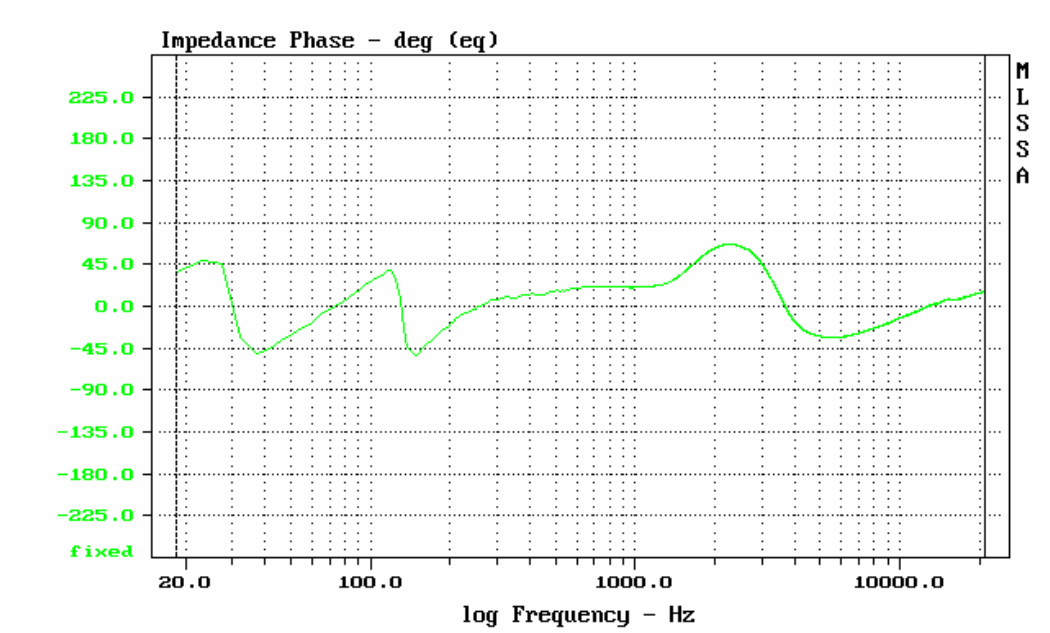
Kanguro K-1201A MLSSA: Bode Plot



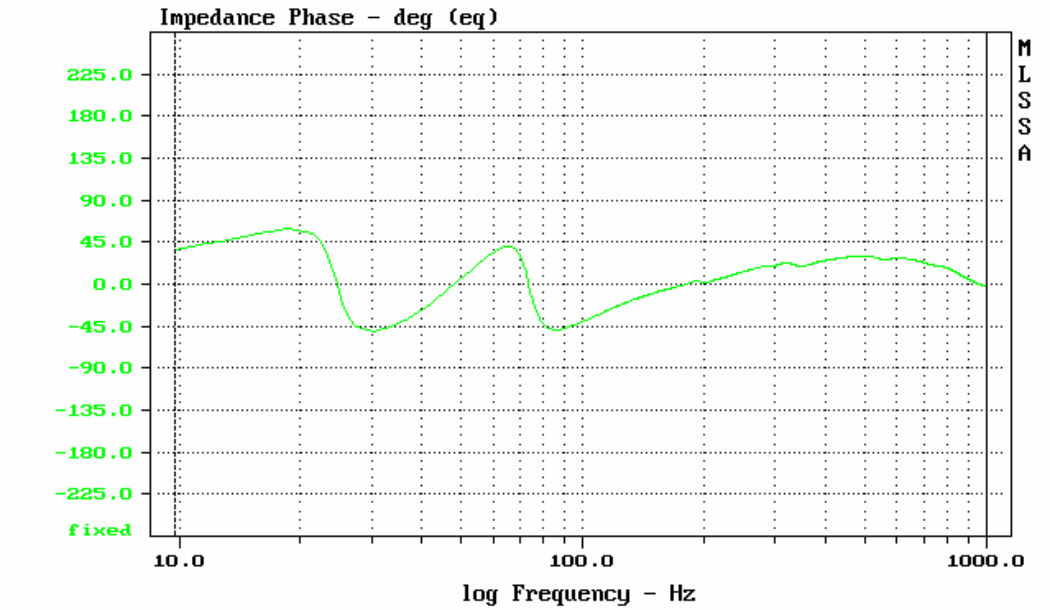
mean: 11.03, rms: 12.85, std: 6.596, max: 36.2, min: 4.385



mean: 8.029, rms: 8.638, std: 3.185, max: 39.42, min: 4.605



max: 66.3225 x = 2349.278 (510), min: -52.0878 x = 147.406 (32);



max: 58.8753 x = 18.555 (19), min: -50.2777 x = 30.273 (31);

BUILT-IN AMPLIFIERS' SPECIFICATIONS

KANGURO Satellite (K-1201A)

Performance features

- 500W @ 0.02% THD+N, 1kHz, 4Ω
- Peak output current > 45A
- 117dBA dynamic range
- THD = 0.0009% @ 100mW, 5kHz
- THD+N < 0.1%, 0.1W – 500W, 4Ω
- Efficiency = 93% @ 300W / 8Ω
- Output impedance < 5mΩ @ 1kHz
- Power Supply Rejection Ratio > 60dB
- Output DC-offset < 25mV

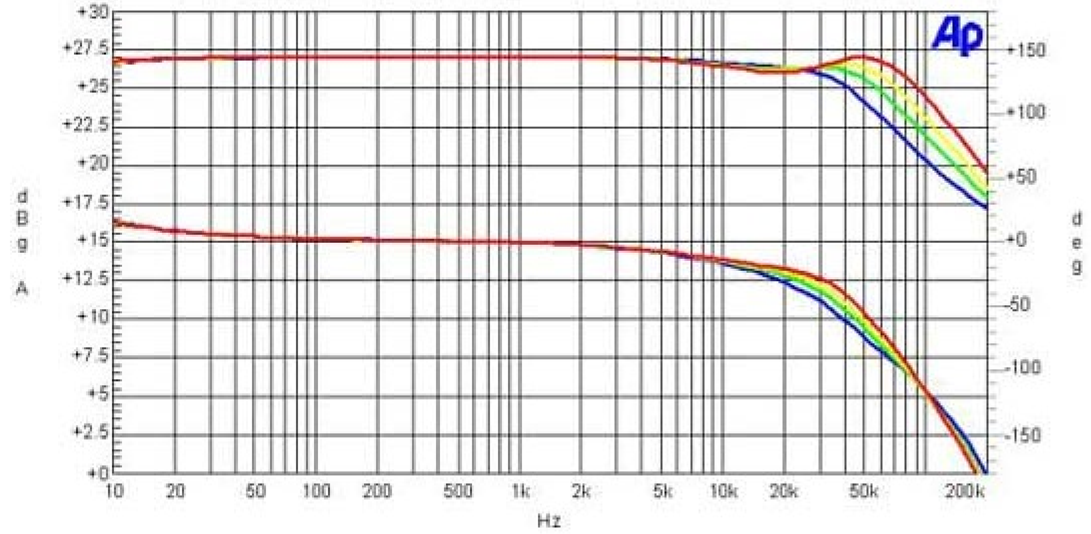
Other features

- Soft clipping
- Soft start-up
- Stand-by
- Soft mute/de-mute
- Under voltage protection
- Monitor output
- Balanced input
- Balanced output

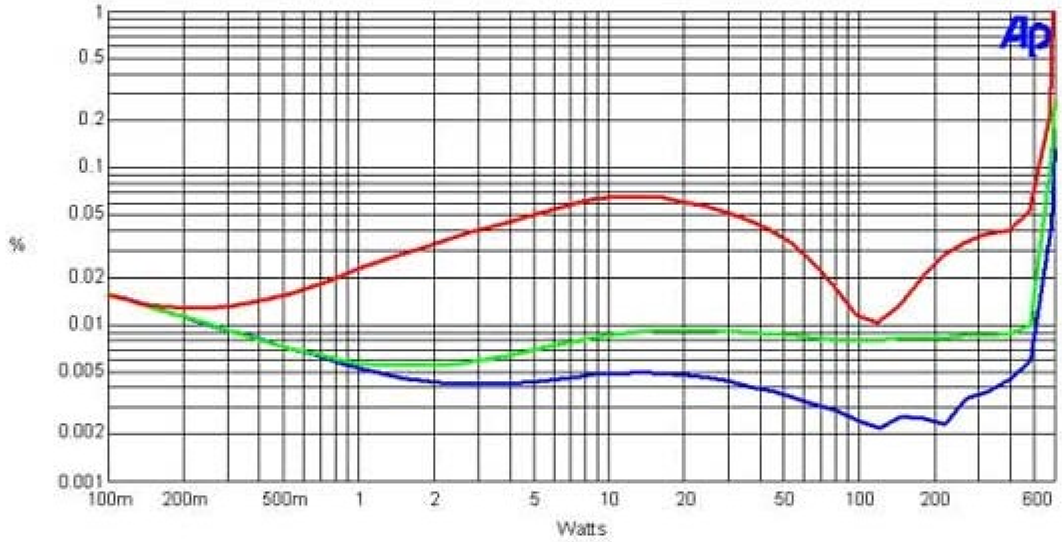
Audio specifications

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
THD+N	THD+N in 4Ω (AES17 measurement filter)	f = 1kHz, P_O =1W		0.006	0.01	%
THD+N	Maximal THD+N in 4Ω (AES17 measurement filter)	10Hz < f < 20kHz 100mW < Po < 500W		0.1	0.12	%
$V_{N,O}$	Output referenced idle noise	A-weighted 10Hz < f < 20kHz	65	75	115	μV
$V_{OFF,Diff}$	Differential offset on output terminals	Terminated input			±25	mV
A_V	Nominal Voltage Gain	f = 1 kHz	26.8	27.1	27.4	dB
f	Frequency response	20Hz - 20kHz, All loads		±0.5	±1.0	dB
f_u	Upper bandwidth limit (-3dB)	R_L = 8Ω		50		kHz
Z_L	Load impedance range		2	4	o	Ω
D	Dynamic range	A-weighted		117		dB
IMD1	Intermodulation (CCIF)	f = 19kHz, 20kHz, PO = 10W		0.002	0.001	%
IMD2	Intermodulation (SMPTE)	f = 60Hz, 7kHz(1:4), PO=10W		0.02	0.03	%

Frequency response



THD+N



KANGURO Subwoofer (K-W15A)

Performance features

- **1000W @0.04% THD+N, 100Hz, 4O**
- **Peak output current > 50A**
- **120dBA dynamic range**
- **THD+N < 0.1%, 0.1W – 1000W, 4O**
- **Efficiency = 93% @500W, 8O**
- **Output impedance < 5mO >@1kHz**
- **Power Supply Rejection Ratio > 60dB**
- **Output DC offset < 40mV**

Other features

- **Soft clipping**
- **Soft start-up**
- **Stand-by**
- **Soft mute/ de mute**
- **Under voltage protection**
- **Monitor output**
- **Balanced input**
- **Balanced output**

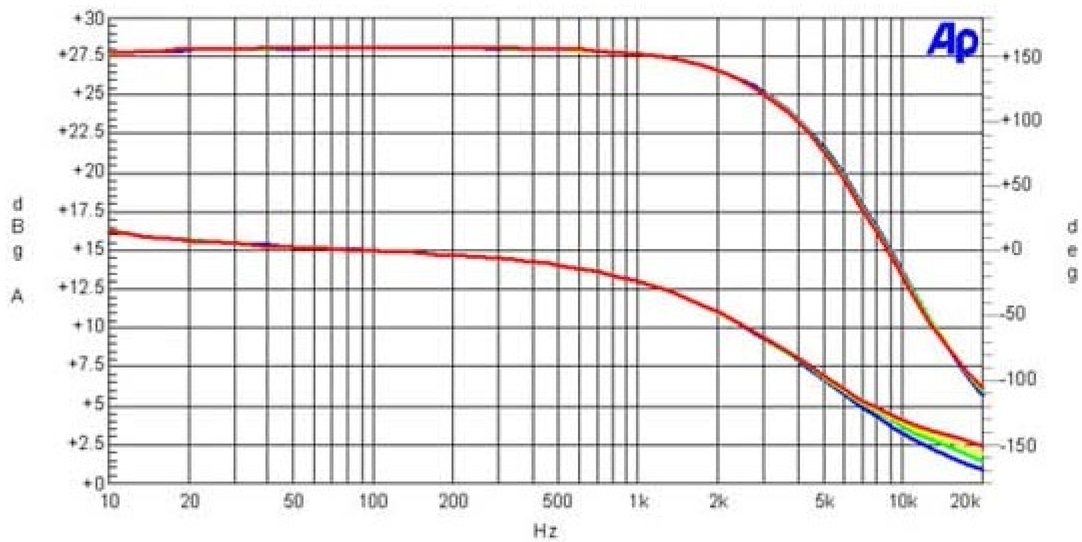
Power specifications

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V_P	Power Supply	Operation	40	120	125	V
P_O	Output power @ 0.1% THD+N 10Hz < f < 1kHz (AES17 measurement filter)	$R_L = 4\Omega$, V_P = 120V $R_L = 6\Omega$, V_P = 120V $R_L = 8\Omega$, V_P = 120V		1000 800 600		W
I_{VP}	Quiescent current	V_P = 120V	20	35	40	mA
I_{VCC}	Quiescent current	V_{CC} = 12V		200	230	mA
I_{VSS}	Quiescent current	V_{SS} = -12V		25		mA
η	Power stage Efficiency	$R_L = 8\Omega$, P_O = 500W		93		%
PSRR	Power Supply Rejection Ratio of V_P	Voltage Ripple @ f = 100 - 120 Hz	60			dB

Audio specifications

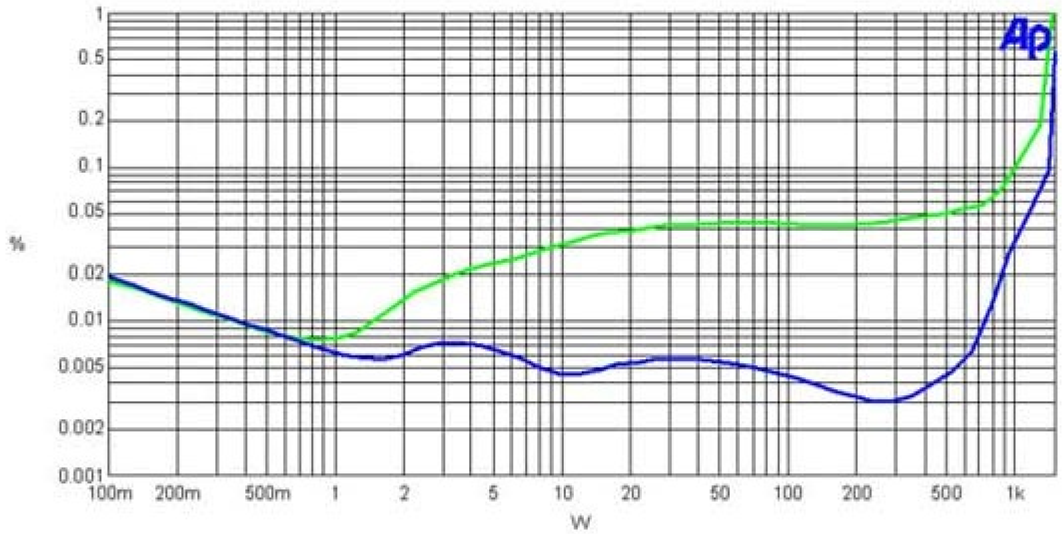
Symbol	Parameter	Conditions	Min	Typ	Max	Unit
THD+N	**THD+N in 4Ω (AES17 measurement filter)**	**f = 100Hz, P_O =1W**		**0.008**	**0.01**	**%**
THD+N	**Maximal THD+N in 4Ω (AES17 measurement filter)**	**10Hz < f < 1kHz 100mW < Po < 100W**		**0.05**	**0.07**	**%**
$V_{N,O}$	**Output referenced idle noise**	**A-weighted 10Hz < f < 20kHz**	**70**	**80**	**100**	**μV**
$V_{OFF,Diff}$	**Differential offset on output terminals**	**Terminated input**			**±40**	**mV**
A_V	**Nominal Voltage Gain**	**1 kHz**	**27.8**	**28.1**	**28.4**	**dB**
f	**Frequency response**	**20 - 1kHz, All loads**		**±0.5**	**±1**	**dB**
f_u	**Upper bandwidth limit (-3dB)**	**R_L = 4Ω**		**3**		**kHz**
Z_L	**Load impedance range**		**2**	**4**	**°**	**Ω**
D	**Dynamic range**	**A-weighted**		**120**		**dB**

Frequency response



Frequency response in 4Ω, 8Ω, and 16Ω and open load

THD+N



THD+N vs. output power at 100Hz and 1kHz in 4Ω (AES measurement filter).