



Superior Magnetics Since 1979



# CMOB-3

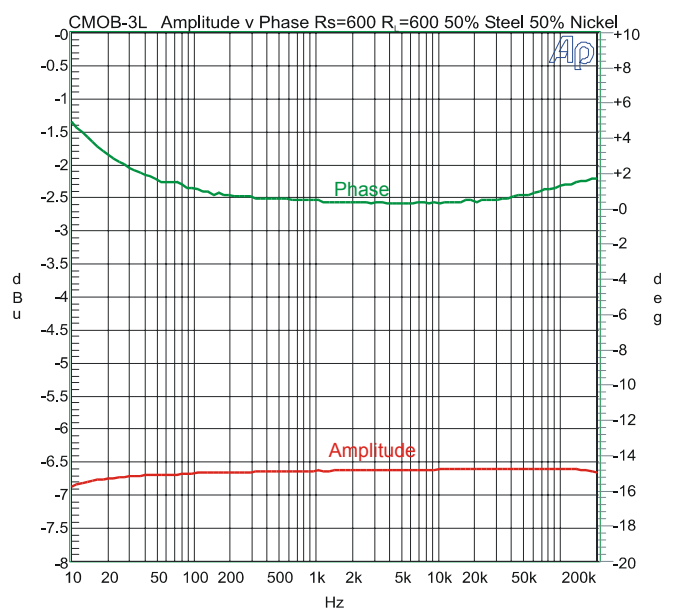
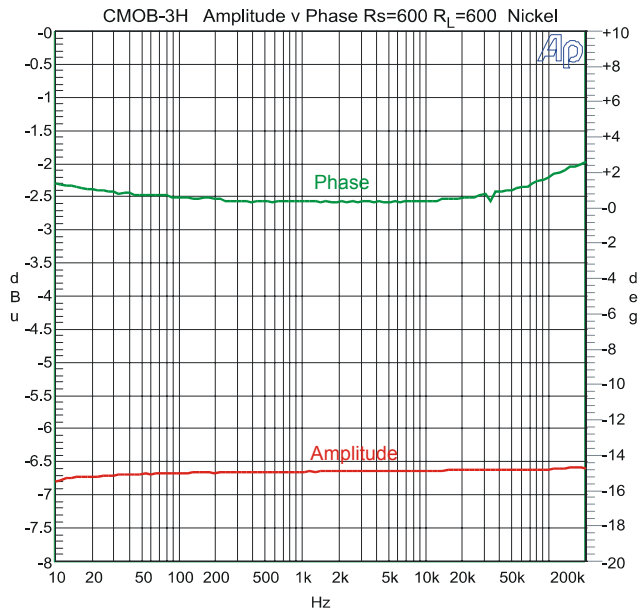
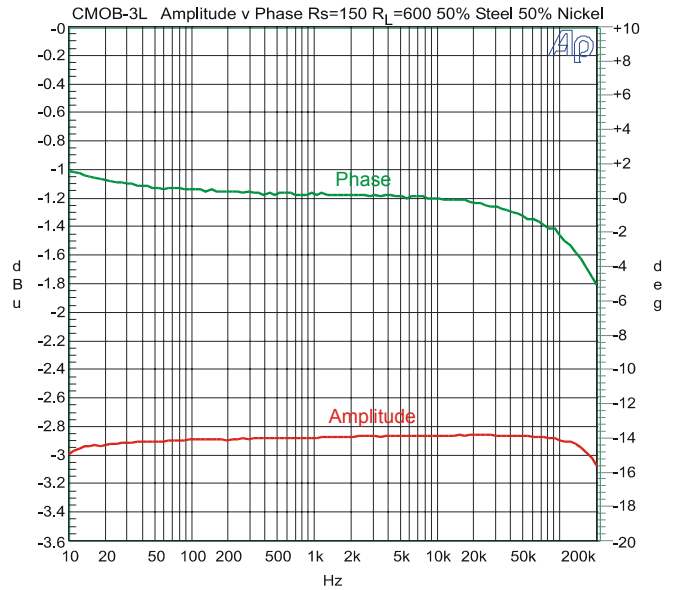
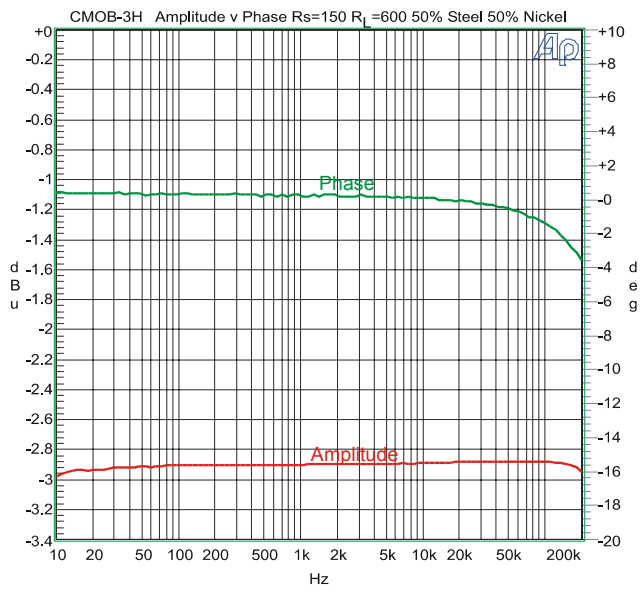
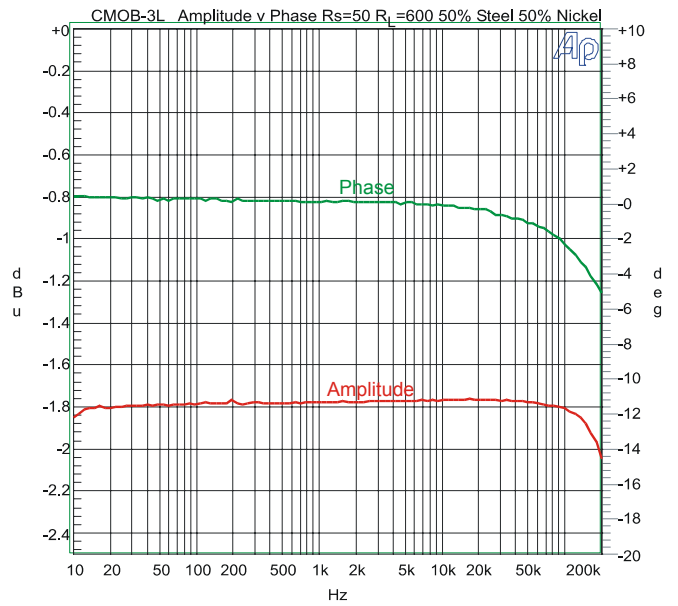
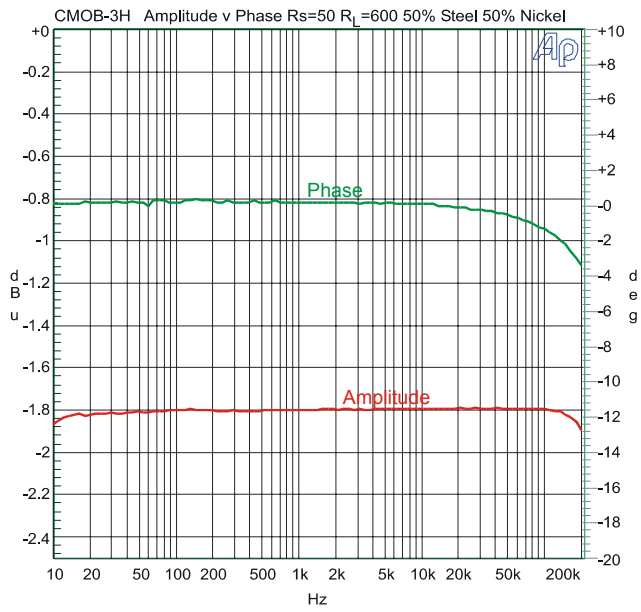
## LINE OUTPUT TRANSFORMER Bifilar Windings

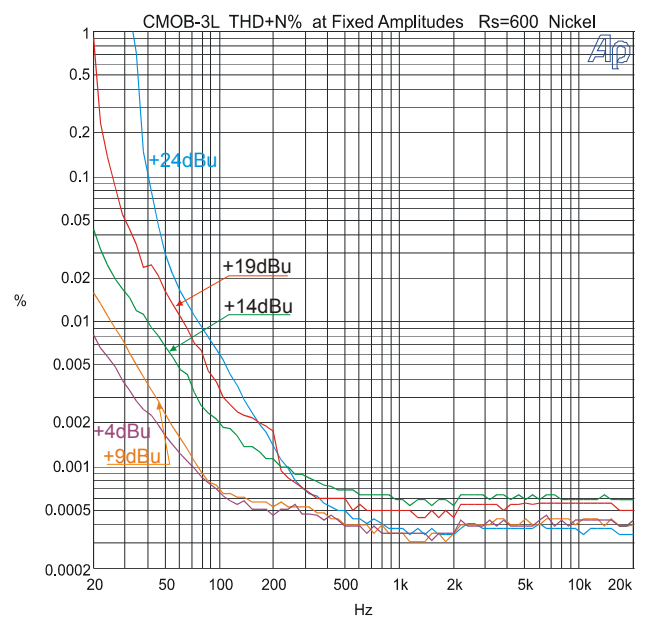
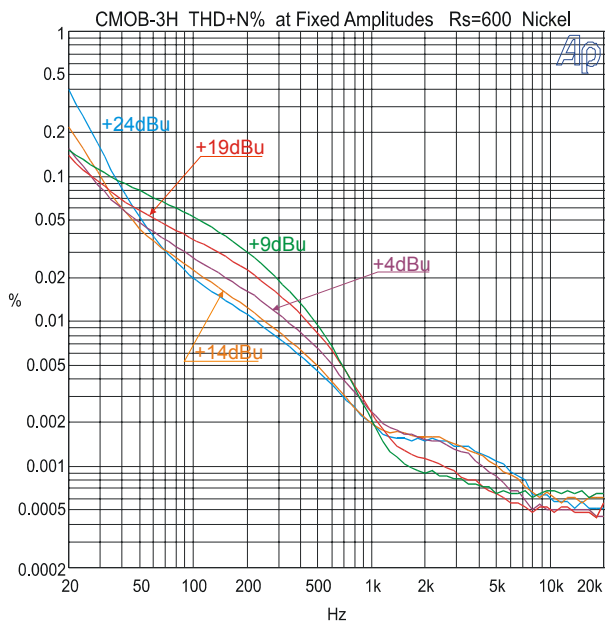
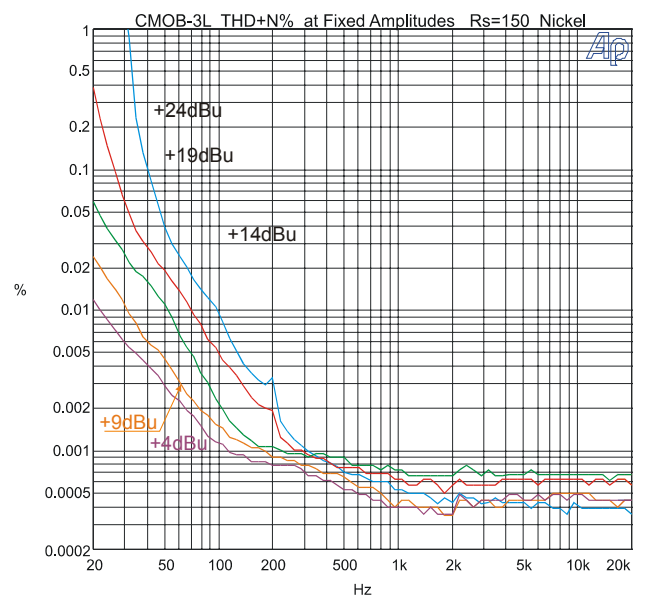
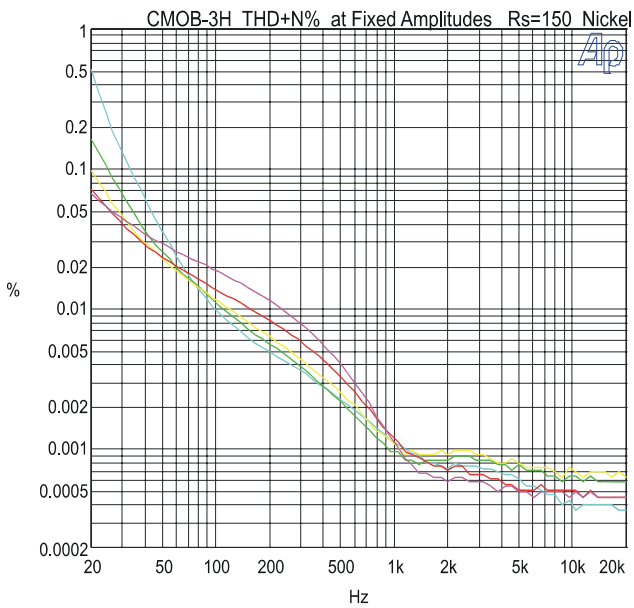
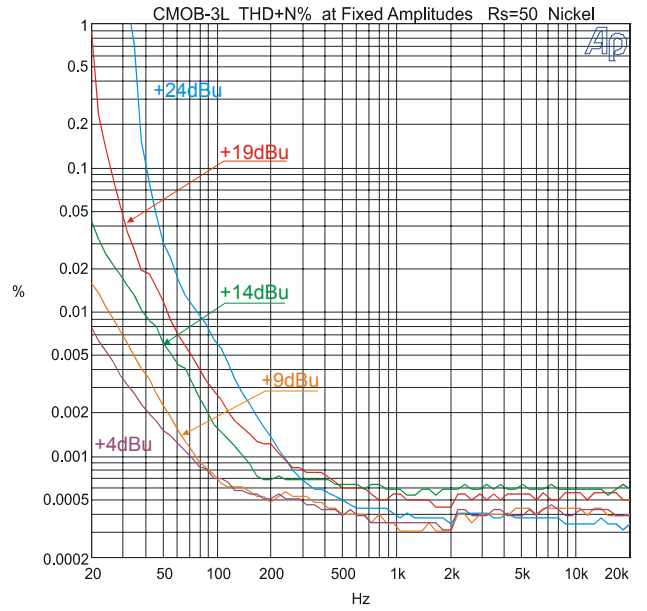
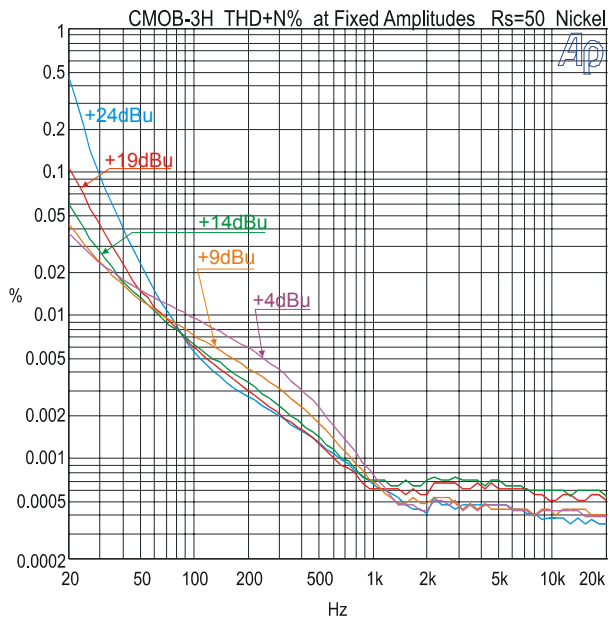
- Excellent bandwidth: -0.1 dB at 200 kHz,
- $R_s=150\Omega$
- 80% Nickel (“HiNi”) or 50% Ni/50% Steel laminations
- Distortion  $\leq 0.02\%$  typ at 20 Hz,  $R_s=150\Omega$  HiNi
- +19 dBu at 20 Hz, 1% THD+N  $R_s \leq 150\Omega$
- Phase Shift  $\sim -0.2^\circ$  at 20 kHz,  $R_s=150\Omega$
- Low insertion loss

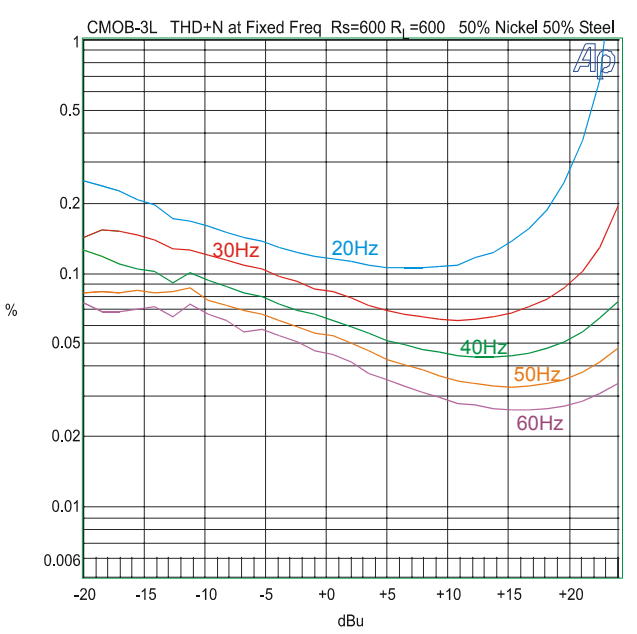
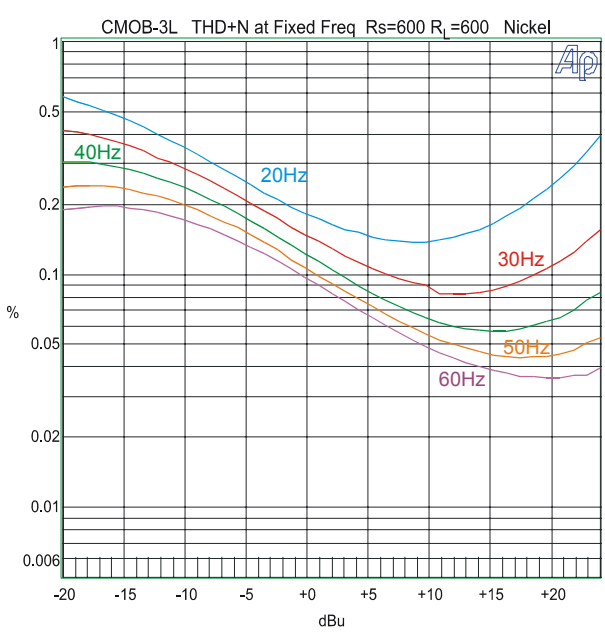
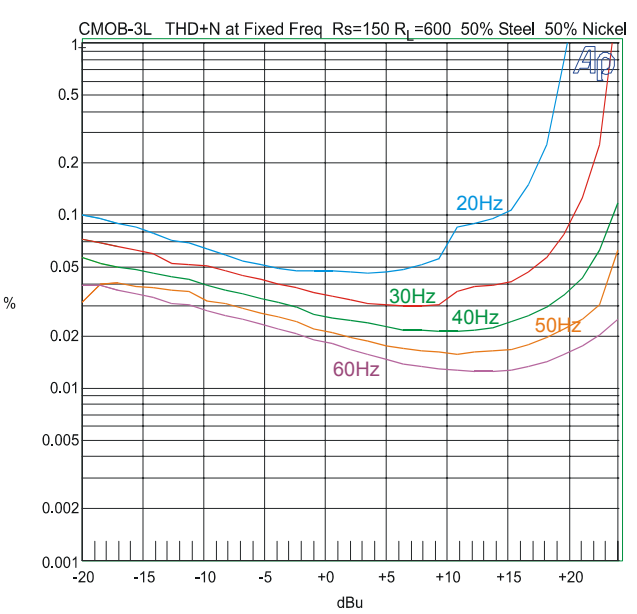
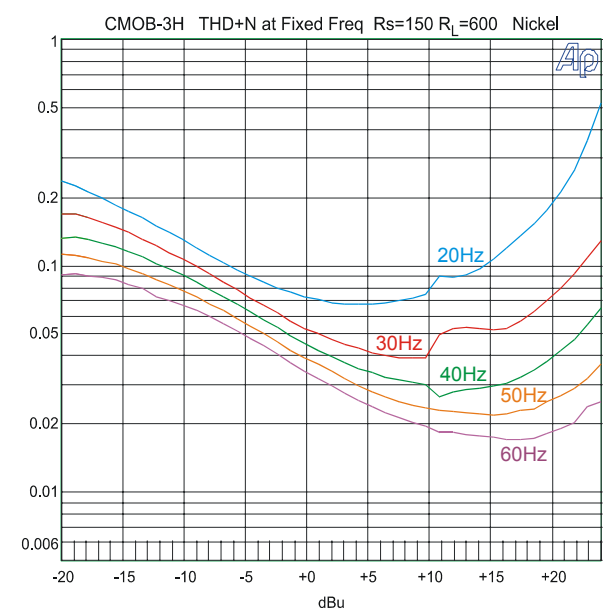
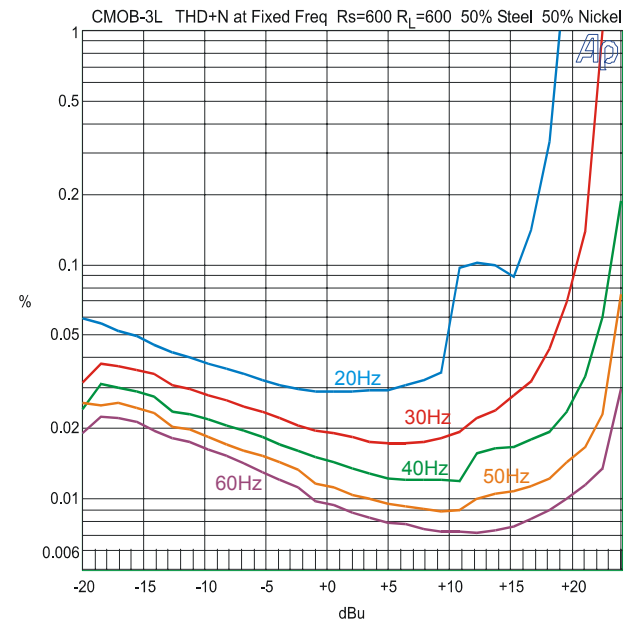
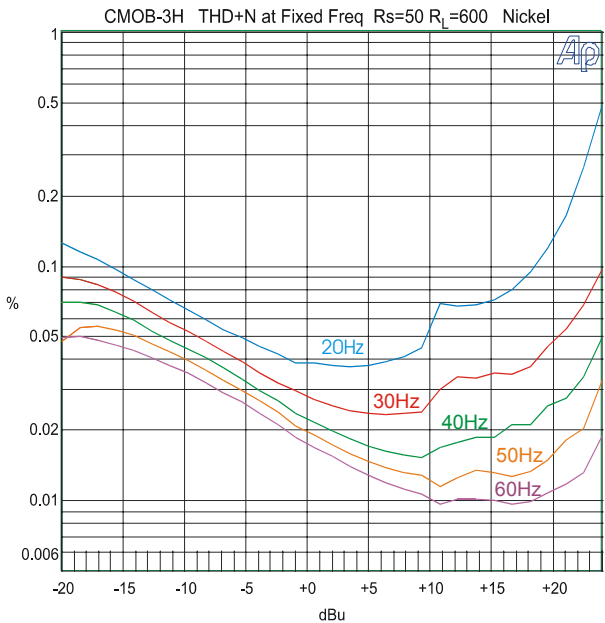
The CineMag CMOB-3 output transformer uses bifilar construction techniques. This two winding transformer delivers good coupling between windings as well as excellent bandwidth. It is available both with 80% Nickel (“HiNi”) and 50% Nickel/50% Steel laminations. It was designed to be driven from source impedances of up to 600 $\Omega$ . As with all line driving devices, the amplifier feeding it should be capable of cleanly delivering the power required to reach maximum operating level. Steel core available.

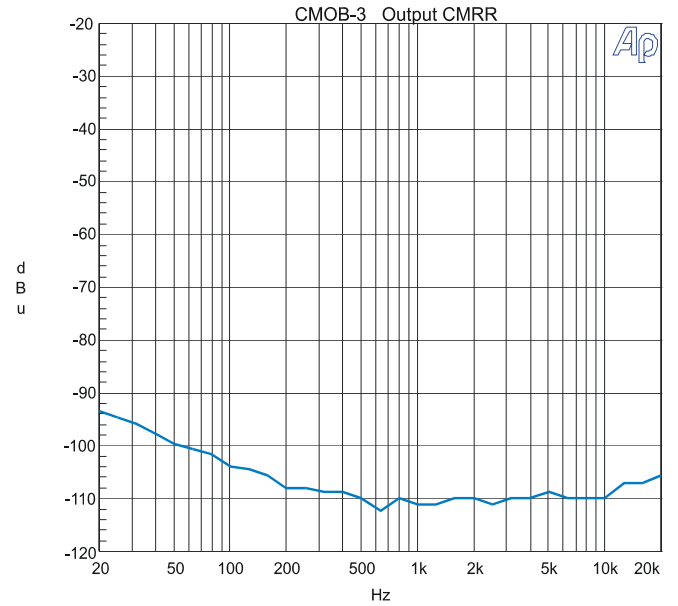
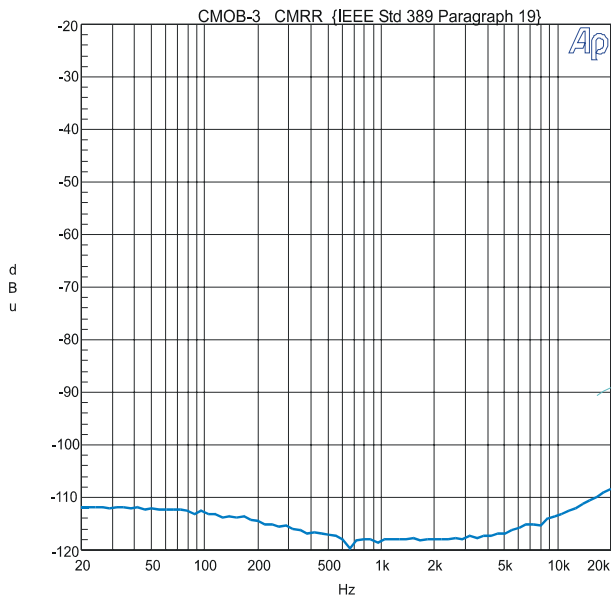
### CMOB-3H / CMOB-3L / CMOB-3S

Parameter	Conditions	Typ
Turns Ratio		1 : 1.00
Input Impedance, Zi	20 Hz to 20 kHz, 0 dBu Test Circuit 3	637 $\Omega$
Voltage Gain	1 kHz HiNi Core, $R_s=150$ 1 kHz 50% Nickel/50% Steel Core, $R_s=150$	-2.82 dB -2.83dB
Distortion (THD+N%)	1 kHz, +4 dBu, $R_s=150$ HiNi Test Circuit 1 1 kHz, +4 dBu, $R_s=150$ 50%Ni/50% Steel	0.0004% 0.0013%
Max 20 Hz input level	1.0% THD+N, $R_s \leq 150$ HiNi Test Circuit 1 1.0% THD+N, $R_s \leq 150$ 50% Ni 50% Steel	>+24 dB +20 dB
Response, ref 1 kHz	20 Hz $R_s=150\Omega$ 50%Ni50%Steel Test Circuit 1 20 kHz $R_s=150\Omega$ 50%Ni50%Steel Test Circuit 1 200 kHz $R_s=150\Omega$ Test Circuit 1	-0.02 dB +0.01 dB -0.1 dB
Phase Shift at 20Hz Phase Shift at 20 kHz	Referenced to source generator Test Circuit 1	+0.8° -0.2°
CMRR	60 Hz Test Circuit 4 per IEEE Std 389-1996 ¶19 1 kHz Test Circuit 4 per IEEE Std 389-1996 ¶19	92 dB 98dB
Output CMRR	60 Hz Test Circuit 2 1 kHz Test Circuit 2	112 dB 118 dB
Operating Temp Range	Operation and storage	0° C Min 70° C Max



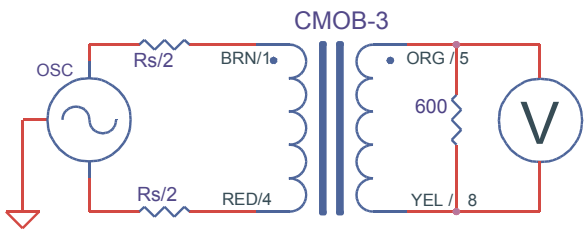




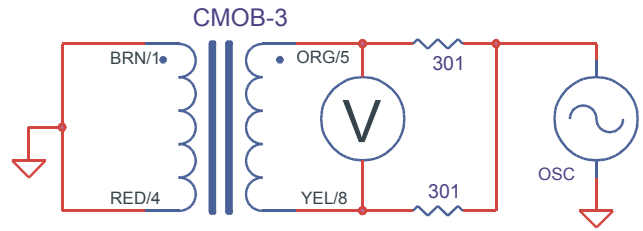


NOTES:

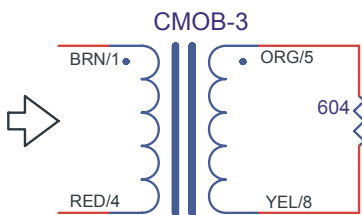
1. All graphs generated from one (1) randomly chosen device. No statistical averaging or weighting. Data from one sweep.
2.  $R_L = 604$  unless otherwise noted.



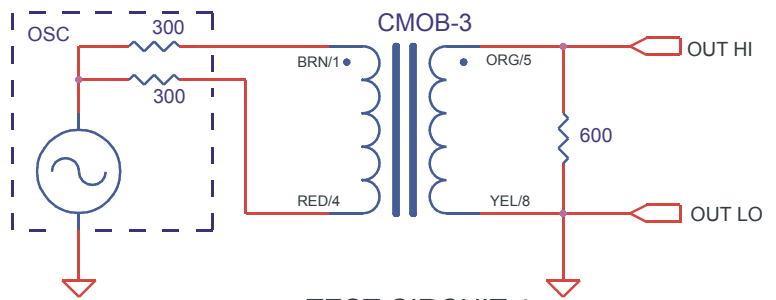
TEST CIRCUIT 1



TEST CIRCUIT 2



TEST CIRCUIT 3



TEST CIRCUIT 4

