

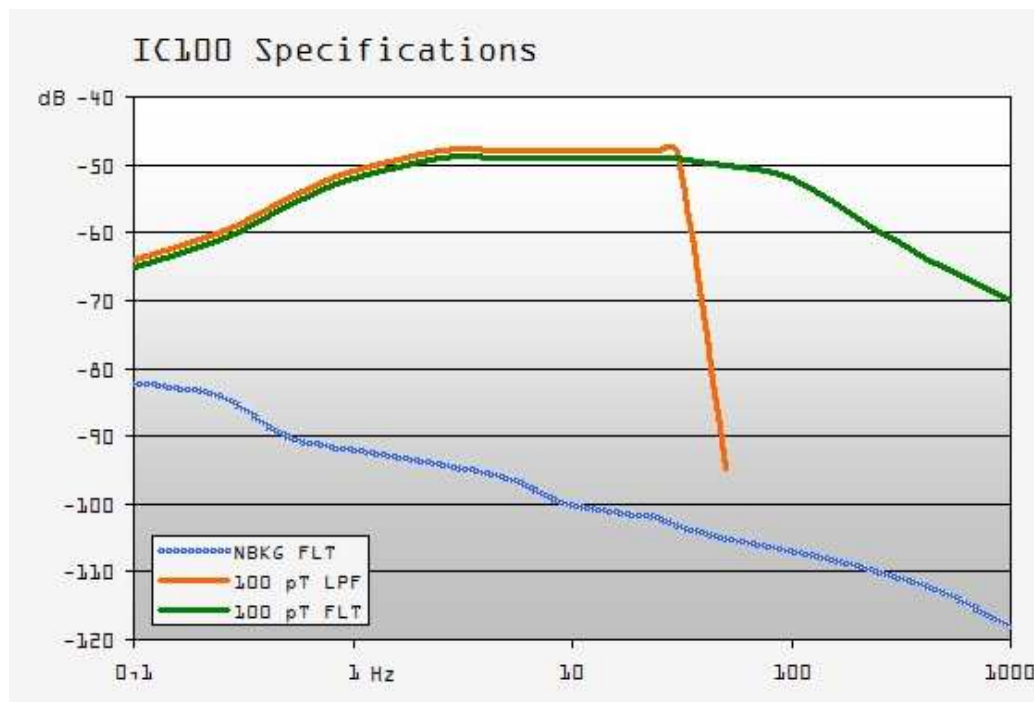
# ICS101

Induction Coil for reception of magnetic fields at low frequencies , with high permeability core , electric field shielding , internal low noise preamp and filter .

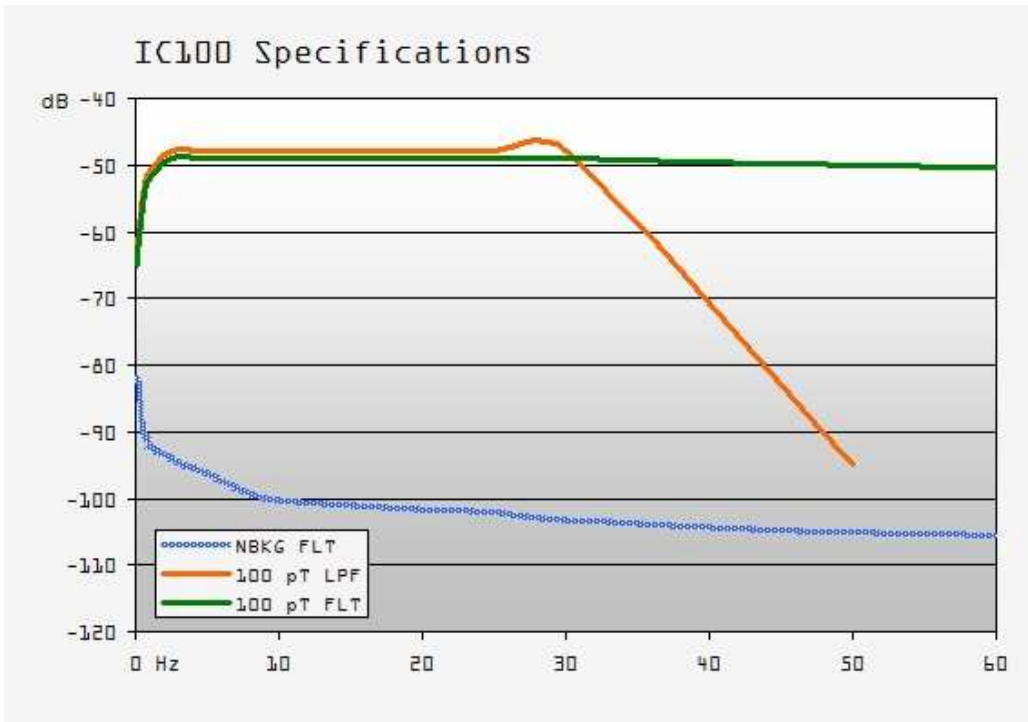


## Technical specifications

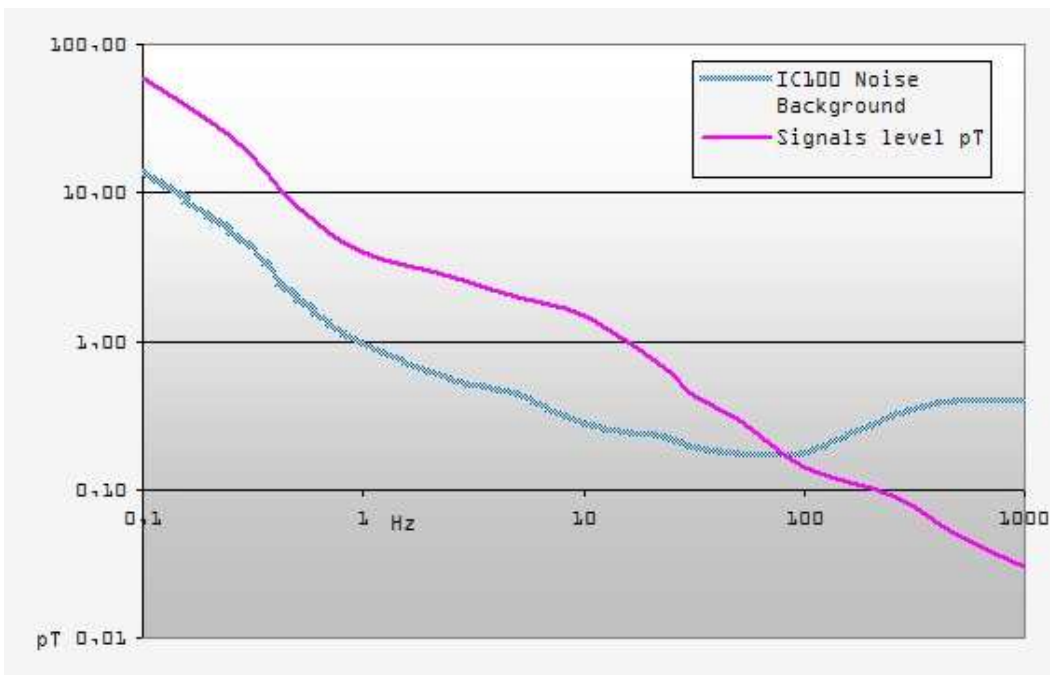
Max diameter	cm	12
Length	cm	109
Weight	kg	13
Power supply	V	24
Connections	BNC F	2 (Power supply and signal Output)
Antenna Factor		100 pT @ 10 Hz - 2.2 mV rms (gain 0 dB e LPF ON)
Output gain		0/20/40 dB (respect to the antenna factor) selectable at the order
Low Pass Filter	Hz	30 (On or OFF at the order )
Frequency range	Hz	0.1 – 120 Hz (rolloff @ 1.3 Hz)



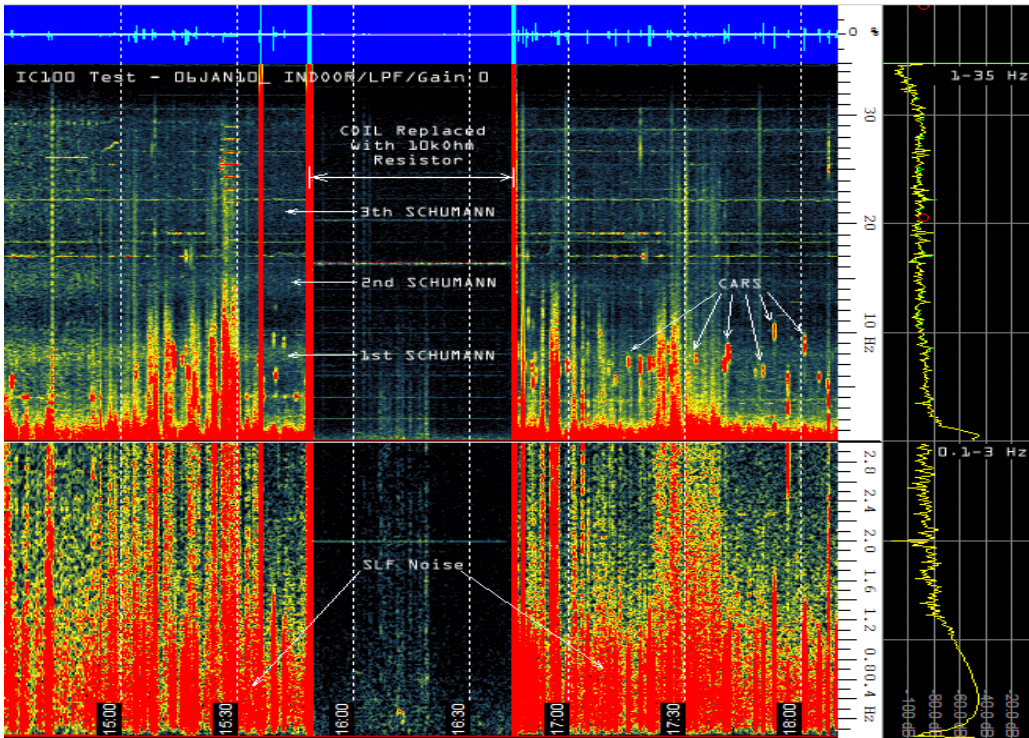
Frequency response with output gain 0 dB, with and without LPF . Blue plot = noise floor .



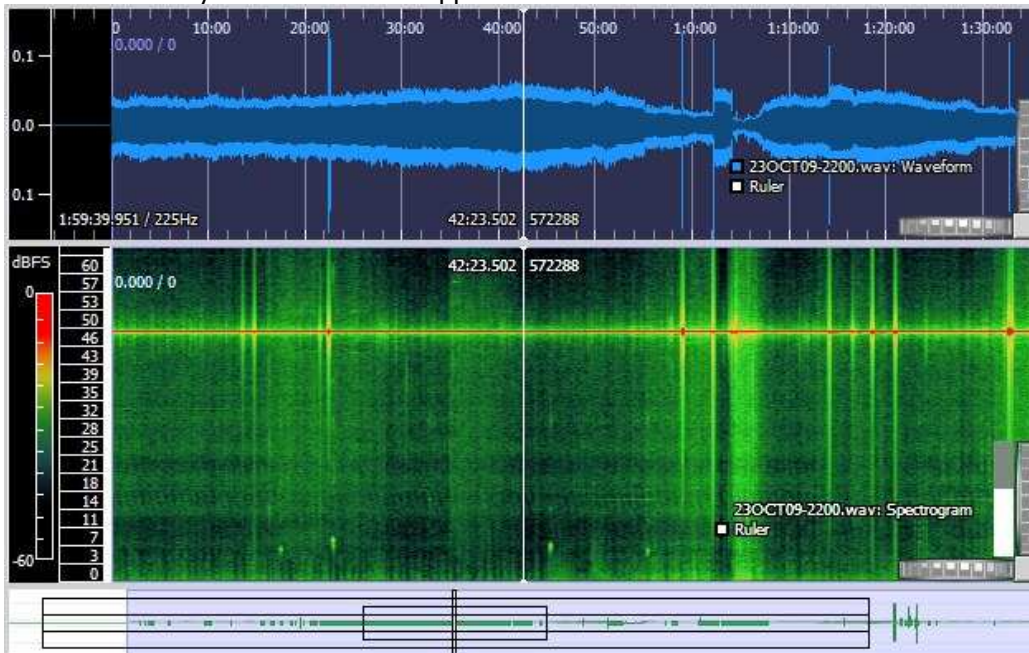
Frequency response – linear plot . With LPF filter ON attenuation at 50 Hz is 48 dB ; at 60 Hz is 67 dB.



Typical level of mean received signals and noise floor of the system .



Indoor practical example . Highlighted Schumann resonances , noise in the lower frequencies and signals coming from transit of cars a 25 m from the sensor . In the central part of the plot the coils of the system has been swapped with a resistor to test the noise floor of the system .



Outdoor practical example .Coil oriented Est-Ovest - LPF OUT . Schumann resonances can easily seen together with 50 Hz and sidebands coming from main power lines .

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