



VP1000 Voltage preamplifier



The VP1000 is a 1 MHz bandwidth single ended voltage preamplifier, designed for use with piezoelectric hydrophone and a variety of transducers. VP1000 offers excellent low-noise performance, gain selection in 6 levels and options of 12 Hi-Pass filters.

The high input impedance of 100M Ω allow for low frequency measurements with even very small sensor element capacities.

The VP1000 is encapsulated in a water splash proof aluminum box.

FEATURES

- ◆ 1 Hz to 1 MHz bandwidth
Hi-pass filter options
- ◆ 6 level gain selection
- ◆ 100 M Ohm input impedance
- ◆ Excellent low-noise characteristic

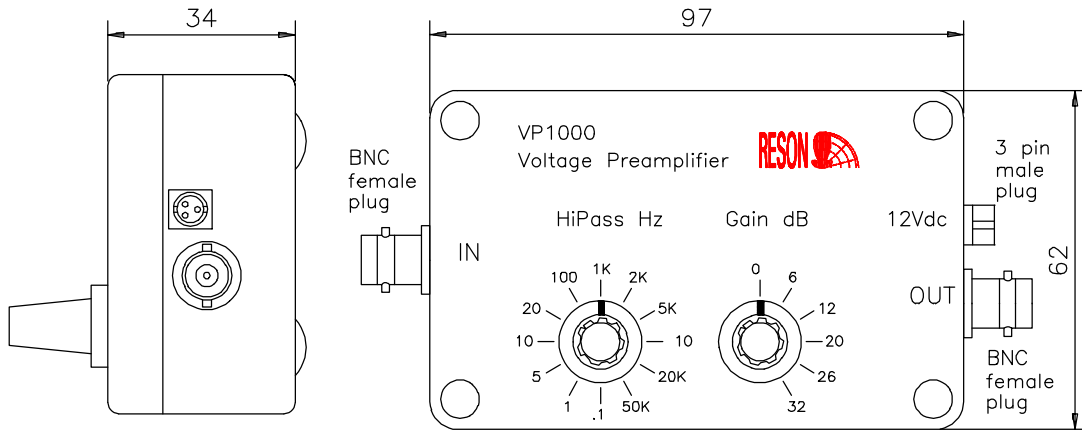
TECHNICAL SPECIFICATIONS

Input:	
Impedance:	100 M Ω /2.5 pF
Max. level:	2.8 Vrms at 12 V supply
Output:	
Impedance:	10 Ohm/100 μ F
Max. level:	2.8 Vrms at 0 dB gain
Max. load:	10 nF \approx 100 m cable
DC offset Phase @:	0mVdc (capacitive coupling) -180°
Gain:	
Gain settings:	0, 6, 12, 20, 26, 32 dB
Tolerance:	\pm 0.5 dB
Bandwidth	
Operating frequency range	
-3 dB at 20 dB gain:	0.5 Hz to 1 MHz
Noise:	
Power spectrum density noise at 1kHz:	20 nV/ \sqrt Hz

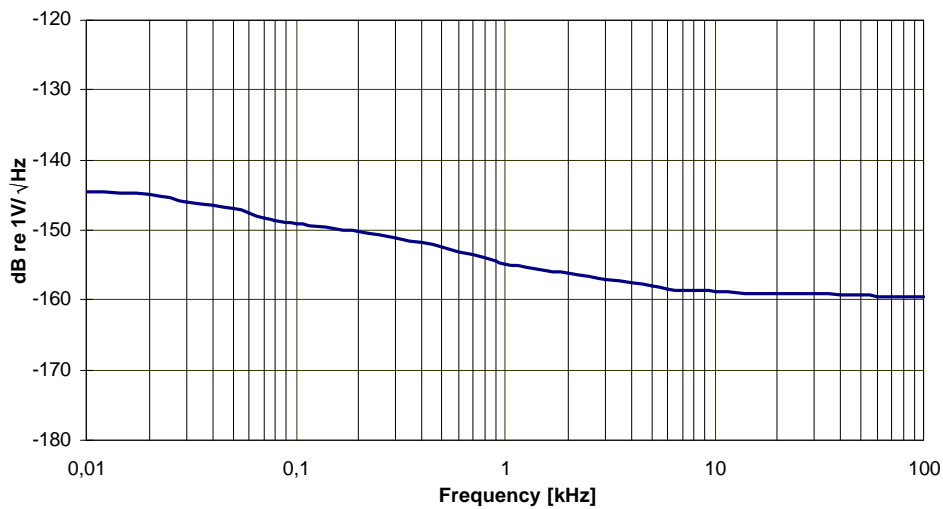
Hi-Pass Filters:	
-3 dB @ Hz:	1,5,10,20,100,1k,2k,5k, 10k, 20k, 50k
-12 dB @ Hz:	0.1
Power supply:	
Voltage nominal:	12 Vdc
Current quiescent:	(min 9Vdc, max 18Vdc) 12 mA @ 12 Vdc
Weight:	
With supply cable and LEMO adaptor:	305 g.
Accessories included:	Supply cable TL 8088



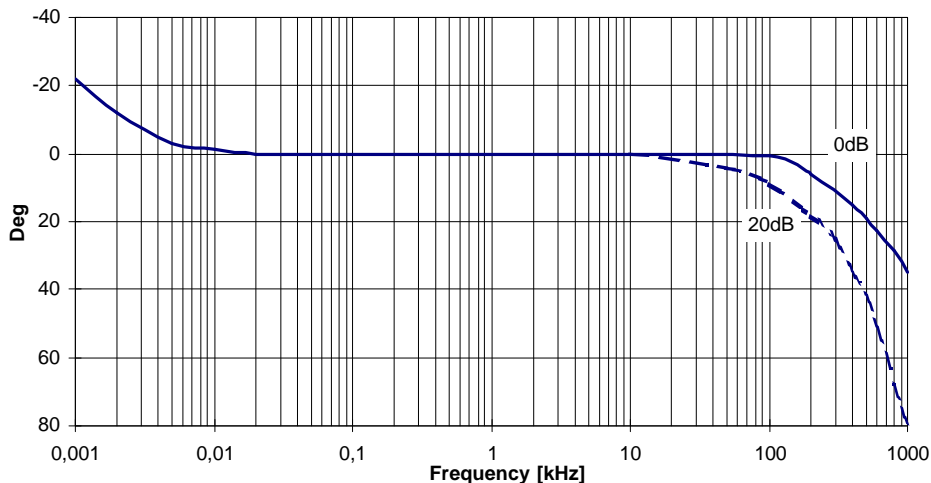
VP1000 outline dimensions and layout



Noise power density spectrum re input Input load 1nF, gain 20dB, 0.1Hz filter



Voltage preamplifier VP1000 Phase shift with 0.1 Hz filter at 0dB and 20dB gain



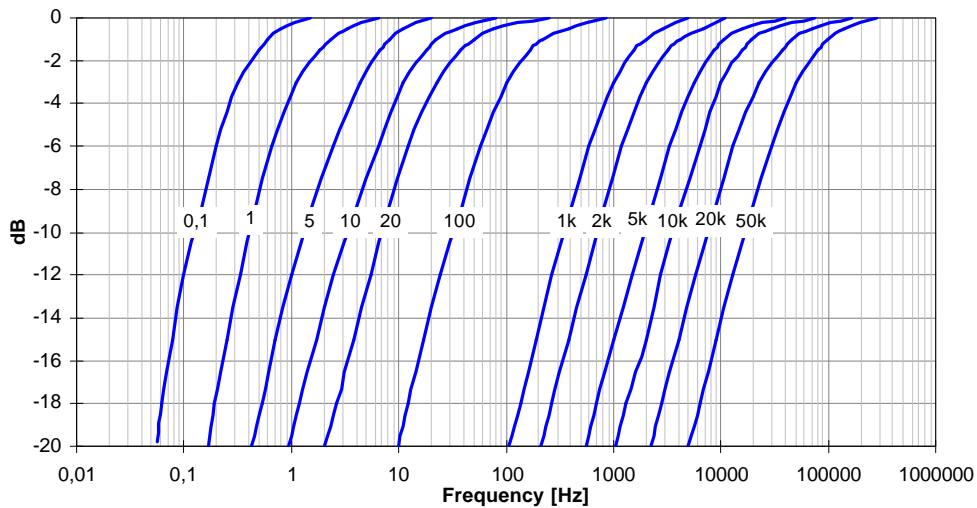
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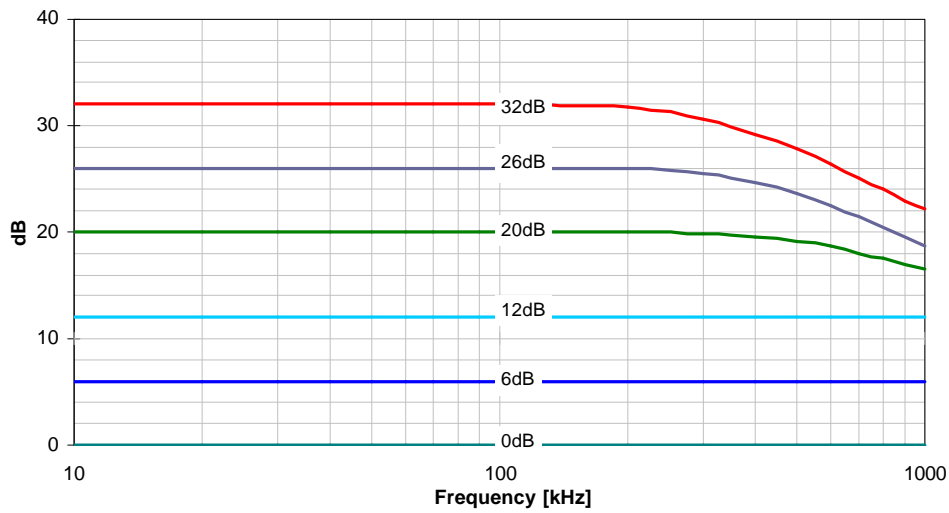
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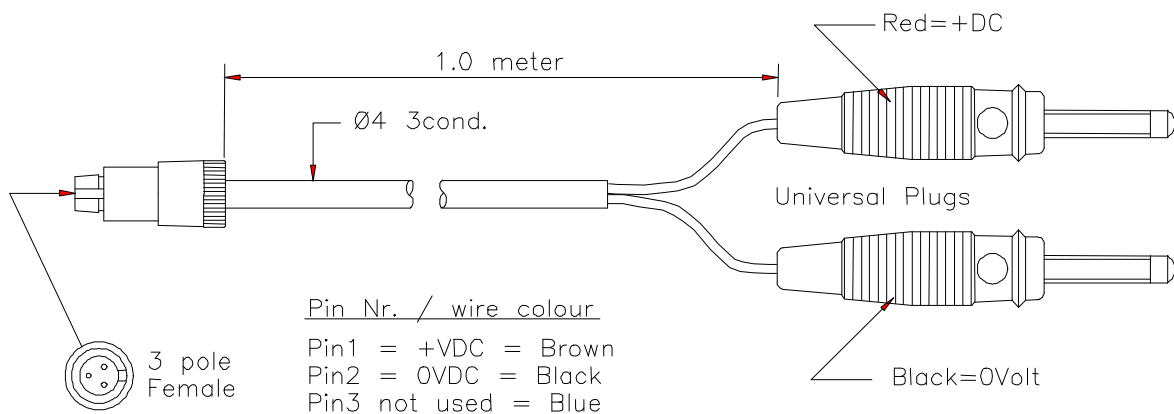
VP1000 filter characteristics



VP1000 Frequency roll-off versus gain



TL 8088 Supply cable



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