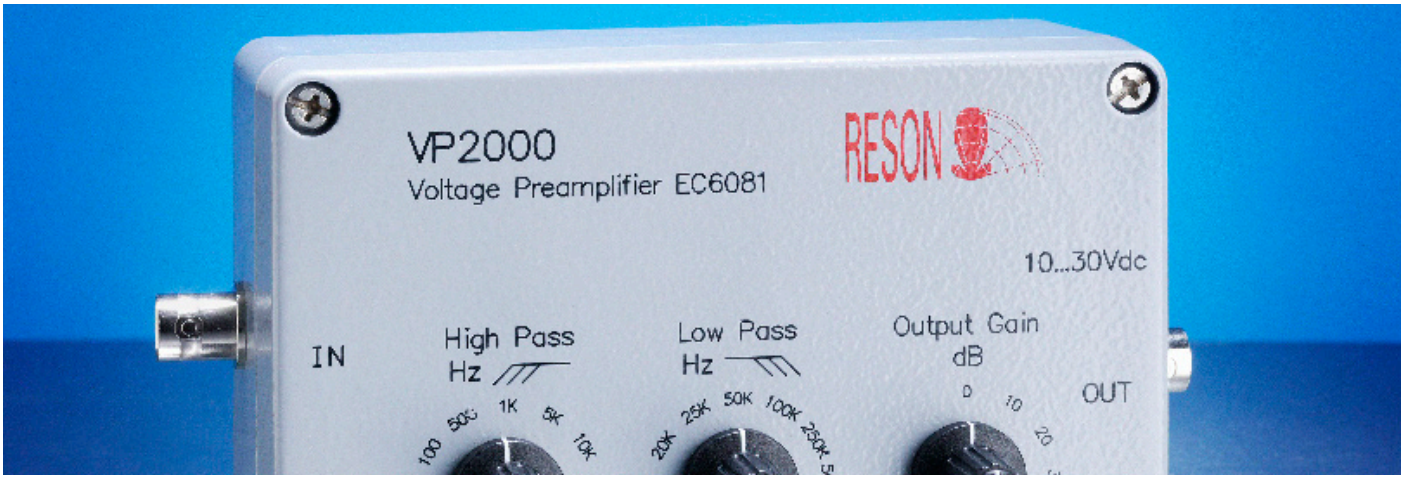
EC6081

VP2000 Voltage preamplifier



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- **1Hz to 1MHz bandwidth**
- **Gain selection From 0 to 50dB**
- **Options of 12 high-pass filters and 12 low-pass filters**
- **Excellent low-noise characteristic**

The VP2000 is a 1MHz bandwidth voltage preamplifier designed for uses in conjunction with piezoelectric hydrophones.
VP2000 offers excellent low-noise performance over the entire frequency range; gain selections in 6 levels from 0 to 50dB.
A range of 12 high-pass and 12 low-pass filters are available, - these allow ideal band pass filter settings.
The VP2000 has a high input impedance which allow the measurements at frequencies below 1Hz with even very small hydrophones sensor capacities.

TECHNICAL SPECIFICATIONS	
Input:	
Impedance:	>100M-Ohm´s
Max. level:	2.4Vrms at 12V supply
Output:	
Impedance:	10Ohm//100µF
Max. level:	2.4Vrms at 12Vdc 5.4Vrms at 24V supply
Max. load:	10nF (100m cable)
Gain:	
Gain settings, 6 steps dB:	0–10–20–30–40-50
Bandwidth	
Frequency range with 20dB gain:	-3dB 0.5Hz to 0.5MHz -6dB 1MHz)
Noise:	
Power spectrumdensity noise	20nV/√Hz (at 1kHz)
Hi-Pass Filters: -3dB @ Hz (6dB/oct):	1-10-50-100-500-1k-5k 10k-25k-50k-100k-250k
Lo-Pass Filters: -3dB @ Hz (6dB/oct):	1k-5k-10k-20k-25k-50k 100k-250-500k-750-1M
Power supply:	12Vdc (min. 10Vdc, max. 30Vdc)
Voltage nominal:	15mA @ 12Vdc
Current quiescent:	20mA @ 24Vdc
Enclosure case, dimensions:	125, 80, 60mm. (l w, h) (Splash proof aluminum box)
Accessory included:	Supply cable TL8088 for laboratory. Vdc supply.
Accessory available:	See page 2

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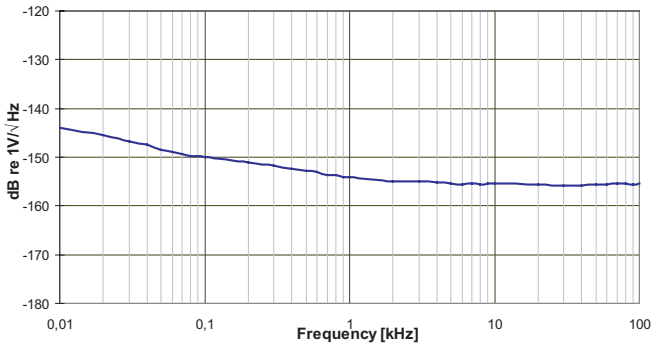
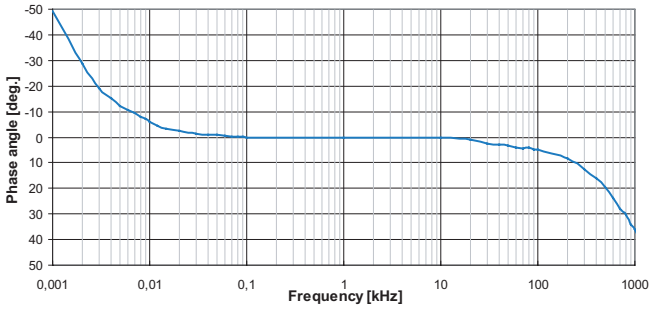
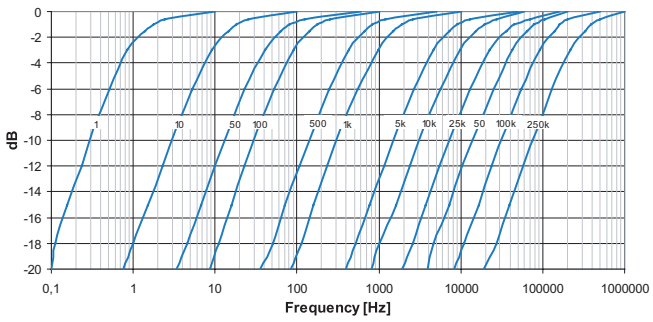
Noise power density spectrum re input
Input load 1nF, gain 0dB, 1Hz filter



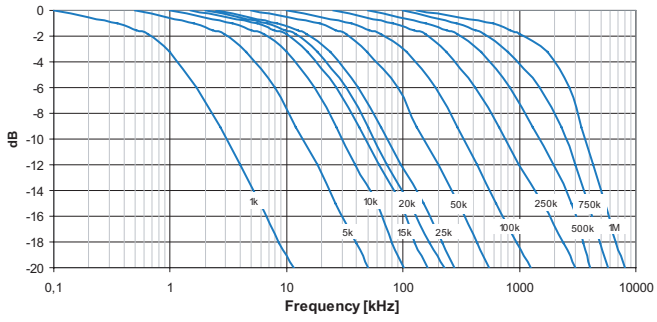
Phase shift
With 1 Hz filter at 0dB and 0dB gain



High Pass filter characteristics



Low Pass filter characteristics



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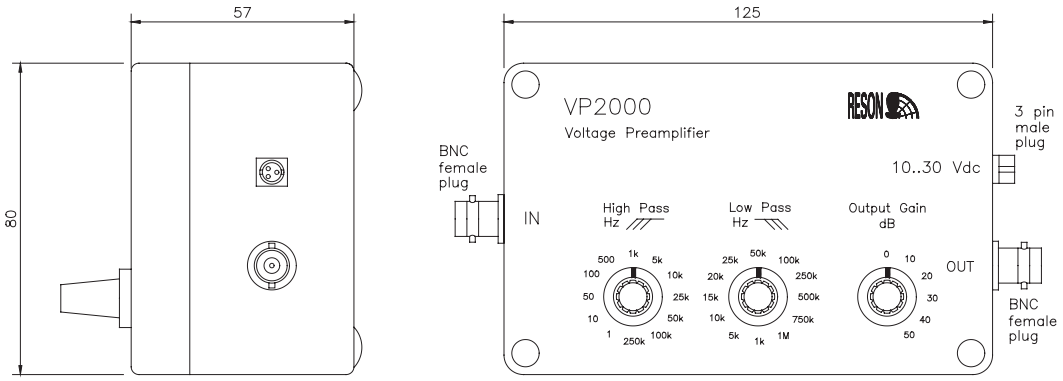
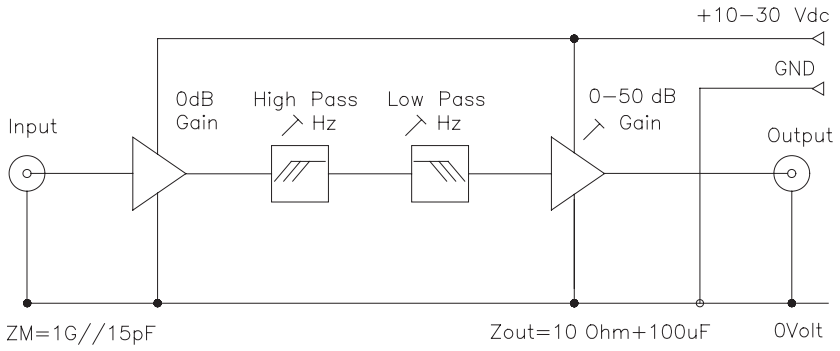
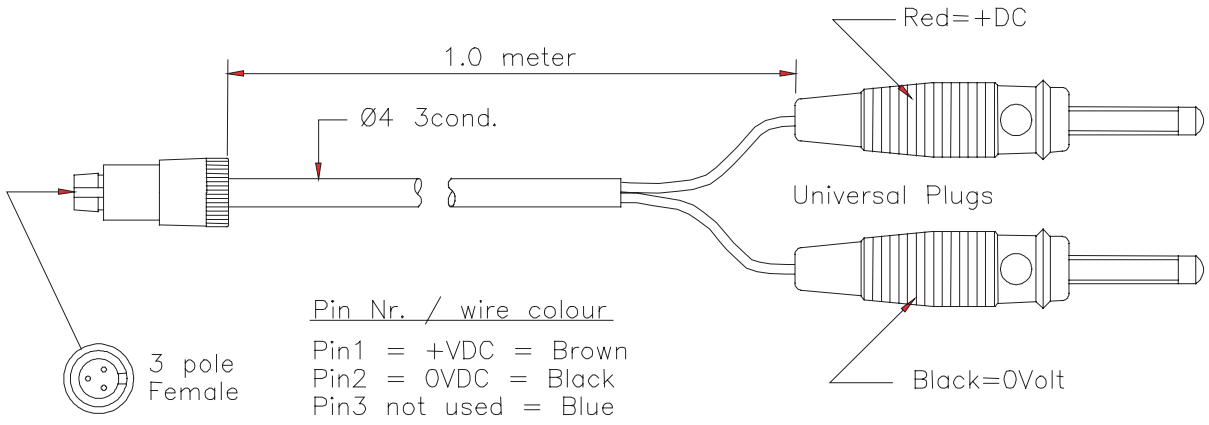
Outline dimensions and layout



Functional Block Diagram



TL 8088 Supply Cable



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