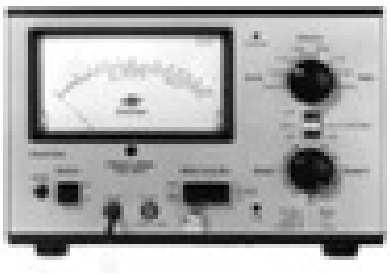
CAPTEUR Piezzo

Type 4371 Order no: 4371	Piezoelectric Charge Accelerometer, side connector, cable included	
	Sensitivity: Freq. Range: Max Oper. Range: Weight: Temperature:	10 pC/g - 1 pC/ms^{-2} 1 - 12600 Hz 6000 g (60000 m/s^2) 11 g (.388 oz) -101 - 482 F -74 - 250 C



B&K 2511 Portable Vibration Meter

Battery operated meter with charge amplifier input, for measuring acceleration, velocity and displacement in both Imperial & Metric units - RMS and TRUE PEAK-PEAK meter.

Ideal, for use, as a front-end, signal conditioning unit into FFT or other analysers, DAT recorders etc. It also includes a 160 Hz reference signal to calibrate complete measurement systems.

Bruel & Kjaer 2511

Bruel & Kjaer 2511 Vibration Meter

Specifications:
Recommended Transducer :
Bruel & Kjaer 4370 piezoelectric accelerometer with a nominal sensitivity of 10 pC/ms^{-2} ~ 100 pC/g

Measurement Ranges : - with 4370 accelerometer.

Acceleration	0.3 Hz	0.002 - 100 ms^{-2}	0.0002 - 10 g
Velocity	3 Hz	0.02 - 1000 mm/s	0.001 - 100 in/s
Displacement	10 Hz	0.0003 - 10 mm	0.00002 - 1 inch

The above figures are for wide band measurements.
The minimum levels are RMS and are 6 dB (2 x) above the wide band instrument RMS noise level.
If the next lower low frequency setting is selected, then the minimum limit for velocity measurements is a factor of 3 to 4 higher.
The next lower low frequency for displacement settings will increase the minimum limit by 10 times.

Accuracy : including accelerometer is ± 5 % absolute overall within linear ranges.

Filters :
High Pass Filter : 3-pole Butterworth, fall off 18 dB/octave
Low Pass Filter : 2-pole Butterworth, fall off 12 dB/octave

Detector : Quasi RMS : - True reading indicated for sinusoidal signals with crest factor < 3
Time Constants : 1 s and 10 s switchable
Time Constants in Max Hold : 1 s
Max Hold drift : < 10 % per 5 minutes with FSD

Detector : True Peak-to-Peak :
Time Constants : 1 s and 10 s switchable
Max Hold drift : < 10 % per 30 minutes with FSD
Rise Time : > 25 µs : 15 kHz LP filter

Dynamic Range : for both detectors is 40 dB

External Filter Sockets : 2 x BNC
Signal level : 1 V PEAK or RMS
Input Socket Impedance : 16 kΩ

Recorder Outputs :
Output Impedance : 1 kΩ
AC : 2.7 V RMS for FSD. Overload 6.8 V peak

DC Log : 2 V for FSD, 0.05 V/dB. Overload 2.25 V
DC Lin : 3 V for FSD. Overload 4.5 V

Meter Calibration :
Internal Oscillator : 80 Hz

Internal Power Supply :
Battery : 4 x 1.5 V - D cells, IEC type R20
Battery Life : 15 hours with Alkaline batteries

Environmental :
Temperature Range : -10 °C to +50 °C
Humidity Range : 0 to 95 %RH, non condensing
Electromagnetic : fields up to 100 A/m increases noise floor < 14dB

Bruel & Kjaer 1621

Tuneable Band Pass Filter

The Tuneable Band Pass Filter Type 1621 is a variable filter intended for use with the general purpose B&K 2511 Vibration Meter for narrow band frequency analysis of vibration levels.
Frequency Range: 0.2 Hz to 20 kHz in 5 ranges

Pass Bandwidths: switchable : 3 % or 23 % (1/3 octave)
Attenuation at 1/2 and 2 x selected frequency : switchable 34 or 16 dB

Dynamic Range:
> 40 dB RMS with 3 % bandwidth between 0.2 Hz and 6 kHz
> 35 dB RMS with 3 % bandwidth between 6 kHz and 20 kHz
> 40 dB RMS with 2 % bandwidth between 0.2 Hz and 20 kHz

Accuracy of Indicated Frequency: qu± 1.5 % at 25 °C with additional ± 0.04 % per °C

BNC Input: 1 V RMS or 0.2 V RMS switchable with crest factor of 5
Impedance 1 V input : 1 MΩ in series with 10 µF
Impedance 0.2 V input : 200 kΩ in series with 10 µF

BNC Output:
Impedance: 0.5 Ω in series with 100 µF
Load Impedance: > 25 kΩ

Gain: 0 dB ± 1 dB

Hum and Noise: 3 % Bandwidth

Frequency	0.2 Hz - 6 kHz	6 kHz - 20 kHz
1 V input	10 mV	18 mV
0.2 V input	2 mV	3.6 mV

Hum and Noise: 23 % Bandwidth

Frequency	0.2 Hz - 20 kHz
1 V input	10 mV
0.2 V input	2 mV