

Type 5210

5210 K-BEAM® SENSOR POWER SUPPLY

The 5210 power supply is the first Kistler power supply intended for the K-BEAM line of capacitive accelerometers. The unit is a low cost and convenient way to power any single K-BEAM® accelerometer from a casual check to an in-depth study.

A key feature of this instrument is its ability to operate at $0g = 0$ volts. Readout equipment can be set to lower ranges for viewing higher resolution measurements. The unit may be powered by a standard 9V battery, external DC supply, or AC powered with

Continued

- For 8305AM4, M7, 8304B & 8310A K-BEAM accelerometers
- Adjustable offset control for higher resolution measurements
- Battery or external power
- Gain and filtering options; low battery indicator
- Complete kit available
- Conforming to CE



| Technical Data | Unit | 5210 |
|--|-------------------|----------------------|
| Input Information | | |
| Signal | V | ±5 |
| Sensor Excitation Voltage, nom. | V | 9 |
| Current, max. | mA | 25 |
| Output Information | | |
| Signal max. | V | ±8 |
| Impedance | Ω | 100 |
| Signal Processing | | |
| Gain | | 1 |
| Standard Jumper, selectable | | 2, 10, 20 |
| Accuracy (gain dependent) | % | ±0.5 ... ±1.5 |
| Upper Frequency Limit –5% (w/o filter) | Hz | 750 ±50 |
| Noise Contribution to meas. chain | μV/√Hz | 1 |
| Noise, Wide Band (gain 1:1 w/o sensor) | μV _{rms} | 300 |
| Offset Adjust Range (gain dependent) | V | ±1.8 ... ±3.6 |
| Output @ Zero g standard | V | 0 |
| Jumper, selectable | V | +2.5 |
| General Information | | |
| Temperature Range Operating | °F | 15 ... 130 |
| | °C | -10 ... 54 |
| Temperature Range Storage | °F | -4 ... 140 |
| | °C | -20 ... 60 |
| External DC Voltage Source | V | 12...28 |
| | mA | <50 |
| Battery Life with sensor 8305A | hr | ≈24 |
| with sensor 8304B | hr | ≈10 |
| Low Battery Time | min | 30 |
| Internal Battery type IEC 6LR61 | type | 9V alkaline |
| Connectors Sensor | type | Microtech 4-pin pos. |
| Output signal | type | BNC neg. |
| External DC input | type | 2.1mm jack (tip+) |
| IP Rating | | 40 |
| Case Dimensions (W x D x H) | in | 5.75 x 3.6 x 1.29 |
| | mm | 147,3 x 91,4 x 33 |
| Weight (including battery) | g | 260 |

1 g = 9.80665 m/s², 1 inch = 25.4 mm, 1 gram = 0.03527 oz

Kistler Instrument Corporation reserves the right to discontinue or change specifications, designs or materials without notice consistent with sound engineering principles and quality practices.

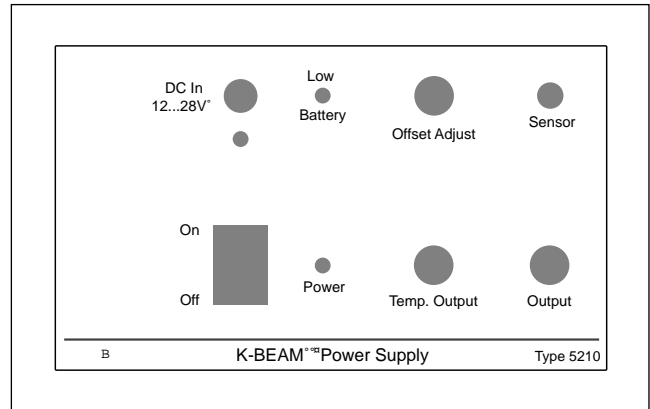
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an appropriate wall adaptor. Internal circuitry permits selectable gain from 1X to 20X.

Signal filtering is available from optional low pass, plug-in filters designed to reduce high frequency signals. LEDs are used to indicate power mode and condition. A green indication shows external powering and red indicates a low battery condition. A high capacity external battery can be connected when field studies require long-term monitoring.

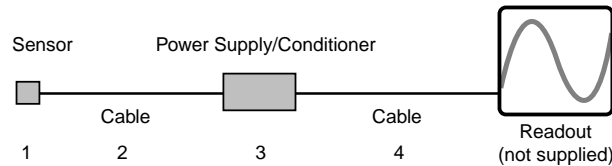
Kistler recommends using an optional 1592A (2 meter) cable, or 1592Asp (X=length) for connecting the 5210 to K-BEAM sensors such as 8304B, 8305AM4 or 8310A.

The power supply is housed in a rugged plastic case. A kit version includes the 5210 power supply, AC-DC power adaptor, and carrying case.



Front panel view

Ordering Information



- Specify:
- 1 - 8304B... K-BEAM accelerometer, recommended (specify range) or 8305A... M4 K-BEAM accelerometer or 8305A... M7 K-BEAM accelerometer, with 2 meter integral cable for connecting directly to a 5210. or 8310A... K-BEAM accelerometer
 - 2 - 1592A connecting cable, 2 meter (4-pin Microtech neg. to 4-pin Microtech neg.), required for 8304B(X) and 8305A(X)M4, 8310A(X).
 - 3 - 5210 supplied with a 9V battery or 5210S1 kit includes 5210 plus power adaptor 5752 (115V) battery and carrying case or 5210S1(E) same as 5210S1 except power adaptor is 5757 (230V)
 - 4 - 1511... output cable, BNC pos. to BNC pos., specify length in meters

Optional Accessories

- 5752 AC-DC power adaptor (115V, 60Hz)
- 5757 AC-DC power adaptor (230V, 50Hz)
- 704-2068-001 external DC power cable (6 ft. with pigtails)
- 300-0092-002 9V alkaline battery
- 440-0540-001 shunt jumper (spare)
- 5326A20 low pass filter, 20Hz, -12dB/octave
- 5326A50 low pass filter, 50Hz, -12dB/octave
- 605-2500-001 carrying case
- 1592Asp(X) same as 1592A, specify length in meters

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