DBK8

8-Channel High-Voltage Input Card

Features

- **Provides eight high-voltage input channels**
- **Per-channel selection of three voltage ranges via jumper**
- **Provides 10 MOhm input impedance for minimum loading errors**
- **Buffered inputs on each channel for high-speed scanning**

The DBK8 provides eight high-impedance, high-voltage input channels for IOtech's data acquisition systems. The DBK8 accommodates 10, 50, or 100 VFS bipolar inputs that you can set on a per-channel basis via jumpers on the card.

The DBK8's 10 MOhm input impedance presents minimal loading of high impedance circuits and transducers (e.g., string pots), which ensures accurate readings over a wide range of source impedance, and high impedance transducers, such as string pots.

Each of the DBK8's inputs provides an individual buffer amplifier that allows the combination of high-speed (10 µs/reading) and high-input impedances.

As many as 32 DBK8 cards can be used in one system for a total of 256 high-voltage differential inputs.

Specifications

Connector: DB37 male, mates with P1*; screw terminals for signal inputs
Voltage Input Ranges: ±10V, ±50V, ±100V; selection by jumper for each channel
Input Impedance: 10 MOhm
Attenuation:

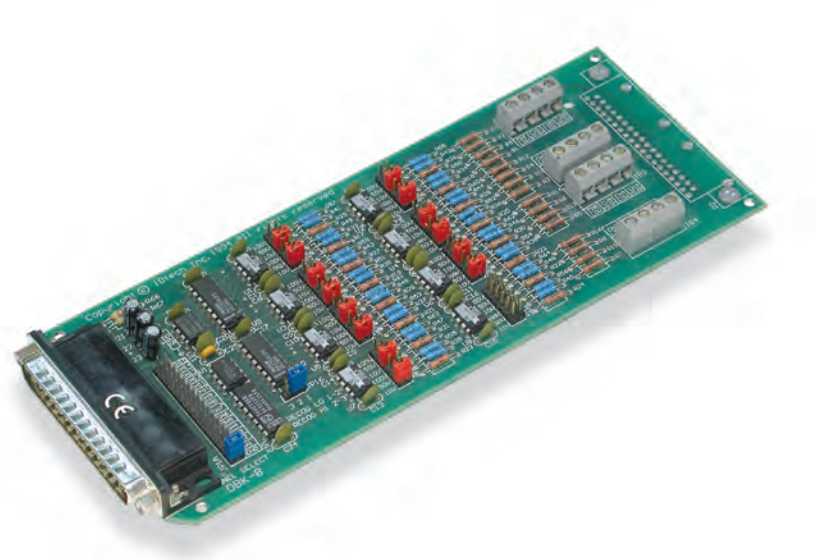
10V	Vout=Vin/2	(Bandwidth=579 Hz)
50V	Vout=Vin/10	(Bandwidth=1608 Hz)
100V	Vout=Vin/20	(Bandwidth=3047 Hz)

Attenuation Accuracy: 0.5%
Offset Voltage
Typ: 0.5 mV
Max: 2.0 mV
Offset Drift
Typ: 4 µV/°C
Max: 10 µV/°C
Power Consumption: 455 mW

Ordering Information

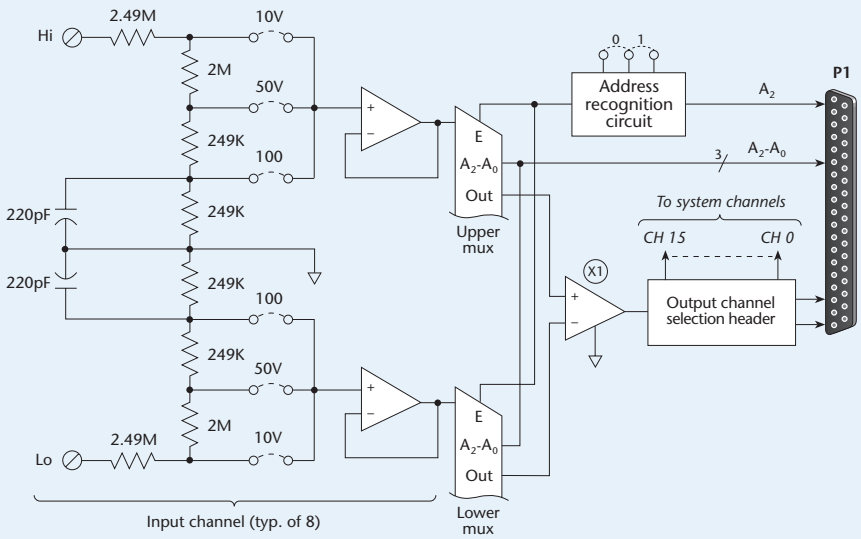
Description	Part No.
8-channel high-voltage input card	DBK8

* Attachment to the DaqBoard/2000 Series requires a DBK200, DBK202, DBK203A, DBK209, DBK213, or DBK214



The 8-channel DBK8 high-voltage input card provides three input ranges, which can be set on a per-channel basis

DBK8 High-Voltage Input Card Block Diagram



Cables

For use with DBK10, use CA-37-x ribbon cable, or contact factory of additional cabling options
For use with DBK60 or LogBook/360, no cable is required (except from DBK60 or LogBook/360 to the A/D mainframe)
For use with no enclosure, use CA-37-x where x is the number of DBK devices attached
For use with DaqLab Series (internal slots), use CA-255-2T with one board, or CA-37-2 for use with two DBK cards (or contact factory for additional cabling options)

Product Compatibility

- ✔ LogBook
- ✔ DaqBook
- ✔ DaqLab
- ✔ DaqScan
- ✔ DaqBoard/2000 Series