



DBK44™

2-Channel Multi-Purpose Isolated Signal Conditioning



Compatibility: ✓ LogBook ✓ DaqBook ✓ DaqLab ✓ DaqScan ✓ DaqBoard/2000 Series

Features

- Accepts two 5B isolated input signal conditioning modules of any type
- Features on-board screw-terminal signal connections, plus cold-junction sensors for thermocouple applications

The DBK44™ two-channel multi-purpose isolated signal conditioning card accommodates two multi-purpose isolated signal conditioning modules of any type*. Each user-configurable signal conditioning module offers 500V isolation from the system and from other channels. It can accommodate an array of signals—from low-level thermocouple signals to strain gage signals.

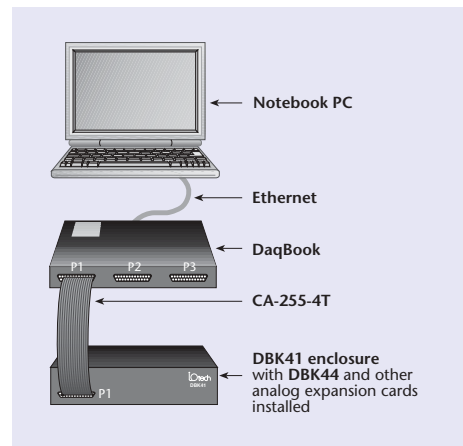
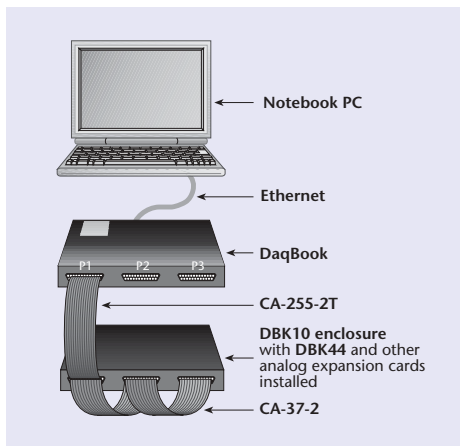
The DBK44 features screw terminals that provide access to each channel's analog inputs, as well as to the excitation output if the card is used with a strain gage or RTD module. In addition, each DBK44 channel has a cold-junction sensor mounted adjacent to each screw-terminal block. This permits 5B thermocouple modules to output linearized and compensated temperature, eliminating the need for any components other than the user-supplied thermocouple. The A/D scans the DBK44's channels at the same 5 or 10 μ s/channel rate that they scan all DBK series analog expansion and signal conditioning cards.

Expansion Enclosures. The DBK44 can be housed in a variety of ways, such as in the DBK10 three-slot expansion-card enclosure, or the DBK41 ten-slot analog expansion module. Also, it can be mounted anywhere outside the data acquisition system, such as in a snap track or with stand offs.



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DBK44 Expansion Examples



Powering the DBK44. The A/D mainframe can provide power for the DBK44 via their P1 connector. DaqBoards, which draw power from the host PC, can power an external signal conditioning card via their internal power supply. The 5B modules used with the DBK44 typically require 5V at 30 mA minimum and can demand up to 175 mA in applications requiring excitation voltages.

Please, note that for applications that demand more than 4 isolated channels, it is more economical to use the DBK42™ 16-channel isolated module, which includes a built-in power supply that can accommodate any combination of up to sixteen 5B modules of any choice.

* 5B modules must be purchased separately, see p. 184



DBK44™

Specifications & Ordering Information



5B modules (see p. 184 for the complete 5B Module Selection Guide)

Specifications

Connector: DB37 male, mates with P1*; screw terminals for signal inputs

User Connections: 4 screw-terminals/channel; 2 screw-terminals for external 5 VDC

Isolation

Input Power to DaqBoard: 0V

Signal Inputs to DaqBoard: 1500 VDC

Input Channel-to-Channel: 500 VDC

Signal Modules: Any 5B series input module; cold-junction sensors for T/C modules are located by each channel terminal block; plug-in locations for Current Loop sensing resistors are provided for each channel

Module Capacity: 2 (input only) 5B modules

Weight: 0.25 kg (8 oz) with no modules installed

DC Input Fuse: 4A

Power Consumption: 330 mW

Note: Only modules with $\pm 5V$ or 0-5V output should be used.

Ordering Information

Description
2-channel 5B expansion card

Part No.
DBK44

Accessories

AC powered 5V supply

TR-4

Cables

For use with DBK10, use CA-37-x ribbon cable, or contact factory of additional cabling options

For use with DBK60 or LogBook360, 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)

For complete information on accessories and cables, visit www.iotech.com/acc

Related Products

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DaqBook	p. 89
DaqLab	p. 103
DaqScan	p. 108
DBK10	p. 126
DBK41	p. 146
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* Attachment to the DaqBoard/2000 requires a DBK200, DBK201, DBK202, or DBK203 adapter