



DBK85™

16-Channel Differential Voltage Input Module



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

Features

- 16 differential input channels via BNC connectors
- Unity gain combines with A/D gains to provide full-scale inputs from $\pm 156\text{ mV}$ to $\pm 10\text{V}$

The DBK85™ provides 16 channels of differential voltage input. The DBK85 has a single, unity-gain input stage on all channels. When coupled with the A/D's on-board x1 through x64 programmable input gains, the combination provides full-scale input ranges from $\pm 10\text{V}$ down to $\pm 156\text{ mV}$.

The DBK85's ultra-low noise, high-speed design allows users to expand their input channels up to 256 channels without sacrificing measurement integrity.

Specifications

Dimensions: 285 mm W x 220 mm D x 45 mm H (11" x 8.5" x 1.75")
Weight: 1.13 kg (2.5 lbs.)
Operating Temperature: -30°C to +70°C
Connector: DBK37 male, mates with P1*; front-panel BNC connectors for signal connection
Gain Ranges: x1
Inputs: 16 differential voltage inputs
Maximum Voltage Range: $\pm 10\text{V}$
Input Impedance: 20M Ohm
Accuracy: $\pm[0.025\% + 150\ \mu\text{V}]$ (typ), $\pm[0.1\% + 250\ \mu\text{V}]$ (max)



The DBK85 adds the convenience of BNC inputs plus 16 additional differential channels to any Daq system

Temperature Coefficient: 10 ppm for every degree outside the range of 0° to 50°C
Noise: 60 μVrms (typ)
Maximum Input Voltage (without damage): $\pm 35\text{V}$
3 dB Bandwidth: 2.6 MHz
CMRR: 80 dB typ
Power Consumption: 755 mW

Description	Part No.
Shielded P1 T cable for use with DaqBook/2001, DaqBook/2005, DaqLab/2001, and DaqLab/2005	CA-255-2T
Ribbon cable for use with DaqScan	CA-37-x

Note: The CA-37-x ribbon cable can also be used in lieu of the CA-255-x molded T cables.

Ordering Information

Description	Part No.
16-channel differential voltage input module	DBK85

Accessories & Cables

Rack mount kit	RackDBK3
Shielded P1 T cable for use with DaqBook/2020, and WBK40/41	CA-255-4T

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

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

DBK85 Differential Voltage Input Module Block Diagram

