



# DBK85<sup>™</sup>

## 16-Channel Differential Voltage Input Module



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**Features** 

- 16 differential input channels via BNC connectors
- Unity gain combines with A/D gains to provide full-scale inputs from ±156 mV to +10V

The DBK85<sup>™</sup> 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 ±10V down to ±156 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: ±10V Input Impedance: 20M Ohm Accuracy: ±[0.025% +150 µV] (typ), ±[0.1% +250 µV] (max)



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

RackDBK3

CA-255-4T

**Temperature Coefficient:** 10 ppm for every degree outside the range of  $0^{\circ}$  to  $50^{\circ}$ C

Noise: 60 µVrms (typ)

Maximum Input Voltage (without damage): ±35V

3 dB Bandwidth: 2.6 MHz

CMRR: 80 dB typ

Power Consumption: 755 mW

### **Ordering Information**

Part No.
DBK85

#### **Accessories & Cables**

Rack mount kit Shielded P1 T cable for use with DaqBook/2020, LogBook/360,

and WBK40/41

**Description**Shielded P1 T cable for use with

DaqBook/2001, DaqBook/2005, LogBook/300, DaqLab/2001, and DaqLab/2005 Ribbon cable for use with DaqScan

CA-255-2T CA-37-x

Part No.

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

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

\* Attachment to the DaqBoard/2000 requires a DBK200, DBK201, DBK202, or DBK203 adapter

#### **DBK85 Differential Voltage Input Module Block Diagram** Output channel Channels CH 0 1 thru 15 Instrumentation selection amplifier switch High ⋛ MUX Iow REF 16 channels total Channel select lines

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