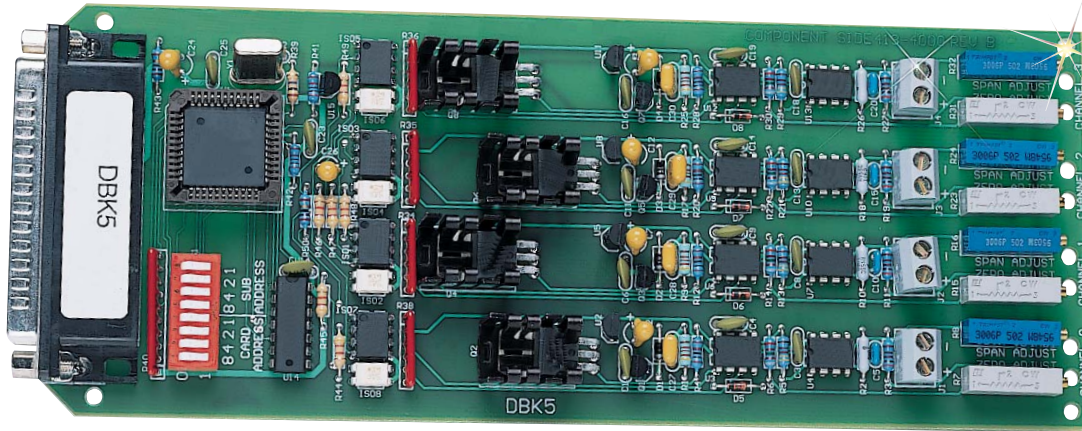


OMB-DBK5

4-Channel Current Output Card for OMB-DAQBOARD-2000 Series



Model OMB-DBK5
\$519



OMB-DBK5, \$519, current-output card controls four isolated 4 to 20 mA current loops, shown smaller than actual size

- Provides Four Isolated 4 to 20 mA Current Outputs
- Compatible with 12 to 45 V Current Loop Supplies
- Features Predictable Power-On & Fault States
- Provides 12-Bit Resolution

The OMB-DBK5 current-output card provides OMB-DAQBOARD-2000 Series data acquisition systems with the ability to control four isolated 4 to 20 mA current loops. The OMB-DBK5 acts as a current loop transmitter by modulating current from an external source. The OMB-DBK5 can be programmed with a static value whenever the data acquisition system is not transferring A/D data. As many as sixty-four OMB-DBK5's can be used in one system, to obtain up to 256 outputs.

Architecture

Each of the OMB-DBK5's channels contains a 12-bit D/A converter to set the loop current. All channels are optically isolated from the data acquisition system and from one another by 500 V.

Current Loop

The OMB-DBK5 is compatible with regulated or unregulated loop supplies of 12 to 45 Vdc. It also provides compliance with loop resistances of up to 1950 ohms, depending on the source magnitude.

Current Loop-Powered Outputs

Since the isolated outputs of the OMB-DBK5 are loop powered, the card maintains control of the loop current even when the data acquisition system is powered down. When loop power is first applied, the OMB-DBK5's outputs assume their 4 mA default state. If at any time the data acquisition system's power is lost or communication with the data acquisition system fails, the OMB-DBK5's outputs retain their last set values.

Specifications

Connectors:

DB37 male, mates with P1 pinout on OMB-DAQBOARDS-2000 Series; screw terminals for signal outputs

Accuracy/Linearity:

0.1% full scale

Resolution:

4 μ A/LSB, monotonic

Isolation: 500 V

Voltage Range:

$V_{loop} = 12$ to 45 V

Compliance:

$R_{loop} = (V_{loop} - 6) / 0.020$

Example Voltage MDR*

@ $V_{exc} = 35$ V 1450 Ohms

@ $V_{exc} = 15$ V 450 Ohms

* MDR (maximum drive resistance)

Cables:

Use OMB-CA-37-x with OMB-DAQBOARD-2000 Series

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)		
Model Number	Price	Description
OMB-DBK5	\$519	4-channel current output card

Ordering Example: OMB-DBK5 4-channel current output card, \$519



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