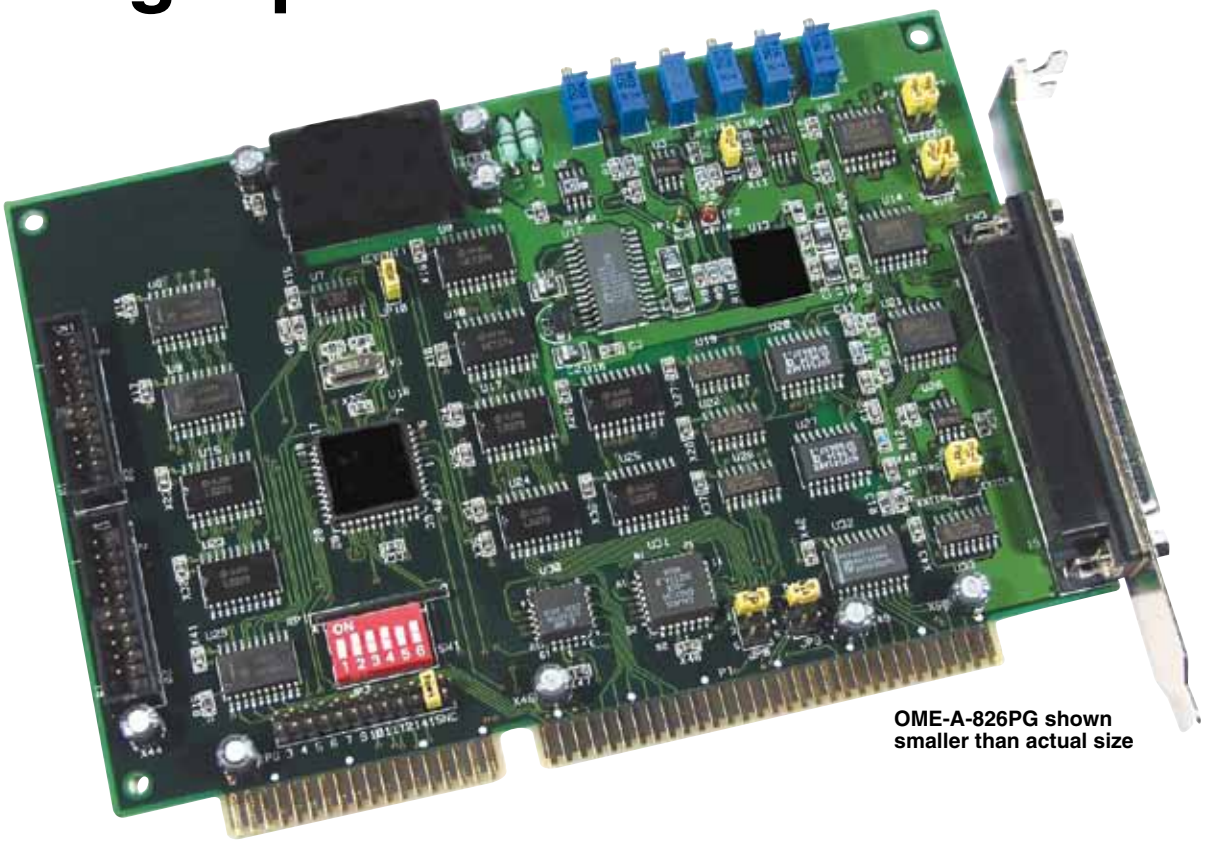
100K S/s 16-Channel 16-Bit Analog Input Board for the ISA Bus



OME-A-826PG shown smaller than actual size

OME-A-826PG

1 YEAR WARRANTY

- **16-Bit A/D Converter**
- **12-Bit D/A Converter**
- **16 Single-Ended or 8 Differential Inputs**
- **100 KS/s Sampling Rate**
- **Two 12-Bit Analog Output Channels**
- **A/D Data Transfer Modes: Polling, Interrupt, DMA**
- **16 Digital Input & 16 Digital Outputs**

The OME-A-826PG is a 16-bit multifunction analog and digital I/O board for PC/AT compatible computers. The OME-A-826PG offers 16 single-ended or 8 differential analog inputs, plus two channels of analog output with 12-bits resolution. In addition, the OME-A-826PG has 16 digital inputs, 16 digital outputs and one counter/ timer channel. The OME-A-826PG provides gains of 1, 2, 4 and 8. It has a maximum sampling rate of 100 KS/s. DMA operation is jumper selectable for levels 1 or 3. Interrupts are jumper selectable between 3 and 15.

Software Development Kit

All data acquisition boards are supplied with a standard software development kit for Windows 98/NT/2000/XP. The software development kit includes DLL files for programming in C, C++ or other high level languages and OCX files for Visual Basic or Active X programming. LabView drivers are also included.

Specifications

ANALOG INPUT

Channels: 16-channel single-ended or 8-channel differential
Input Ranges:
±10V, ±5V, ±2.5V, ±1.25V
Resolution: 16-bits
Conversion Rate: 100 KS/s
Input Impedance: 10,000Ω//6pf
Overvoltage Protection: ±35V
Linearity: ±1-bit
Sample & Hold: on chip
Zero Drift: 19 ppm/°C of full scale

D/A OUTPUTS

Channels: 2 independent
Type: 12-bit double buffers
Linearity: 0.006% FS
Output Driving: 5 mA
Output Range:
0 to 5V or 0 to 10V
External Reference: Max ±10V
Output Current: ±5 mA

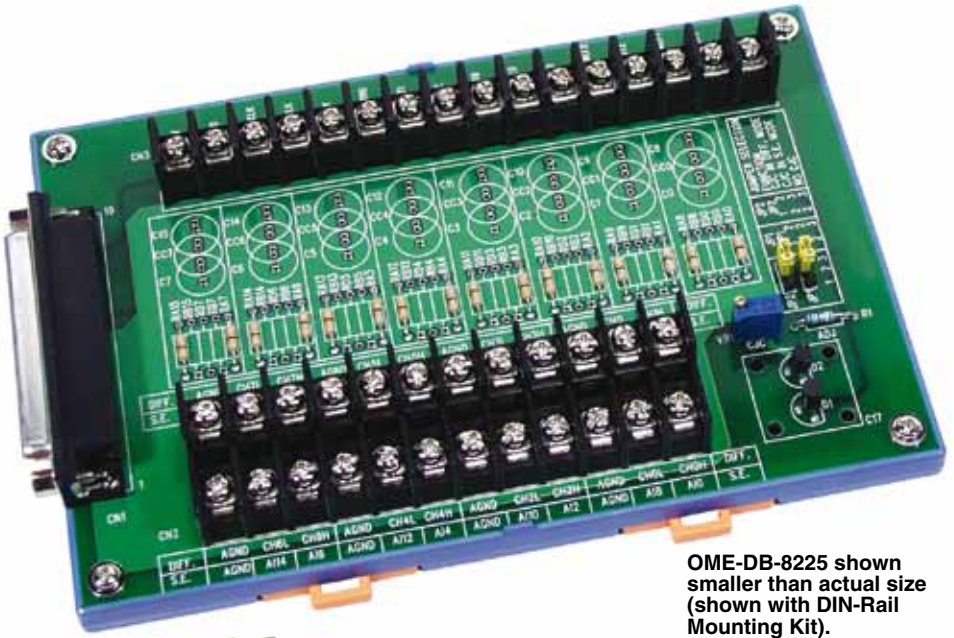
DIGITAL I/O

Inputs: 16 (LSTTL)
Input Low: VIL = 0.8V max
IIL = -0.4 mA max
Input High: VIH = 2.0V min
IIH = 20 µA max
Outputs: 16 channel TTL levels
Outputs Low: VOL = 0.5V max
@ IOL = 8 mA max
Outputs High: VOH = 2.7V min
IOH = -400 µA max

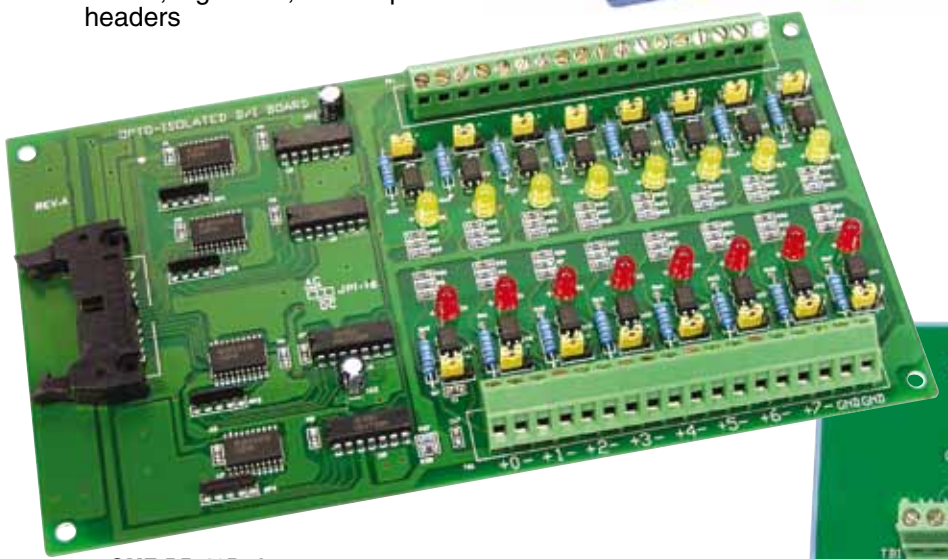
COUNTER/TIMER

Programmable Internal Timer: (0.0045 Hz 0.5 MHz)
Type: 82C54
A/D Pacer: 16-bit counter
Interrupt Channel: 3-15 jumper selectable

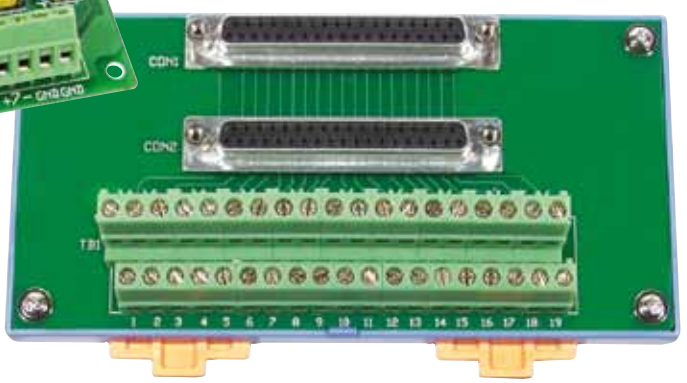
General Environmental
Power Requirements: +5V @ 650 mA (max)
Operating Temperature: 0 to 50°C (32 to 172°F)
Storage Temperature: -20 to 70°C (-4 to158°F)
Humidity: 0 to 90% RH non-condensing
Dimensions: 122 H x 170 mm W (4.8 x 6.7")
Connector: analog I/O, 37-pin D-Sub; digital I/O, two 20-pin headers



OME-DB-8225 shown smaller than actual size (shown with DIN-Rail Mounting Kit).



OME-DB-16P shown smaller than actual size.



OME-DN-37 shown smaller than actual size (shown with DIN-Rail Mounting Kit).

OMEGA CARE℠ Extended Warranty Program

OMEGACARE℠ extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE℠ covers parts, labor and equivalent loaners.

To Order

Model Number	Description
OME-A-826PG	100 KS/s 16-bit multi-function board
OME-DB-8225/1	Screw terminal board for analog I/O with 1 m (3') 37-pin D-sub cable
OME-DB-8225/2	Screw terminal board with 2 m (7') 37-pin D-sub cable
OME-DB-37	Direct connect 37-pin terminal board
OME-DN-37	37-pin D-Sub DIN rail mount I/O connector board (two 37-pin D-Sub connectors, one for expansion) for analog inputs, includes one 1 m (3') cable
OME-DB-889D	16-channel analog multiplexer board, includes 1 m (3') cable
OME-DB-16P	16-channel isolated digital input board, includes 1 m (3') cable
OME-DB-16R	16-channel relay output board, includes 1 m (3') cable

OME-A-826PG *comes complete with operator's manual and software development kit on CD ROM.*
Ordering Example: OME-A-826PG *16-bit multi-function board, and* ***OCW-1,*** *OMEGACARE℠ extends standard 1-year warranty to a total of 2 years.*