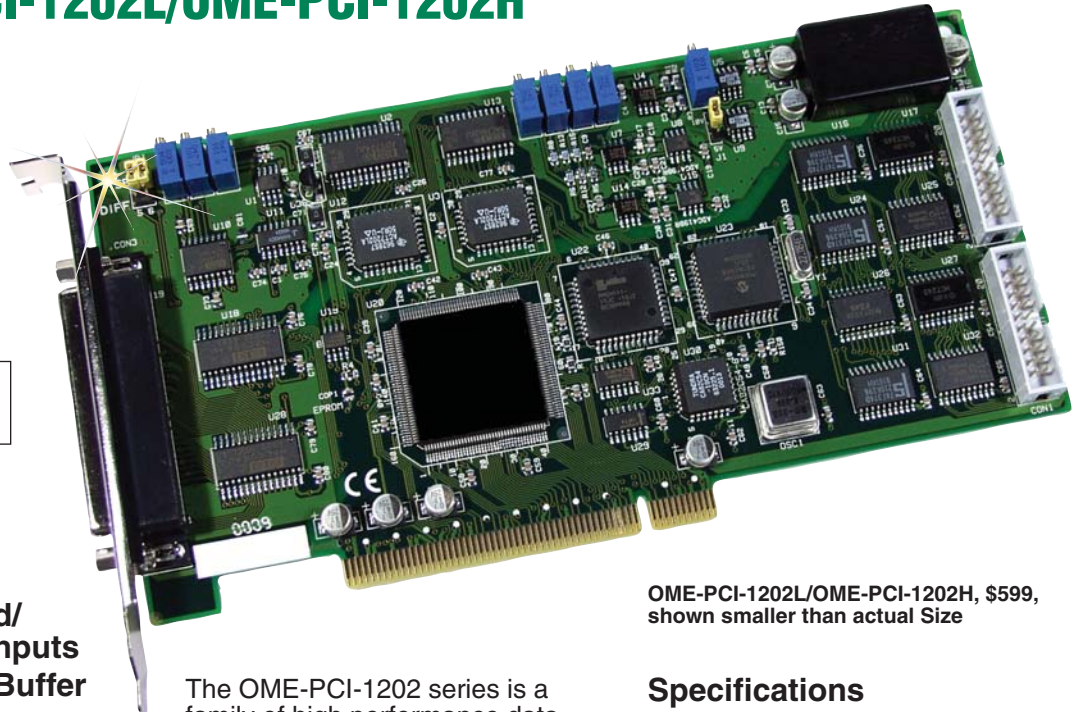


110 KS/s 12-Bit High Performance Analog and Digital I/O Boards

OME-PCI-1202L/OME-PCI-1202H

\$599
Basic unit



OME-PCI-1202L/OME-PCI-1202H, \$599, shown smaller than actual size

- ✓ PCI Bus
- ✓ 12-Bit 110 KHz A/D Converter
- ✓ 32 Single-Ended/16 Differential Inputs
- ✓ 2 K Word FIFO Buffer
- ✓ 110 KS/s Maximum Sampling Rate:
OME-PCI-1202H-40KS/s;
OME-PCI-1202L-110KS/s
(Single Channel or Multiple Channels)
- ✓ Trigger Methods:
Software Trigger, Pacer Trigger, External Trigger
- ✓ External Triggers:
Post-Trigger, Pre-Trigger, External Pacer Trigger
- ✓ 16 Digital Input/16 Digital Output Channels
- ✓ OME-PCI-1202L Provides Programmable Low Gain: 0.5, 1, 2, 4, 8
- ✓ OME-PCI-1202H Provides Programmable High Gain: 0.5, 1, 5, 10, 50, 100, 500, 1000
- ✓ Two 12-Bit Independent Programmable DACs
- ✓ 2.7 M Word/High Speed Data Transfer Rate

The OME-PCI-1202 series is a family of high performance data acquisition boards for the PCI bus. They feature a continuous, 110 KHz, gap-free data acquisition under DOS and Windows. The OME-PCI-1202 provides 32 single-ended or 16 differential analog inputs.

Both the OME-PCI-1202L and OME-PCI-1202H provide software programmable input ranges. The OME-PCI-1202L offers low gain settings of 0.5/1/2/4/8. The OME-PCI-1202H offers high gain ranges of 0.5/1/5/10/50/100/500/1000. The OME-PCI-1202 contains two 12-bit D/A converters that can generate output voltages in the range of ± 5 or ± 10 V. Sixteen channels of digital input and 16 channels of digital output are also available.

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 SPECIFICATIONS FOR OME-PCI-1202L AND OME-PCI-1202H

Input Channels:

32 S.E./16 Diff (jumper setting)

Input Ranges:

See range table on next page

Resolution: 12-bits

Max Conversion Rate:

OME-PCI-1202L: 110 KS/s

OME-PCI-1202H: 40 KS/s

Input Impedance:

10,000M Ω // 6pf

Overvoltage Protection: ± 35 V

Linearity: ± 1 bit

On Board FIFO: 2 K

Programmable Gain:

0.5/1/2/4/8 (PCI-1202L);

0.5/1/5/10/50/100/500/1000

(PCI-1202H)

D/A OUTPUTS

Channels: 2

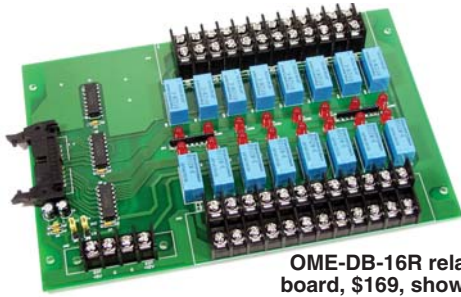
Type: 12 bit double buffers

Linearity: 0.06% FS

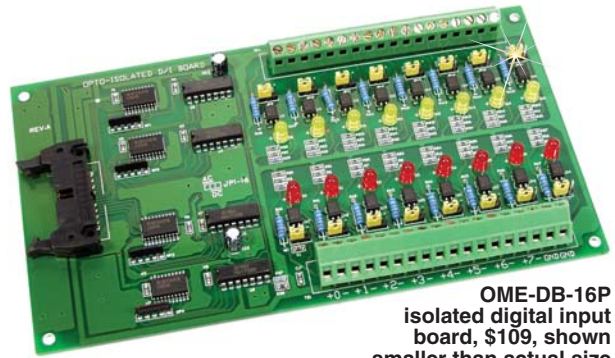
Settling Time: 0.4 ms

Output Range: ± 5 or ± 10 V

Output Current: ± 5 mA



OME-DB-16R relay board, \$169, shown smaller than actual size



OME-DB-16P isolated digital input board, \$109, shown smaller than actual size

DIGITAL I/O

Input: 16 channels;

TTL levels

Input Low:

$V_{IL} = 0.8$ V max,

I_{IL} low = 4 mA

Input High:

$V_{IH} = 2.0$ V min,

$I_{IH} = -20$ μ A max

Output: 16 channels;

TTL levels

Output Low:

V_{OL} low = 0.33 V max,

I_{OL} low = 4 mA max

Output High:

$V_{OH} = 3.84$ V min,

$I_{OH} = -400$ μ A max

TIMER

Internal Pacer Timer:

16-bit, 8 MHz input

External Pacer Timer:

16-bit, 8 MHz input

Machine Independent

Timer: 16-bit, 8 MHz input

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

GENERAL ENVIRONMENTAL
Operating Temperature: 0 to 50°C (32 to 122°F)
Storage Temperature: -20 to 70°C (-4 to 158°F)
Humidity: 0 to 90% RH non-condensing
Dimensions: 200 L x 105 mm H (7.9 x 4.1")

OME-PCI-1202L Analog Input Ranges

| Gains: | Bipolar(V): | Unipolar(V): | Throughput: |
|--------|---------------|--------------|-------------|
| 0.5 | ± 10 V | 0 to 10 V | 110 KS/s |
| 1 | ± 5 V | 0 to 10 V | 110 KS/s |
| 2 | ± 2.5 V | 0 to 5 V | 110 KS/s |
| 4 | ± 1.25 V | 0 to 2.5 V | 110 KS/s |
| 8 | ± 0.625 V | 0 to 1.25 V | 110 KS/s |

OME-PCI-1202H Analog Input Ranges

| Gains: | Bipolar(V): | Unipolar(V): | Throughput: |
|--------|---------------|--------------|-------------|
| 0.5 | ± 10 V | 0 to 10 V | 40 KS/s |
| 1 | ± 5 V | 0 to 10 V | 40 KS/s |
| 5 | ± 1 V | 0 to 1 V | 40 KS/s |
| 10 | ± 0.5 V | 0 to 1 V | 40 KS/s |
| 50 | ± 0.1 V | 0 to 0.1 V | 10 KS/s |
| 100 | ± 0.05 V | 0 to 0.1 V | 10 KS/s |
| 500 | ± 0.01 V | 0 to 0.01 V | 1 KS/s |
| 1000 | ± 0.005 V | 0 to 0.01 V | 1 KS/s |

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

| Model Number | Price | Description |
|----------------|-------|---|
| OME-PCI-1202H | \$599 | 32-channel high gain 12-bit A/D board |
| OME-PCI-1202L | 599 | 32-channel low gain 12-bit A/D board |
| OME-DB-1825/1 | 109 | Screw terminal board for analog input channels with 1 m 37-pin D-Sub cable |
| OME-DB-1825/2 | 119 | Screw terminal board for analog input channels with 2 m 37-pin D-Sub cable |
| OME-DB-8025 | 79 | Screw terminal board for digital I/O, includes two 1 m cables |
| OME-DB-16P | 109 | 16-channel isolated digital input board, includes 1 m cable |
| OME-DB-16R | 169 | 16-channel SPDT relay board, includes 1 m cable |
| OME-ADP-20/PCI | 49 | 20-pin extender extender (extends the dual 20-pin digital I/O flat cable connectors on the board to the PC slot window, includes two 20-pin cables) |
| OME-DN-20 | 79 | 20-pin DIN rail mount I/O connector board (two 20-pin headers) for digital I/O, includes two 1 m cables |
| OME-DN-37 | 89 | 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 cable |

Each OME-PCI-1202H and OME-PCI-1202L data acquisition board includes complete operator's manual on CD ROM and software development kit.

Ordering Example: OME-PCI-1202H 40 KS/s 32-channel high gain data acquisition board, OME-DB-8025 screw terminal board and OMEGACARESM 1 year extended warranty for OME-PCI-1202H (adds 1 year to standard 1 year warranty), \$599 + 79 + 59 = \$737.



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www.omega.com
1-800-TC-OMEGA
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• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

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• Data Acquisition

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Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters