

ACQ-16 USB Acquisition Interface



Features

- **Most cost effective acquisition interface solution**
- **Acquire up to 16 channels simultaneously**
- **Industry standard USB 2.0 communication port**
- **Low profile Rack Mount \ Table Top Enclosure**
- **Input ranges of ± 1.25 , ± 2.5 , ± 5 and ± 10 volts**

The ACQ-16 USB is designed specifically to interface to the Ponemah Physiological Platform. The ACQ-16 USB is a cost effective choice for interfacing to pre-conditioned, high-level signals, when the required number of channels does not exceed sixteen. The slim line chassis can be free standing on a table or mounted in a standard 19" laboratory rack. The ACQ-16 USB interfaces to the computer by the standard USB 2.0 port. Up to sixteen channels can be simultaneously acquired with 16-bit resolution. The maximum aggregate sample rate is 250 KHz*. The input circuit has a fixed span of ± 1.25 , ± 2.5 , ± 5 , or ± 10 Volts full scale.

Optionally, the ACQ-16 USB device can be used in conjunction with OpenART on the same computer to acquire synchronized data.

Technical Data Sheet

Model PNM-P3P-USB16

ACQ-16 USB Acquisition Interface

SPECIFICATIONS

Analog Inputs

Number of Channels 16
Maximum Input Voltage 30V Peak

Acquisition System

Aggregate Sample Rate 250K Samples/Second
Sample Rate Groups A and B where B is a divisor of A, individually as signed by channel
Resolution 16 bits
Filter 1 pole, fixed @ 50 KHz, $\pm 20\%$
A/D Noise $< \pm 0.25\%$ Full Scale
A/D Offset $< \pm 0.25\%$ Full Scale
A/D Gain Error $< \pm 0.25\%$ Full Scale
Bandwidth Flat to -1% @ 5 KHz, -3dB @ 50 KHz

*NOTE: The aggregate sampling rate may be affected by the host computer's performance and the complexity of the real-time analysis being performed.

POWER REQUIREMENTS

Line Voltage Auto-switching 100-240 VAC ($\pm 10\%$)
Line Frequency 50/60 Hz

GENERAL

Temperature: Storage -25 to 85 °C
Temperature: Operation 0 to 50 °C
Humidity 10% to 90% Relative Humidity @ 18 °C

PHYSICAL SPECIFICATIONS

Dimensions:

Height with feet 1.83 inches
Height without feet 1.72 inches
Dimensions: width 16.73 inches
Dimensions: depth 10 inches
Weight 5 pounds

ORDERING INFORMATION

Part Number	Description
PNM-P3P-USB16	ACQ-16 Interface with USB Connection

Kit Includes: ACQ-16 Acquisition Interface Unit, USB Cable, BNC to BNC Interface Cables, Reference Manual.

*Specifications are current at publication.
Due to DSI's continuing product improvement program,
specifications may change without notice.*

DSI products are not intended for the purposes of diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, or used as a life support device. Use of DSI products are solely for the purposes of conducting life science research.