

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

3300 SYSTEM

ADRE 208-P 102351-04-01

DATA ACQUISITION INTERFACE UNIT

Used with the applicable 3300 System configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Bently Nevada ADRE 208-P 102351-04-01 manufacturer documentation

ADRE® for Windows® / DAIU

Bently Nevada™ Asset Condition Monitoring



Description

ADRE for Windows® Software (Automated Diagnostics for Rotating Equipment) and the 208 DAIU/208-P DAIU (Data Acquisition Interface Unit) is a portable system for multi-channel (up to 16) machinery data acquisition.

Unlike other general-purpose computer-based data acquisition systems, ADRE for Windows is specifically designed for capturing machinery data. It is an extremely versatile system, incorporating the features and capabilities of oscilloscopes, spectrum analyzers, filters, and recording instruments. As a result, this additional equipment is seldom, if ever, needed. When using the system's real-time display capability, data is presented on the computer screen as it is captured. For users of previous ADRE systems, ADRE for Windows is backwards compatible with existing ADRE 3 databases.

An ADRE for Windows® data acquisition and reduction system consists of:

- One (or two) 208 Data Acquisition Interface Unit(s)^{1, 2} **or**
- One (or two) 208-P Data Acquisition Interface Unit(s)^{1, 2} **and**
- ADRE for Windows® software **and**

A computer system capable of running ADRE for Windows® software.

The system's Data Acquisition Interface Units can operate using ac or battery power, and are fully portable, allowing convenient operation in test stands or at machinery sites. It is highly configurable to provide support for virtually all standard and non-standard input types including both dynamic transducer signals (such as proximity probes, velocity transducers, accelerometers, and dynamic pressure sensors), static signals (such as process variables from transmitters), and Keyphasor® or other speed input signals. The system also supports multiple triggering modes for automated data acquisition, allowing it to be used as a data or event logger without an operator present.

Notes:

1. A 208 DAIU and a 208-P DAIU may **not** be connected together.
2. The 208 DAIU is a predecessor to the 208-P DAIU and was designed to allow certain older models of Compaq® notebook computers to be connected directly to the 208 using the notebook's docking port connector. A special ISA card is also available for installation in desktop computers, allowing a 208 to be connected. The newer 208-P allows direct connection to an enhanced parallel port (EPP) and is supported by virtually all currently available notebook and desktop computer systems, provided they have an EPP and it can be placed in the EPP mode. The 208-P is recommended for all new applications; because a 208 may not be connected to a 208-P, a 208 is only required for installations in which it must be connected to another existing 208.



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Specifications and Ordering Information
Part Number 141577-01
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Specifications

(DAIUs)

Typical specifications are provided for a temperature of $+25^{\circ}\text{C}$ ($+77^{\circ}\text{F}$) except where noted. Worst case specification is over the entire operating temperature range of 0°C to $+50^{\circ}\text{C}$

($+32^{\circ}\text{F}$ to $+122^{\circ}\text{F}$) unless specified otherwise.

Signal Conditioning

**Direct
Measurement
Accuracy**

**Non-RMS
Amplitude:**

100 to 60k rpm:

- At $+25^{\circ}\text{C}$ ($+77^{\circ}\text{F}$):
 $\pm 0.77\%$ of input signal
and $\pm 0.28\%$ of full-scale
range.
- Across operating
temperature range:
 $\pm 0.49\%$ of full-scale
range.

**Non-RMS
Amplitude,
Integrated:**

100 to 60k rpm:

- At $+25^{\circ}\text{C}$ ($+77^{\circ}\text{F}$):
 $\pm 3.5\%$ of input signal
and $\pm 0.28\%$ of full-scale
range.
- Across operating
temperature range:
 $\pm 0.49\%$ of full-scale
range.

RMS Amplitude:

100 to 600 rpm:

- At $+25^{\circ}\text{C}$ ($+77^{\circ}\text{F}$):
 $\pm 2.7\%$ of input signal
and $\pm 0.31\%$ of full-scale
range.

**RMS Amplitude,
Integrated:**

100 to 600 rpm:

- At $+25^{\circ}\text{C}$ ($+77^{\circ}\text{F}$):
 $\pm 3.4\%$ of input signal
and $\pm 0.31\%$ of full-scale
range.
- Across operating
temperature range:
 $\pm 0.47\%$ of full-scale
range.

600 to 60k rpm:

- At $+25^{\circ}\text{C}$ ($+77^{\circ}\text{F}$):
 $\pm 3.5\%$ of input signal
and $\pm 0.31\%$ of full-scale
range.
- Across operating
temperature range:
 $\pm 0.47\%$ of full-scale
range.

**Filtered
Measurements**

**Filter
Bandwidth:**

Selectable in software,
12 cpm or 120 cpm
(0.2 Hz or 2.0 Hz).