

Description

Agilent DAC Express Data Acquisition/Recorder requires *no programming* and thus dramatically improves the productivity of electro-mechanical and electronic engineers. Tests such as design verification, durability, and regulatory compliance can be set up quickly with no need for time-consuming debugging.

There are several system configurations available that are ready to run with the optional Hewlett-Packard® PC or with your PC (MS Windows 95/98/NT) and an IEEE-1394 I/O card (E8491B). These systems use the C-size VXI architecture for unmatched data integrity and throughput speed and can be easily upgraded for more measurement channels.

- E9814B combined noise/vibration, high-level voltage, and low-level voltage, temperature, strain measurements
- E9813B noise/vibration measurements
- E9812B high-level voltage, and low-level voltage, temperature, strain measurements
- E9811B multi-function measurements of analog, digital, and rpm signals.

The source of test data is never in question because system setup, test descriptions, and related documents are stored with the test data. This provides a unique identification and also a means of system setup for repeating the test.

Agilent E9814B, E9813B, E9812B, E9811B, E9801B, E9800B

Agilent DAC *Express* Data Acquisition/Recorder Systems and Software

Data Sheet

- Combined measurements of noise, vibration, temperature, pressure, strain, resistance, voltage, digital states, and rpm
- Intuitive user interface reduces system development time by 10x
- Replaces analog or digital tape recorders
- Online monitoring assures confidence in measurements
- Post-test data viewing mode helps find events of interest
- Saves time with formatted output to analysis and reporting packages

For more information, please refer to the Agilent Technologies Data Acquisition Website at www.agilent.com/find/data_acq.

Refer to the Agilent Technologies Website for instrument driver availability and downloading instructions, as well as for recent product updates, if applicable.

Agilent DAC Express Systems at a Glance

All systems are factory integrated and ready to go with the optional Hewlett-Packard PC with DAC Express installed. If you choose to use your own PC, it's a simple process to install the DAC Express software and the Agilent IEEE-1394 PCI card (high-speed serial I/O).

E9814B Data Recorder/Logger

Combining high-speed measurements of noise or vibration signals and low-speed measurements of temperature, strain, and more, this is the workhorse system of its class. High-speed sample rates can be set up to 51.2 KSa per second per channel. Low-speed scanned sample rates can be set up to 1.25 KSa per second per channel for 64 channels.

In the standard configuration, all data goes to the host PC hard drive. For higher data transfer rates, using the optional VXI data disk, the high-and low-speed data streams go to separate disks, ensuring continuous data rates of up to 5 MSa/sec for high-speed measurements and more than 400 KSa/sec for low-speed measurements.



E9813B Data Recorder

If your need is for noise and vibration measurements only, using microphones, accelerometers, or other voltage transducers, just connect your inputs and go. Real-time displays include time records and single-block FFTs.

E9812B Data Logger

The simple name understates its power. Focusing on low-speed measurements of temperature, strain, and so on, this system starts with 16 channels but can expand to 64 channels per slot and 768 channels total in the optional 13-slot mainframe. The channel scan rate can be up to 1.25 KSa/sec for 64 channels. The data-to-disk transfer rates of greater than 400 KSa/sec (for multiple modules) can be maintained while online monitoring displays show key values for the operator.

E9811B Multi-function Data Logger

Sometimes you need more than just analog data. If your job requires recording digital states, relay settings, shaft rpm, pulse train rates, or similar parameters in addition to analog signals, this system is the answer. You can configure a mix of channel types, up to 196 channels in the standard 4-slot mainframe, or up to 768 channels in the optional 13-slot mainframe.

Get Your Own Custom System

If these systems don't exactly meet your needs, contact your Agilent sales representative to talk about the E9810B DAC $\it Express$ Integrated System that can provide the flexibility you need.

No Programming Required

The intuitive software user interface (E9801B) simplifies the time-consuming tasks of:

- Configuring hardware
- Conditioning transducers
- Setting measurement rates
- Developing display routines
- Creating data files
- Exporting data for analysis and report generation

It's all as simple as 1-2-3:

- 1. Set up
- 2. Record
- 3. View

Share the View

Now with the new DAC *Express* Setup/Data Viewer software (E9800B), design engineers and others outside the test department can be included. They can look at the equipment setup file and replay collected data through the same displays as used during the actual test. The cost of this software is a fraction of that of the full DAC *Express* software because there's no instrument control involved.

For More Information

Agilent DAC Express Data Acquisition/Recorder Systems Product Overview, Pub. No. 5968-6132E; DAC Express Technical Specifications, Pub. No. 5968-0431F

Product Specifications

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rate: Noise/vibration: up to 51.2 KSa/sec/ch

Voltage, temp., etc.: up to 2 KSa/sec/ch

Data throughput

rate: Noise/vibration: up to 5 MSa/sec to VXI data disk

Voltage, temp., etc.: up to 400 KSa/sec to PC hard drive

Ordering Information

| Description | Product No. |
|--|-------------|
| DAC Express Recorder/Data Logger | E9814B |
| DAC Express Recorder | E9813B |
| DAC Express Data Logger | E9812B |
| DAC Express Multi-function Data Logger | E9811B |
| DAC Express Integrated System | E9810B |
| DAC Express Software Release 2.0 | E9801B |
| DAC Express Setup/Data Viewer Software | E9800B |

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