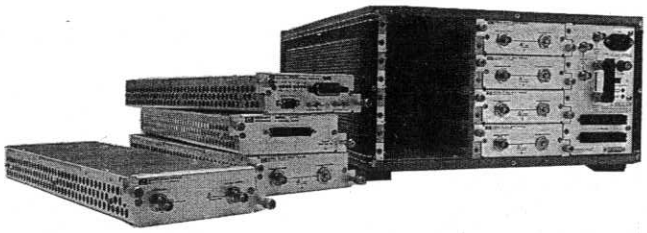


HP 3565S

## HP 3565S Multichannel Measurement System

The modular HP 3565S system is optimized for fast signal acquisition and analysis, acting as a measurement co-processor to your UNIX workstation or DOS-based PC. Each system may have up to 496 input channels.

### Applications Software

System software for the HP 3565S is available from HP (HP 3566A and 3567A), and many independent software vendors, such as: Leuven Measurement Systems, Structural Measurement Systems, Mahrenholtz and Partner, Structural Dynamics Research Corp., and Creare Inc.

### System Mainframes

System mainframes provide power and interconnection for a system. Up to eight HP 35650A 8-slot mainframes may be connected in a system. The HP 35650B 4-slot mainframe is for use in single mainframe or portable systems.

### Signal Processing and SCSI-Interface Modules

Each system needs one signal processing module to perform computation and control tasks. The HP 35651C signal processor comes with 4 MB of RAM and one MC 56002 DSP; the HP 35654B signal processor uses two MC56002 DSP, and has 4 MB of RAM. RAM may be optionally increased to 16 MB.

The HP 35659A SCSI interface module provides high-speed digital recording of input data. There is an optional internal 2 GB SCSI hard drive available.

### Signal and Tachometer/Trigger Input Modules

All analysis input channels are equipped with an anti-alias filter, ADC, digital filter, FIFO, and ICP supply. They are sampled simultaneously to maintain cross-channel phase match. Both the HP 35652A/B 1-channel input modules are equipped with BNC and charge-amp input connectors.

The HP 35655A is a 12.8 kHz, 8-channel input module. The HP 35658A tachometer/trigger module produces input for rotating machinery analysis and system trigger needs.

### Source Modules

The HP 35653C 102.4 kHz source supplies a variety of signals for measurement stimulus and system calibration.

Arbitrary stimulus with 16-bit resolution is available from the HP 35656B Programmable DAC.

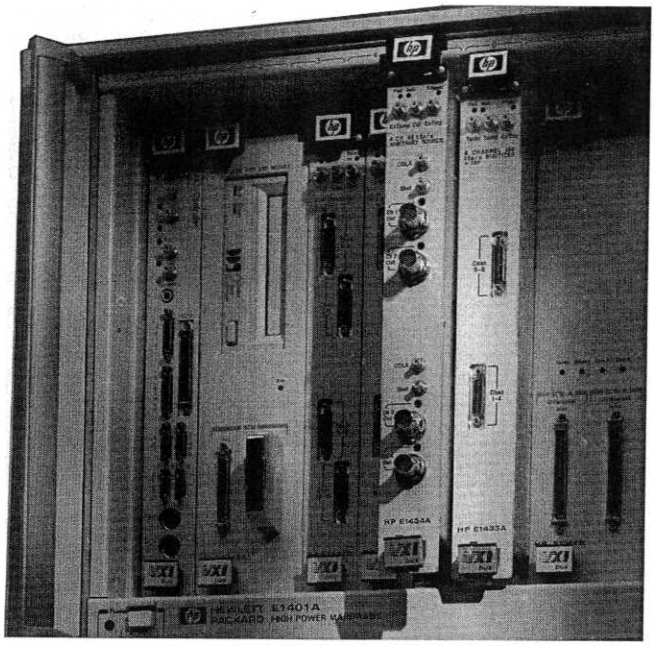
Contact your Hewlett-Packard sales office for complete specifications and technical data.

### Key Literature

HP 3565S Technical Specifications, p/n 5963-2342E

### Ordering Information

| | Price |
|---|---|
| **HP 35650A** 8-Slot Expandable Mainframe | $6,630 |
| **HP 35650B** 4-Slot Portable Mainframe | $4,745 |
| **HP 35651C** Signal Processing Module | $6,320 |
| **HP 35652A** 51.2 kHz 1-Channel 80-dB Input Module | $2,730 |
| **HP 35652B** 102.4 kHz 1-Channel 80-dB Input Module | $3,060 |
| **HP 35653C** 102.4 kHz Source Module | $2,050 |
| **HP 35654B** Signal Processing Module | $11,150 |
| **HP 35655A** 12.8-kHz, 8-Channel 72-dB Input Module | $10,500 |
| **HP 35656B** Programmable DAC | $4,745 |
| **HP 35658A** Tachometer/Trigger Input Module | $2,040 |
| **HP 35659A** SCSI Interface Module | $5,610 |



## VXI Measurement Platform for Mechanical and Acoustic Test

The HP E1433A 8-channel digitizer, E1432A 16-channel digitizer, and E1434A 4-channel arbitrary source provide both system excitation and digitization for the mechanical and acoustical tests common in the automotive and aerospace industries. The HP E1433A's 196-kSa/sec sample rate and onboard digital signal processing (DSP) boost total system performance while cutting system development time. The HP E1432A 16-channel 51.2 kSa/sec digitizer provides many of the same measurements and features as the E1433A, but at a lower sample rate and decreased cost. For system excitation, the HP E1434A arbitrary source provides multi-channel stimulus.

When combined with the existing HP E1562A/B/C SCSI data disk they form a comprehensive measurement platform for mechanical, acoustical, and electrical test. Now all functions necessary for these demanding applications digitization, excitation, and highspeed data recording are available on an industry standard VXI hardware platform.

### Minimize Complexity, Maximize Performance

The HP E1432A and E1433A simplify system integration by providing signal conditioning, filtering, digitization, and measurement computation, all in a single module. Built-in measurement computations such as FFTs and averaged power spectra off load work from the host computer, keeping it from becoming a computational bottleneck. The HP E1434A arbitrary source can playback continuous arbitrary wave forms, but also provides common test signals such as sine, random, burst random, and swept sine.

### Software Support

Customers can develop their own custom software solutions using VXI *plug&play* drivers and common programming languages, or they can use HP's VEE graphical programming environment. For turnkey software solutions, expect wide application support from the industry's leading third-party solution providers. Applications include rotating machinery analysis, modal analysis, acoustics, vibration control, and road simulation, as well as general-purpose multi-channel data acquisition and analysis.

### Key Literature

HP E1432A Technical Specifications p/n 5963-9645E
HP E1562A/B/C Technical Specifications p/n 5963-9643E

### Ordering Information

| | Price |
|---|---|
| **HP E1432A** 16-Channel, 51.2 kSa/sec Digitizer + DSP | $11,350 |
| **HP E1433A** 8-Channel, 196 kSa/sec Digitizer + DSP | $11,700 |
| **HP E1434A** 4-Channel, 65 kSa/sec Arbitrary Source | $7,500 |
| **HP E1562A** VXI Data Disk, DAT and SCSI-2 Interface | $13,000 |

See VXI catalog for more details and additional modules.