

DATA ACQUISITION SYSTEMS

General Information

- Reduce manufacturing costs
- Reduce product development time
- On-going payback
- Improve product quality
- Higher process throughput
- More process up-time



Every data acquisition system requires a combination of computers, instruments, transducers, and software. The extent to which these pieces are packaged together depends on your individual needs. Whether it is a completely integrated turnkey system, system components, plug-in board products, or a customized in-house system, Hewlett-Packard can help. Turnkey solutions can be provided by HP's own Customer Support Group or through a growing network of independent systems integrators and software suppliers. Contact your local HP sales office for more information about these programs.

Information on data acquisition plug-in board products for HP 1000 and HP 9000 computers can be found on page 627. Data acquisition software products are described on page 628. Information on instruments and computers for custom-built systems can be found under the headings for those products. The remainder of this section contains detailed information on data acquisition component systems. These systems provide solutions for a broad range of applications. Contact your local Hewlett-Packard sales office for more information on how these systems can work for you.

Data Acquisition Family Matrix

System Description	Typical Application Areas	Max. Channels/ System Differential	Max. Channels/ System Single-ended	Interfaces	Typical Computers	Programming Method	Supporting Software Packages
HP System 10 + HP 75000 Series B cardcage with measurement cards programmed by Labtech products using a PC.	<ul style="list-style-type: none"> • chemical experimentation • pharmaceutical testing • material evaluation • energy research 	112	336	IEEE-488	HP Vectra PC (or IBM AT compatible)	Iconic & menu driven	Labtech* NOTEBOOK* Labtech* CONTROL*
HP System 20 HP 75000 Series B cardcage with measurement cards programmed by built-in IBASIC controller or external computer.	<ul style="list-style-type: none"> • process characterization • facility monitoring • process troubleshooting • remote station control 	112	336	IEEE-488 RS232/422 (option)	HP Vectra PC, (or IBM AT compatible), HP BASIC workstations or internal IBASIC controller	Front panel, external terminal, or external computer	HP DACQ/PC HP DACQ/300 HPITG
HP 3852A HP 3852 cardcage with measurement cards programmed over IEEE-488 using an external computer.	<ul style="list-style-type: none"> • process control/monitoring • product characterization • process characterization • electromagnetic test 	1848	4620	IEEE-488 RS232/422 (option)	HP Vectra PC (or IBM AT compatible), HP BASIC or HPUX workstations, HP 1000 computer	Front panel or external computer	ISI Autonet* HPITG HP DACQ/PC HP DACQ/UX HP DACQ/300
HP 3421A HP 3421 cardcage with built-in A/D, plug-in relay multiplexer, and digital I/O, programmed by external computer.	<ul style="list-style-type: none"> • small process monitoring • environmental monitoring • material evaluation 	30	56	HPIL IEEE-488 (option)	HP Vectra PC (or IBM AT compatible), HP BASIC workstations	External computer	HP DACQ/PC HP DACQ/300
HP 3497A HP 3497 cardcage with measurement cards programmed by external computer.	<ul style="list-style-type: none"> • process/product characterization • process monitor & control • process troubleshooting 	1000	8070	IEEE-488 RS232/422 (option)	HP Vectra PC (or IBM AT compatible), HP BASIC workstations	Front panel or external computer	HP DACQ/PC HP DACQ/300

*Labtech products available from Laboratory Technologies Corporation, Wilmington, MA (508) 657-5400

*ISI Autonet available from Imagination Systems Incorporated, or The Netherlands (31) 1670 64500 Virginia Beach, VA (804) 497-8200