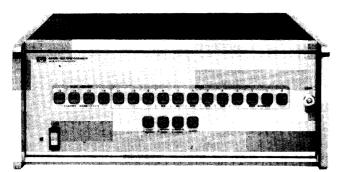
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COMPUTER AIDED TEST

Multiprogrammer: Automatic Test, Data Acquisition and Control Model 6940B

- · Front panel control
- GPIO or HP-IB
- Data transfer rate 20,000 readings/second



HP 6940B

Description

The HP 6940B Multiprogrammer is a low-cost, medium-speed data acquisition and control system designed to be used with controllers or computers via the GP-IO, a 16-bit parallel interface bus. The HP 6940B is supported by a full complement of I/O cards. These I/O cards provide a broad range of instrumentation functions for acquisition, stimulus, measurement and control.

The HP 6940B is programmed by a set of word formats and octal coding. There are three word formats: a control word that selects the operating mode, a data word used to select and control output cards, and an address word to select and control an input card.

The HP 6940B may also be used as an HP-IB product. This requires an HP 59500A Multiprogrammer Interface Kit. This kit provides conversion of the HP-IB format to 16-bit parallel format.

Features

A full-feature, front-panel switch register permits manual programming of all Multiprogrammer output, input and control functions. Fault isolation or manual system checkout of the computer, multiprogrammer or external devices is accomplished from the front panel.

Another feature of the HP 6940B is isolation of analog cards. Isolation from system ground is provided on analog cards. The HP 6940B has four isolated bias power supplies available to independently power the output circuitry of up to four groups of cards.

The HP 6940B Multiprogrammer has the capability of growing to meet the user's needs. Up to 15 HP 6941B extenders can be added to the system, allowing up to 240 I/O slots to be programmed from a single computer interface. The HP 6941B Multiprogrammer Extender has a blank front panel and all interfacing is provided in the HP 6940B Multiprogrammer.

Specifications

Plug-in I/O card position: Maximum of 15 plug-in input or output cards per mainframe.

Computer Interface: Can be interfaced using the GP-IO, which requires an I/O slot of the computer and a GP-IO interface card. An HP 59500A Multiprogrammer Interface Kit is required for use on the HP-IB.

Extender Units: Up to 15 HP 6941B extenders can be chained together to create 240 programmable I/O slots. Extenders may be separated from one another by up to 30 metres.

Data transfer rate: 20,000 readings/second using the GP-IO interface

Cooling: Natural convection

Operating temperature range: 0 to +55 degrees Celsius.

Power: 100/120/220/240 Vac (selectable), +5%, -10%, 48 to 440 Hz, 230 watts.

Dimensions: 172.2 mm high x 425.4 mm wide x 539.8 mm deep (6.78 in high x 16.75 in wide x 21.25 in deep).

Weight (without I/O cards): 15.9 kg (35.0 lb) net, 19.5 kg (43.0 lb) shipping.

Temperature measurement capability

Multiprogrammer Series I I/O cards

Step 1 - Select controller				
Controller	ROM HP P/N	Description		
HP-85B		HP-IB: Option 085		
		GP-IO: Option 185		
HP-86B	00087-15003*	HP-IB: Option 085		
		GP-IO: Option 185		
HP-87XM	00087-15003*	HP-IB: Option 085		
		GP-IO: Option 185		
HP 9826A	N/A	BASIC: Option 016		
	,	HPL: Option 016		
HP 9836A	N/A	Option 016		

N/A

Option 010

HP 1000

Step 2 - Select interface

Interface	GP-IO	HP-IB
HP-85B	HP 6940B Opt 185	HP 59500A and HP-85B Opt 007
HP-86B*	HP 6940B Opt 185	HP 59500A
HP-87XM*	HP 6940B Opt 185	HP 59500A
HP 9826A	HP 98622A Opt 003	HP 59500A, includes 2-metre
	•	HP-IB cable
HP 9836A	HP 98622A Opt 003	HP 59500A
HP 1000A	HP 14550B	HP 59500A and HP 59310B

^{*}When ordering an HP-86B or HP-87XM and using HP-IB interface, an HP-IB cable must be ordered.

Step 3 - Determine I/O card set

Select I/O functions from Series I I/O cards (See page 603).

Step 4 - Select number of mainframes HP 6940B - holds up to 15 I/O cards plus one	Price \$3675
HP 69351C voltage regulator card. Option 10: HP-1000	NIC
Option 85: HP-85B HP-IB	N/C
Option 185: HP-85B GP-IO	N/C \$615
Option 016: Consists of these four items:	N/C
HP 9826A BASIC, HP 9826A HPL,	14/6
HP 9836A BASIC, HP 9836A HPL	
Option 908: Rack Mount Hardware for	\$41
HP 6941B Extender, additional 15 I/O slots	\$3030
Option 908: Rack Mounting Hardware	\$41
HP 14541A Extender Cable; one for each HP 6941B	\$225
Oton F. Bolombia accession	
Step 5 - Determine accessories	*10*0
HP 59500A Multiprogrammer Interface; required for each HP 6940B on the HP-IB	\$1820
Accessories	
HP 14540A Main Input Cable Assembly, 3.6 m (12 ft)	\$335
HP 14541A Chaining Cable, HP 6940B to HP 6941B	\$225
HP 14550B Multiprogrammer Interface Kit for the	\$2120
HP 1000	4212 0
HP 14551A Service Kit for the HP 6940B	\$3030
HP 14555A Connector Kit for Series I Multiprogram-	\$25
mer I/O cards	
HP 14556A Software Library for the HP 9825A	\$204
HP 14557A Power Supply Interconnect Cable for	\$295
the HP 69520A Programming Card	
HP 14558A Termination Panel; with 40 dual-screw ter-	\$230
minals	
HP 14560A Cable Assembly for Series I I/O cards; 15 conductors	\$130
HP 14561A Cable Assembly for Series I I/O cards; 30 conductors	\$180
HP 14562A Cable Assembly for Series I analog I/O cards; two shielded conductors	\$90

^{*}Requires HP 8936A ROM drawer