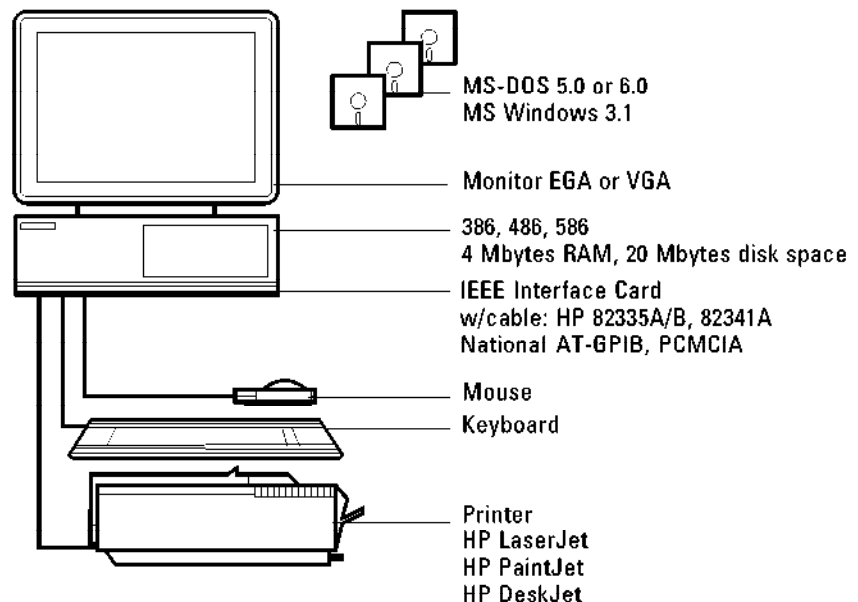# HP 3566A or HP 3567A
Configuration Guide

Ordering an HP 3566A or HP 3567A

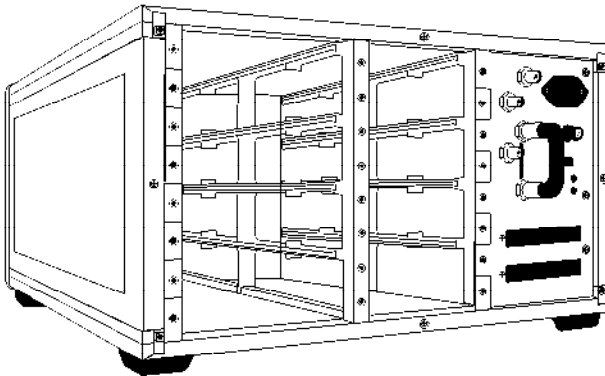Use the following steps to order an HP 3566A or HP 3567A:

1. The HP 3566A and HP 3567A are the same except for frequency range. If you require frequencies greater than 12.8 kHz, choose the HP 3567A. Otherwise, choose the HP 3566A.

2. Choose optional application software if required.
HP 35636A - Order Tracking
HP 35637A - Swept-sine
HP 35638A - Real-time Octave

3. If you want order tracking measurements, order option #058.

4. If you want to do order track measurements with greater than 8 measurement channels, option #054 and #116 are recommened for faster measurements.

5. If you require throughput to disk, order option #059 or #060.

6. If you require chirp waveforms or arbitrary waveforms, order option #056.

7. To determine the amount of RAM required, use the Chart or RAM Equation on page 3. Order option #116 if more than 4 Mbytes is needed.

8. Use option #010 to add extra measurement channels. The maximum number of channels is 48.

9. Determine the number of mainframes you require. Add the number of standard and optional modules you have selected. The standard large mainframe can hold 8 modules. Order option #005 to add extra mainframes. For a portable, non-expandable 4 slot mainframe, order option #050.

10. If an HP personal computer with pre-installed hardware and software is desired, order option #D16.

11. If you plan to provide your own computer, its configuration must conform to the diagram on this page.
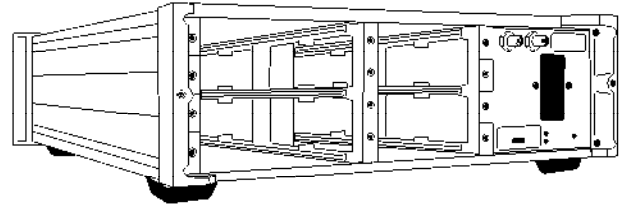
PC Configuration Required

MS-DOS 5.0 or 6.0
MS Windows 3.1

Monitor EGA or VGA

386, 486, 586
4 Mbytes RAM, 20 Mbytes disk space

IEEE Interface Card
w/cable: HP 82335A/B, 82341A
National AT-GPIB, PCMCIA

Mouse

Keyboard

Printer
HP LaserJet
HP PaintJet
HP DeskJet

Tested Computer Configuration

Hewlett-Packard:	All HP personal computers
Toshiba:	T6400 series (laptop)

HP 35650A Mainframe

HP 35650B Mainframe

HP 3566A Includes

One HP 35650A mainframe.
One HP 35655A eight channel 12.8 kHz input module.
One HP 35653C 102.4 kHz source module.
One HP 35651C signal processor module with 4 Mbyte RAM.
HP-IB cable, BNC breakout box and cable.
90 day warranty.
HP 35634A time/frequency domain measurement software.
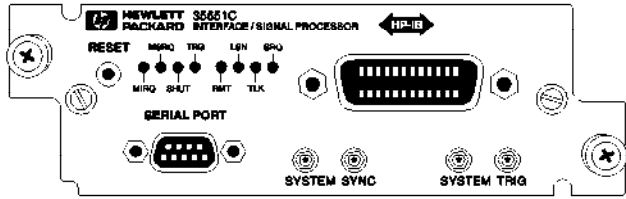
HP 3566A Options

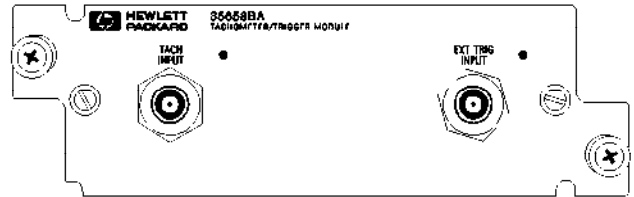|	
#005	Add one HP 35650A mainframe. Maximum is 2 mainframes per system.
#010	Add one HP 35655A eight-channel 12.8 kHz input module. Includes BNC breakout box and cable. Maximum is 6 per system.
#050	Replace HP 35650A Mainframe with HP 35650B portable, non-expandable mainframe.
#054	Replace HP 35651C with HP 35654B.
#056	Add one HP 35656B 51.2 kHz programmable DAC module.
#058	Add one HP 35658A Tachometer/Trigger module.
#116	16 Mbyte RAM upgrade.
#059	Add one HP 35659A SCSI Interface module.
#060	Add one HP 35659A SCSI interface module with 1 Gbyte hard disk.
#D16	Adds HP Vectra 486MX-66 MHz PC with all software installed on the hard disk and HP 82335B HP-IB card and cable. Includes: Super VGA monitor, 5.25 inch and 3.5 inch high density floppy disk drives, 8 Mbyte RAM, 450 Mbyte hard disk, English keyboard, mouse.
#910	Extra manual set.
#UA6	Software subscription service for updating software and manuals on 5.25 inch disks.
#UA8	Software subscription service for updating software and manuals on 3.5 inch disks.

HP 3567A Includes

One HP 35650A mainframe.
Two HP 35652B 102.4 kHz source modules.
One HP 35653C 102.4 kHz source module.
One HP 35651C signal processor module with 4 Mbyte RAM.
HP-IB cable.
90-day warranty.
HP 35634A time/frequency domain measurement software.
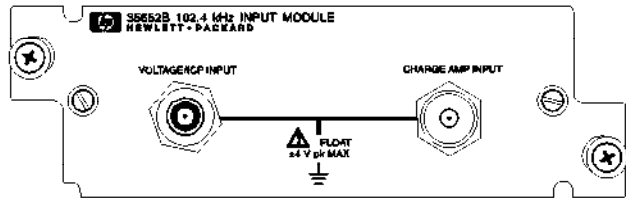
HP 3567A Options

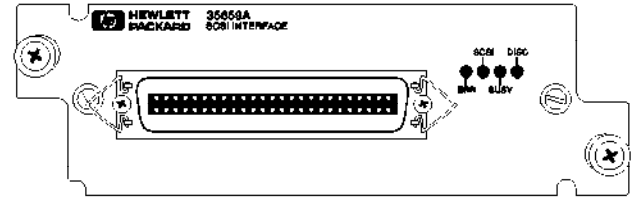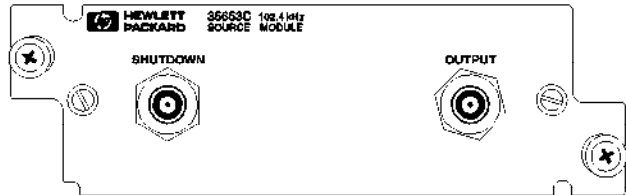|	
#005	Add one HP 35650A mainframe. Maximum is 7 mainframes per system.
#010	Add one HP 35652B 102.4 kHz input module. Maximum is 48 per system.
#050	Replace HP 35650A mainframe with HP 35650B portable, non-expandable mainframe.
#054	Replace HP 35651C with HP 35654B.
#056	Add one HP 35656B 51.2 kHz programmable DAC module.
#058	Add one HP 35658A Tachometer/Trigger module.
#116	16 Mbyte RAM upgrade.
#059	Add one HP 35659A SCSI Interface module.
#060	Add one HP 35659A SCSI interface module with 1 Gbyte hard disk.
#D16	Adds HP Vectra 486MX-66 MHz PC with all software installed on the hard disk and HP 82335B HP-IB card and cable. Includes: Super VGA monitor, 5.25 inch and 3.5 inch high density floppy disk drives, 8 Mbyte RAM, 450 Mbyte hard disk, English keyboard, mouse.
#910	Extra manual set.
#UA6	Software subscription service for updating software and manuals on 5.25 inch disks.
#UA8	Software subscription service for updating software and manuals on 3.5 inch disks.

HP 35651C
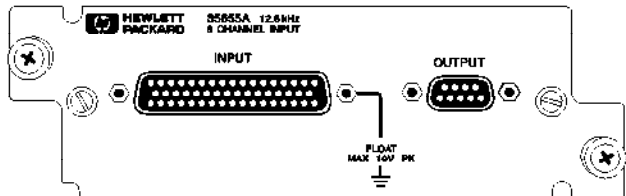Signal Processing Module

HP 35658A
Tachometer / Trigger Module

HP 35652B
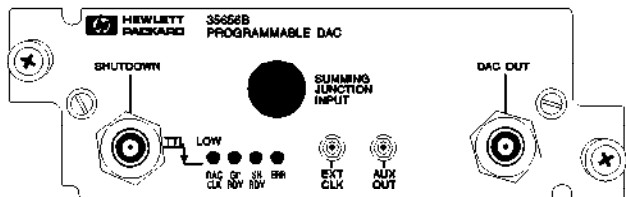102.4 kHz Input Module

HP 35659A
SCSI Interface Module

HP 35653C
Source Module

HP 35655A
8-channel Input Module

HP 35656B
Programmable DAC

Measurement Performance with 4 Mbytes of RAM*

Measurement	Maximum Frequency Lines of Resolution	# Channels
Frequency Response	400	48
	800	32
	1600	16
	3200	8
Power Spectrum	1600	48
	3200	32

Measurement Performance with 16 Mbytes of RAM (opt. #116)*

Measurement	Maximum Frequency Lines of Resolution	# Channels
All measurements**	3200	48

* Increasing the number of map lines, number of channels, and the size of the math buffers and DAC buffer may decrease the maximum frequency lines.

**Except HP 35636A, 35637A, and 35638A.

RAM Equation

Required RAM > (number of channels X number of lines X 2.56 X number of map lines X number of measurement results X number of math buffers used X 2) + DAC buffer length + 1.5 Mbyte.

Software Options

HP 35636A order tracking [1,2]
HP 35637A swept-sine [1,2]
HP 35638A real-time octave [1,2]
HP 35634A HP time/frequency domain measurement software. (Included with HP 3566A or HP 3567A. Order only if you already own HP measurement hardware.)

[1] Software support #UA6 and #UA8 are available for all optional software. See description on previous page.

[2] All optional software and HP 3566A, HP 3567A, or HP 35XXX software must be the same revision number. Customers ordering optional software separately should contact their HP sales person to determine compatibility.

Accessories

Racks:
HP 35605A System Rack
This rack houses a maximum of two mainframes and requires opt. 110 or 220
Opt 110 - 110 volt operation
Opt 220 - 220 volt operation

Microphones:
HP ACOP-7012XX   Free field, 4 Hz to 40 kHz (standard sensitivity)
HP ACOP 7046XX   Free field, 2.6 Hz to 20 kHz (high sensitivity)
HP ACOP-7013XX   Random incidence 4 Hz to 20 kHz (standard sensitivity)
HP ACOP-7047XX   Random incidence 2.6 Hz to 9 kHz (high sensitivity)

Accelerometers:
HP PCBI-353A16   2 g, 10 mV/g, maxF = 10 kHz
HP PCBI-353A24   25 g, 50 mV/g, maxF = 3 kHz
HP PCBI-336C34   4 g, 100 mVg, maxF = 2 kHz

Hammer Kits:
HP PCBI-291M54   Small, low mass structures
                  Hammer, 0.3 pounds
                  Accelerometer, 100 mV/g
                  Accelerometer, 50 mV/g

HP PCBI-291M55   Large mass, heavily damped structures
                  Hammer, 3 pounds
                  Accelerometer, 100 mV/g
                  Accelerometer, 20 mV/g

Note:
In some cases you may want to add HP 35652B input modules to the HP 3566A or add HP 35655A input modules to the HP 3567A. In this case, order the respective module as a line item to the HP 3566A or HP 3567A order. Although both types of modules may exist in the mainframe simultaneously, the PC measurement software operates with ONLY ONE type of input modules at one time. The user must specify which modules to use prior to running the measurement software.