Plug-In Modules for the HP 83480A

The HP 83480A has a large and growing family of plug-in modules designed to cover a very broad range of data rates for both optical and electrical waveforms.

- HP 83481A optical channel/electrical channel module has an integrated, calibrated optical receiver with nearly 3 GHz bandwidth, or automatically configurable as a 155 Mb/s and 622 Mb/s calibrated SONET/SDH reference receiver. Independent of the optical channel is an electrical channel with 20 GHz bandwidth.
- HP 83482A optical channel/electrical channel module has an integrated optical channel with 30 GHz bandwidth and an electrical channel with 40 GHz bandwidth.
- HP 83483A dual electrical channel module has two 20 GHz bandwidth electrical channels.
- HP 83484A dual electrical channel module has two 50 GHz bandwidth electrical channels.
- HP 83484B single electrical channel module has a single 50 GHz bandwidth electrical channel.
- HP 83485A optical channel/electrical channel module has an integrated, calibrated optical receiver with a 20 GHz bandwidth, or automatically configurable as a calibrated SONET/SDH reference receiver (one rate only). Independent of the optical channel is an electrical channel with 20 GHz bandwidth.
- HP 83485B is similar to the HP 83485A with both optical and electrical input channels. The optical channel can be configured as a 10 Gb/s filtered reference receiver. The filter can be switched out for increased measurement bandwidth. The electrical channel has 40 GHz bandwidth.
- HP 83486A optical channel/electrical channel module is similar to the HP 83481A, but will accept both single-mode and multimode fibers. It will operate over a 1000 nm to 1600 nm wavelength range, 155 and 622 or 1063 and 1250 Mbit/s filters.
- HP 83487A optical channel/electrical channel module is similar to the HP 83481A and 83486A, but will operate over a 780 nm to 850 nm wavelength range. It will accept both single-mode and multimode fibers, 1063 and 1250 Mbit/s filters.

The HP 83480A can hold one or two plug-in modules for up to four measurement channels. For example, for compliance testing of STM-1/OC-3, STM-4/OC-12, and STM-16/OC-48 signals with a single instrument, the HP 83480A is configured with the HP 83481A and HP 83485A Option 034 modules. For STM-16/OC-48 and STM-64/OC-192 testing, use the HP 83485A Option 034 and the HP 83485B.

For a full listing of specifications, please contact your local Hewlett-Packard sales office and ask for the HP 83480A Product Overview, or download a copy at:
http://www.hp.com/go/lightwave

	Electrical Channels		Optical Channels					
	Number	**Bandwidth GHz**	**Unfiltered BW GHz** (typical)	**Number of Filters**	**Fiber Rates Mbit/s**	**Filter Input**	**Wavelength**	**Sensitivity** (smallest power for mask test)
HP 83481A	1	12 or 20	2.5 (> 3.0)	2	155 and 622	9/125 µm	1000 to 1600 nm	–17 dBm
HP 83482A	1	18 or 40	30			9/125 µm	1000 to 1600 nm	
HP 83483A	2	12 or 20						
HP 83484A	2	26.5 or 50						
HP 83484B	1	26.5 or 50						
HP 83485A	1	12 or 20	20	1	155/622 or 2488	9/125 µm	1000 to 1600 nm	–10 dBm
HP 83485B	1	18 or 40		1	9953	9/125 µm	1000 to 1600 nm	–8 dBm
HP 83486A	1	12 or 20	2.5 (> 2.7)	2	155/622 or 1063/1250	62.5/125 µm	1000 to 1600 nm	–19 dBm
HP 83487A	1	12 or 20	2.5 (> 2.7)	2	1063/1250	62.5/125 µm	750 to 870 nm	–17 dBm
HP 54753A	1 TDR/1 Electrical	12 or 20						
HP 54754A	2 TDR	12 or 20						

Ordering Information

Mainframe

HP 83480A	Digital Communications Analyzer Mainframe
Option 001	HP Eyeline Mode Software: Disk contains software loaded directly into the HP 83480A mainframe to control either the HP 71603B or HP 71612A Error Performance Analyzer
Option 047	Adds HP 83447A Lightwave Trigger Receiver
Option 100	Enhanced Trigger
Option 908	Rack Mount Kit without Handles
Option 909	Rack Mount Kit with Handles

Plug-in Modules

HP 83481A	Optical Channel/Electrical Channel 155 Mb/s and 622 Mb/s Plug-In Module
Select one connector type for the optical channel (see below)	
Select configuration for the two internal, switchable filters:	
Option 040	Fourth-order 155 Mb/s and Fourth-order 622 Mb/s Filters
Option 050	Fifth-order 155 Mb/s and Fifth-order 622 Mb/s Filters
Option 052	Fourth-order 155 Mb/s and Fifth-order 155 Mb/s Filters
Option 062	Fourth-order 622 Mb/s and Fifth-order 622 Mb/s Filters
HP 83482A	Optical Channel/Electrical Channel High-Speed Plug-In Module
Select one connector type for the optical channel (see below)	
HP 83483A	Dual Channel 20 GHz Electrical Plug-In Module
HP 83484A	Dual Channel 50 GHz Electrical Plug-In Module
HP 83484B	Single Channel 50 GHz Electrical Plug-In Module
HP 83485A	Optical Channel/Electrical Channel 20 GHz Plug-In Module
Select one connector type for optical channel (see below)	
Select one filter type for internal reference receiver:	
Option 030	STM-1/OC-3
Option 032	STM-4/OC-12
Option 034	STM-16/OC-48
HP 83485B	Optical Channel/Electrical Channel High-Speed Plug-In Module
Select one connector type for optical channel (see below)	
Select one filter type for internal reference receiver:	
Option 040	Fourth-order Filter Response for STM-64/OC-192
Option 050	Fifth-order Filter Response for STM-64/OC-192
HP 83486A	20 GHz Electrical/2.5 GHz Optical (multimode fiber) Plug-In Module
Select one connector type for the optical channel (see below).	
Select configuration for the two internal, switchable filters	
Option 040	155 and 622 Mbit/s filters
Option 041	1063 and 1250 Mbit/s filters
HP 83487A	20 GHz Electrical/2.5 GHz Optical (multimode fiber, short wavelength) Plug-In Module, 1063 and 1250 Mbit/s filters
Must order this option with module	
Option 041	1063 and 1250 Mbit/s filters
Select one connector type for the optical channel (see below).	
HP 54753A	Single-Ended TDR/TDT Plug-In Module
HP 54754A	Differential Plug-in Module
Options Available for all Modules:	
Option 001	Latest operating system firmware for the HP 83480A
Option 002	Latest operating system firmware for the HP 54750A
Connector Options	
Option 011	HP/HMS-10 Connector
Option 012	FC/PC Connector
Option 013	DIN Connector
Option 014	ST Connector
Option 015	Biconic Connector
Option 017	SC Connector

Optional Accessories

HP 10086A	ECL Terminator
HP 11898A	Module extender
HP 11982A	High-Speed, Amplified Lightwave Converter
HP 54006A	6 GHz Handheld Probe
HP 54118A	500 MHz to 18 GHz Trigger
HP 83440B/C/D	High-Speed Lightwave Converter
HP 83446A/B	Lightwave Clock And Data Receiver
HP 83447A	Lightwave Trigger Receiver