

KEYSIGHT TECHNOLOGIES (AGILENT HP)

83486A

The Keysight (Agilent/HP) 83486A is an optical and electrical receiver plug-in module designed for use with the HP/Agilent 83480A and Infiniium 86100 series Digital Communications Analyzers (DCA). It features a 2.85 GHz optical channel optimized for 2.488 Gb/s (OC-48/STM-16) measurements and a 20 GHz electrical channel.

SPECIFICATIONS

General

Interfaces	HP/Agilent proprietary mainframe interface, interchangeable optical connector adapter (FC/PC standard), 3.5 mm (female) RF electrical input
Display	None (utilizes mainframe display)

Physical

Power Supply	Powered directly from host DCA mainframe backplane
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Optical Channel

Optical Wavelength Range	1200 nm to 1600 nm
Optical Bandwidth (-3 dB)	2.85 GHz
Optical Input Fiber Type	9/125 μ m (Single-mode)
Optical RMS Noise (maximum)	2.5 μ W
Optical RMS Noise (typical)	1.5 μ W
Maximum Safe Optical Input Power	10 mW (peak)
Optical Power Meter Range	+3 dBm to -30 dBm
Optical Return Loss	> 33 dB
Calibration Wavelengths	1310 nm, 1550 nm

Electrical Channel

Number of Electrical Channels	1
Electrical Bandwidth	12.4 GHz or 20 GHz (user-selectable)
Electrical Rise Time (10% to 90%, 20 GHz mode)	17.5 ps
Electrical Rise Time (10% to 90%, 12.4 GHz mode)	28.2 ps
Electrical RMS Noise (maximum, 20 GHz mode)	0.5 mV
Electrical RMS Noise (maximum, 12.4 GHz mode)	0.25 mV
Electrical Input Impedance	50 Ohm
Maximum Safe Electrical Input Voltage	±2 V DC + AC peak (16 dBm)
Electrical Connector Type	3.5 mm female (ruggedized)

Clock Recovery

Clock Recovery Option	Option 020 (internal clock recovery loop)
Clock Recovery Operating Rate	2.488 Gb/s (OC-48/STM-16)

General & Compatibility

Compatible Mainframes	HP 83480A, Agilent/Keysight 86100A, 86100B, 86100C
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Physical & Environmental

Form Factor	Plug-in module
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TECHNOLOGY

Optical and Electrical Sampling

APPLICATIONS

High-speed optical transceiver testing and OC-48/STM-16 telecom waveform analysis

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.