


Aumictech

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 83487A Lightwave Clock Recovery Module

Keysight 83487A Optical Electrical Plug In Module The Keysight 83487A is an optical/electrical plug-in module for 83480A and 54750A mainframes. It combines a calibrated multimode optical channel covering 750 to 860 nm with 2.85 GHz bandwidth and a dual-bandwidth electrical channel selectable at 12.4 GHz or 20 GHz. 850 nm datacom eye and mask testing at 1063/1250 Mb/s, multimode optical waveform analysis, and simultaneous electrical channel measurements on DCA-class mainframes. Integrated calibrated optical channel with average power measurement The Keysight 83487A is an optical/electrical plug-in module for 83480A and 54750A mainframes. It combines a calibrated multimode optical channel covering 750 to 860 nm with 2.85 GHz bandwidth and a dual-bandwidth electrical channel selectable at 12.4 GHz or 20 GHz. 850 nm datacom eye and mask testing at 1063/1250 Mb/s, multimode optical waveform analysis, and simultaneous electrical channel measurements on DCA-class mainframes. Integrated calibrated optical channel with average power measurement Switchable 1063 and 1250 Mb/s datacom reference filters



MODEL

**Agilent / Keysight
83487A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

83487A

LISTING

<https://aumictechlabs.com/products/83487a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 83487A Lightwave Clock Recovery Module is a plug-in accessory for high-speed optical and electrical signal analysis. It recovers clock timing from optical signals and conditions electrical triggers for advanced communication system characterization. The module combines a 3 GHz optical channel with a 20 GHz electrical channel, delivering precise triggering across multiple modes to support data rates from 155 Mb/s to 1.25 Gb/s.

Technical Specifications

Optical Channel Bandwidth: 3 GHz Wavelength Range: 750–860 nm Fiber Compatibility: 62.5/125 μ m multimode Supported Data Rates: 0.155/0.622/1.066/1.250 Gb/s Optical Attenuator (Options 012, 014, 017): 5 dB (maintains fidelity above –10 dBm average power) Electrical Channel Bandwidth: 20 GHz Connector: 3.5 mm male input Triggering Modes Limited Mode: DC to 100 MHz bandwidth Normal Mode: DC to 2.5 GHz bandwidth; 40 mVpp sensitivity at 100 MHz, rising linearly to 200 mVpp at 2.5 GHz; trigger jitter $<2.5 \text{ ps rms} + 5\text{E-}5 \times \text{delay}$ (at 2.5 GHz, 200 mV source) High Speed Mode (Option 100): 2.0–12 GHz bandwidth (1–15 GHz typical); 200 mVpp sensitivity; jitter $<2 \text{ ps rms}$ for delays $<100 \text{ ns}$ (typical 1.3 ps) Trigger Level Range: $\pm 1 \text{ V}$ Maximum Trigger Signal: $<2 \text{ V DC} + \text{AC peak (+16 dBm)}$ in Normal and High Speed modes

Key Features

Simultaneous optical and electrical measurement paths enable clock recovery validation Multiple triggering modes optimize dynamic range and jitter performance across frequency bands Optional 5 dB optical attenuator prevents saturation on high-power signals Lowest jitter specification in High Speed Mode supports precision timing measurements

Typical Applications

Optical transceiver characterization and validation Clock recovery performance assessment in high-speed serial links Signal integrity analysis for 155 Mb/s to 1.25 Gb/s systems R&D, manufacturing, and quality assurance testing

Compatibility & Integration

Plug-in module for Agilent 83480A Digital Communications Analyzer, Keysight 86100A/B/C Infinium DCA/DCA-J, and Agilent 54750A mainframes.

83487A Characteristics / Specifications

PARAMETER	VALUE
Model	83487A
Instrument Type	optical electrical DCA plug in module
Optical Unfiltered Bandwidth	2.85 GHz 3 GHz typical
Wavelength Range	750 to 860 nm
Calibrated Wavelength	850 nm
Filtered Data Rates	1063 Mb/s and 1250 Mb/s
Sensitivity Mask Test	less than -17 dBm
Fiber Input	62.5/125 um multimode maximum
Electrical Bandwidth Settings	12.4 GHz and 20 GHz
Electrical Connector	3.5 mm male
Trigger Channel Connector	3.5 mm male
Probe Power Connectors	1
Auxiliary Power Connectors	1
Mainframe Compatibility	83480A 54750A
Slot Width	2 mainframe slots
Temperature Spec Range	+15 C to +35 C
Warm Up Time	60 minutes continuous operation
Optical Channel Role	calibrated display and power measurement
Electrical Low Noise Mode	12.4 GHz
Electrical High Fidelity Mode	20 GHz
Reference Filters Class	Fibre Channel and Gigabit Ethernet datacom
Related Sibling Wavelength Class	86101A 750 to 860 nm family
RMS Noise Optical Characteristic Class	1.5 uW class shared with 86101A family
Bandwidth	2.85 GHz 3 GHz typical

83487A Specifications

PARAMETER	VALUE
Keysight 83487A Optical Electrical Plug In Module	Overview
Switchable 1063 and 1250 Mb/s datacom reference filters	User selectable 12.4 or 20 GHz electrical bandwidth
Technical Specifications	Model: 83487A

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	83487A
Instrument Type	optical electrical DCA plug in module
Optical Unfiltered Bandwidth	2.85 GHz 3 GHz typical
Wavelength Range	750 to 860 nm
Calibrated Wavelength	850 nm
Filtered Data Rates	1063 Mb/s and 1250 Mb/s
Sensitivity Mask Test	less than -17 dBm
Fiber Input	62.5/125 um multimode maximum
Electrical Bandwidth Settings	12.4 GHz and 20 GHz
Electrical Connector	3.5 mm male
Trigger Channel Connector	3.5 mm male
Probe Power Connectors	1
Auxiliary Power Connectors	1
Mainframe Compatibility	83480A 54750A
Slot Width	2 mainframe slots
Temperature Spec Range	+15 C to +35 C
Warm Up Time	60 minutes continuous operation
Optical Channel Role	calibrated display and power measurement
Electrical Low Noise Mode	12.4 GHz
Electrical High Fidelity Mode	20 GHz
Reference Filters Class	Fibre Channel and Gigabit Ethernet datacom
Related Sibling Wavelength Class	86101A 750 to 860 nm family
RMS Noise Optical Characteristic Class	1.5 uW class shared with 86101A family
Notes	
Numeric rows from Agilent 83487A Optical/Electrical Plug-In Module User Guide specifications and Keysight	

83487A module specification summary. Queue titles calling thisaclock-recovery module are incorrect; OEM identity is O/E plug-in.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.