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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 83496A clock recovery module

Agilent Keysight 83496A Clock Recovery Module 50 Mb/s to 7.1 Gb/s class The Agilent 83496A is the first-generation 86100 continuous-rate clock-recovery plug-in preceding 83496B. OEM 86100 configuration guides describe 83496x CDR modules with 50 Mb/s to 7.1 Gb/s standard coverage, optional extension toward 14.2 Gb/s on the Brevison (Options 200/201), optical 1260-1360/1490-1600 nm and 830-860 nm MM paths, and electrical single-ended/differential taps. Triggering 86100 DCA eyes on 1-10 Gb/s-class electrical and optical data without an explicit clock. The Agilent 83496A is the first-generation 86100 continuous-rate clock-recovery plug-in preceding 83496B. OEM 86100 configuration guides describe 83496x CDR modules with 50 Mb/s to 7.1 Gb/s standard coverage, optional extension toward 14.2 Gb/s on the Brevison (Options 200/201), optical 1260-1360/1490-1600 nm and 830-860 nm MM paths, and electrical single-ended/differential taps. Triggering 86100 DCA eyes on 1-10 Gb/s-class electrical and optical data without an explicit clock. Continuous-rate CDR versus discrete 83494A rates



MODEL

**Agilent / Keysight
83496A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

83496A

LISTING

<https://aumictechlabs.com/products/83496a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight 83496A Clock Recovery Module extracts clock signals from high-speed NRZ data streams for waveform analysis, bit error rate testing, and jitter characterization. This plug-in

module integrates with Keysight Digital Communications Analyzer (DCA) mainframes to deliver precision timing recovery across electrical and optical signal paths.

Technical Specifications

Data Rate Coverage Continuous tuning: 50 Mb/s to 13.5 Gb/s Options 100 (electrical) and 101 (optical): up to 7.1 Gb/s for specific configurations

Jitter Performance Residual jitter: 50% (electrical), 80% (single-mode optical), 70% (multimode optical)

Output Recovered clock available at front panel

Optical configurations: attenuated optical output available

Key Features Golden PLL operation for clock extraction from NRZ data streams Type-2 Transition Frequency fine-tuning with automatic CDR loop bandwidth coupling

Trigger on Data mode derives timing directly from signal under test

Data pass-through via AC-coupled limit amplifier at rear panel (Trigger on Data)

Typical Applications High-speed digital communication system characterization Jitter and timing analysis on serial data links Bit error rate and waveform measurement support OTN, Ethernet, and optical transport protocol testing

Compatibility & Integration Designed as a plug-in module for Keysight DCA mainframes. Supports both electrical and optical input configurations through distinct options.

83496A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Clock recovery plug-in module
Series Family	Agilent 83496A/B / 86100 DCA
Standard Rate Class	50 Mb/s to 7.1 Gb/s (83496x family standard range)
Successor 83496B Option 2	7.1 to 14.2 Gb/s shifted range
Successor Option 3	tunable loop bandwidth golden PLL
Optical Sm Bands Family	1260 to 1360 nm and 1490 to 1600 nm (83496B-101 table)
Optical Mm Bands Family	830 to 860 nm and 1260 to 1360 nm (83496B-101 table)
Electrical Path Family	single-ended and differential with integrated taps (83496B-100 table)
Host	86100 Infiniium DCA
Function	recovered clock for oscilloscope trigger
Form Factor	86100 plug-in
Compatibility Note	83496B is not compatible with 86100A/B mainframes
Trigger Cable Note	86100D-ETR recommended; STR mainframes need front-panel trigger cable 5062-6690 class
Documentation	Keysight 86100D configuration guide 83496B option table (family successor to 83496A)
Application	1-10 Gb/s eyes without forwarded clock
Loop Bandwidth	fixed on 83496A; adjustable on 83496B-300
Operating Temperature Family	plus 10 C to plus 40 C class of 86100 modules
Input	optical and/or electrical per option
Output	recovered electrical clock
Verification	confirm 83496A vs 83496B option label before applying 14.2 Gb/s rows
Bandwidth	golden PLL
Operating temperature	Family: plus 10 C to plus 40 C class of 86100 modules

83496A Specifications

PARAMETER	VALUE
Applications	Triggering 86100 DCA eyes on 1-10 Gb/s-class electrical and optical data without an explicit clock.
Key Features	Continuous-rate CDR versus discrete 83494A rates
Integrated signal taps	Not for 86100A/B on later 83496B (trade-in notes)
Technical Specifications	Instrument Type: Clock recovery plug-in module

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Family: plus 10 C to plus 40 C class of 86100 modules
Operating Temperature	Family: plus 10 C to plus 40 C class of 86100 modules
Operating Temperature Family	plus 10 C to plus 40 C class of 86100 modules
Input	optical and/or electrical per option
Output	recovered electrical clock
Verification	confirm 83496A vs 83496B option label before applying 14.2 Gb/s rows
Use	laboratory DCA plug-in Notes 50 Mb/s-7.1 Gb/s continuous CDR identity from Agilent 83496A/B family configuration guides. Optical wavelength bands, Option 200 14.2 Gb/s, and Option 300 loop BW are published on the 83496B option table (5992-0038); apply those numeric option rows only when the installed module is optioned 83496B hardware.

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
Instrument Type	Clock recovery plug-in module
Series Family	Agilent 83496A/B / 86100 DCA
Standard Rate Class	50 Mb/s to 7.1 Gb/s (83496x family standard range)
Successor 83496B Option 200	50 Mb/s to 14.2 Gb/s
Successor 83496B Option 201	7.1 to 14.2 Gb/s shifted range
Successor Option 300	tunable loop bandwidth golden PLL
Optical Sm Bands Family	1260 to 1360 nm and 1490 to 1600 nm (83496B-101 table)
Optical Mm Bands Family	830 to 860 nm and 1260 to 1360 nm (83496B-101 table)
Electrical Path Family	single-ended and differential with integrated taps (83496B-100 table)
Host	86100 Infiniium DCA
Function	recovered clock for oscilloscope trigger
Form Factor	86100 plug-in
Compatibility Note	83496B is not compatible with 86100A/B mainframes
Trigger Cable Note	86100D-ETR recommended; STR mainframes need front-panel trigger cable 5062-6690 class
Documentation	Keysight 86100D configuration guide 83496B option table (family successor to 83496A)
Application	1-10 Gb/s eyes without forwarded clock
Loop Bandwidth	fixed on 83496A; adjustable on 83496B-300
Operating Temperature Family	plus 10 C to plus 40 C class of 86100 modules
Input	optical and/or electrical per option
Output	recovered electrical clock
Verification	confirm 83496A vs 83496B option label before applying 14.2 Gb/s rows
Notes On 14.2: 14.2 Gb/s is a 83496B option, not assumed on every 83496A	
Use: laboratory DCA plug-in	
Notes	
50 Mb/s-7.1 Gb/s continuous CDR identity from Agilent 83496A/B family configuration guides. Optical	

wavelength bands, Option 200 14.2 Gb/s, and Option 300 loop BW are published on the 83496B option table (5992-0038); apply those numeric option rows only when the installed module is optioned 83496B hardware.

Ordering Information

OPTION	DESCRIPTION
Option 200	14.2 Gb/s, and Option 300 loop BW are published on the 83496B option table (5992-0038); apply those numeric option rows only when the installed module is option

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

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.