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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 83491A Electrical clock recovery module

Keysight / Agilent 83491A Electrical Clock Recovery Module The Keysight/Agilent 83491A is an electrical clock recovery module for 86100-series DCA communications analyzers. OEM clock-recovery module tables specify electrical input interfaces and supported data-rate bands for recovering a trigger clock from serial electrical data streams. Electrical high-speed serial eye tests, recovered-clock jitter analysis, and DCA triggering from electrical data. Instrument Type: Electrical clock recovery module The Keysight/Agilent 83491A is an electrical clock recovery module for 86100-series DCA communications analyzers. OEM clock-recovery module tables specify electrical input interfaces and supported data-rate bands for recovering a trigger clock from serial electrical data streams. Electrical high-speed serial eye tests, recovered-clock jitter analysis, and DCA triggering from electrical data. Instrument Type: Electrical clock recovery module Measurement Role: Recover clock from electrical serial data



MODEL

**Agilent / Keysight
83491A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

83491A

LISTING

<https://aumictechlabs.com/products/83491a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 83491A is an electrical clock recovery module that extracts clock signals from NRZ data streams for high-speed digital communication system analysis. When a direct clock signal is unavailable, this module enables reliable parametric testing and signal

characterization across the 86100-series and 83480A Digital Communications

Analyzers. Technical Specifications Data Rate Support Selectable rates: 155, 622, 1063, 1250, 2125, 2488, and 2500 Mb/s Data triggering range: 50 Mb/s to 2500 Mb/s for non-standard rates Clock recovery tolerance: $\pm 0.1\%$ Signal Performance Input power level: -10 dBm to $+3$ dBm Output jitter: 0.0125 UI across all rates Through path insertion loss: 7 dB (DC to 2500 MHz), 10 dB (4500 MHz) Electrical return loss: 20 dB (DC to 1250 MHz), 15 dB (1250–2500 MHz) Clock Recovery & Triggering Phase-locked loop bandwidth: 50–70 kHz (internal path triggering), 4–5 MHz (external output) Three trigger sources: narrow bandwidth recovered clock, wide bandwidth recovered clock, and data trigger Built-in 50/50 internal splitter reduces external hardware requirements Key Features Electrical outputs for both recovered clock and regenerated data 50 Ohm electrical input connector with 3.5 mm (m) output connectors Exceptional jitter performance ensures accurate jitter display on incoming data Approximately 5 lbs weight Typical Applications Clock extraction from NRZ data streams in high-speed digital signal analysis, parametric testing without dedicated clock signals, and reliable signal characterization across multiple data rates. Compatibility & Integration Operates within 86100A/B, 86100C, and 86100D Infiniium DCA mainframes. Compatible with Agilent passive and active probes. User's guide and datasheet available.

83491A Characteristics / Specifications

PARAMETER	VALUE
Model	83491A
Instrument Type	Electrical clock recovery module
Host Family	86100 series DCA
Input Type	Electrical
Measurement Role	Recover clock from electrical serial data
Primary Use	Eye/jitter trigger recovery
Data Rate Coverage	Per 83491A option tables
Safety Class	Observe published maximum ratings
Chassis Form	DCA plug-in module class
Brand Lineage	Keysight / Agilent
Related Modules	83492A optical CR; 83495A CR family
Control Path	Host DCA module control
Remote Interfaces	Through host analyzer
Documentation Scope	OEM 83491A documentation
Operating Temperature Spec Class	Follow DCA system sheet
Power	Derived from host mainframe
Lock Modes	Clock recovery lock modes per sheet
Jitter Analysis Support	Recovered clock for DCA jitter apps
Installed Options	Determine rate bands
Warmup Spec Class	Follow host DCA warm-up
Calibration	System calibration with host DCA
Connector Class	Electrical high-speed connectors per option
Manufacturer Documentation	OEM datasheet and user documentation
Data Rate	Coverage: Per 83491A option tables
Operating temperature	Spec Class: Follow DCA system sheet

83491A Specifications

PARAMETER	VALUE
Electrical clock recovery	86100 DCA modular accessory
Technical Specifications	Model: 83491A
Notes	From Keysight/Agilent 83491A electrical clock recovery documentation. Confirm option codes for supported bit-rate windows.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Spec Class: Follow DCA system sheet
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Power	Derived from host mainframe
Lock Modes	Clock recovery lock modes per sheet
Jitter Analysis Support	Recovered clock for DCA jitter apps
Installed Options	Determine rate bands
Warmup Spec Class	Follow host DCA warm-up
Calibration	System calibration with host DCA
Connector Class	Electrical high-speed connectors per option
Manufacturer Documentation	OEM datasheet and user documentation Notes From Keysight/Agilent 83491A electrical clock recovery documentation. Confirm option codes for supported bit-rate windows.

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	
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Installed Options	Determine rate bands
Warmup Spec Class	Follow host DCA warm-up
Calibration	System calibration with host DCA
Connector Class	Electrical high-speed connectors per option
Manufacturer Documentation	OEM datasheet and user documentation
Notes	
From Keysight/Agilent 83491A electrical clock recovery documentation. Confirm option codes for supported bit-rate windows.	

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.