

KEYSIGHT TECHNOLOGIES (AGILENT HP)

83493A

The Keysight (Agilent) 83493A is a single-mode (9/125 μm) optical clock recovery plug-in module designed for the 86100A/B/C Infiniium DCA/DCA-J wide-bandwidth oscilloscope mainframes. Operating over a wavelength range of 1200 to 1600 nm, it supports discrete data rates of 0.155, 0.622, 1.250, 2.488, and 2.500 Gb/s, providing reliable triggering and parametric measurements without requiring an external clock signal.

SPECIFICATIONS

General

Display	None (uses host mainframe display)
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Physical

Power Supply	Powered via mainframe plug-in slot
Operating Temperature	15 to 35 °C (for specified accuracy); 10 to 40 °C (operating limit) °C
Form Factor	Single-slot plug-in module for Agilent 86100 series Infiniium DCA mainframes

Input Specifications

Compatible Fiber Type	9/125 μm single-mode
Operating Wavelength Range	1200 - 1600 nm
Optical Input Power Range	-20 to +3 dBm
Optical Insertion Loss (Through Path)	≤ 1.5 dB
Optical Return Loss	≥ 28 dB
Maximum Non-Destructive Optical Input Power	10 mW peak

Clock Recovery Performance

Supported Data Rates	0.155 / 0.622 / 1.250 / 2.488 / 2.500 Gb/s
Internal Path Triggering PLL Bandwidth	50 to 70 kHz
Option 100 Loop Bandwidth	4 MHz
Option 101 Loop Bandwidth	50 kHz to 7.1 MHz (Golden PLL, software adjustable)

System Compatibility and Connectivity

Host Mainframe Compatibility	86100A/B/C Infiniium DCA/DCA-J
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Connectors

Output Connectors	3.5 mm female
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Outputs

Output Impedance	50 Ω nominal
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TECHNOLOGY

Optical Clock Recovery

APPLICATIONS

Fiber Optic Telecom and Datacom Testing

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