KEYSIGHT TECHNOLOGIES (AGILENT HP)

83446A

The Keysight (formerly Agilent / HP) 83446A is a high-performance Lightwave Clock Recovery Receiver designed to extract a precise clock signal from 2.488 Gb/s (OC-48/STM-16) optical telecommunications data streams. It is widely used in optical transceiver testing, eye diagram analysis, and jitter measurements.

SPECIFICATIONS

General

Interfaces	None (standalone analog/RF instrument)
Display	LED front-panel indicators for Lock and Power status

Physical

Operating Temperature	0 to 55 °C °C

Input Specifications

Operating Wavelength Range	1200 nm to 1600 nm
Data Rates Supported	2.48832 Gb/s (OC-48 / STM-16)
Optical Input Connector Type	HP Universal Interface (supports FC/PC, SC, ST, etc. via adapters)
Minimum Optical Input Sensitivity	-19 dBm

Clock Recovery Performance

Clock Output Frequency	2.48832 GHz

Output Specifications

Output Impedance	50 Ω
Clock Output Connector	SMA female
Data Output Connector	SMA female

Optical Input

Optical Return Loss	> 33 dB
Maximum Safe Optical Input Power	+10 dBm

TECHNOLOGY

Lightwave Clock Recovery

APPLICATIONS

Fiber-optic communications testing, optical clock and data recovery for 2.488 Gb/s (OC-48/STM-16) signals