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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 83441B Lightwave Source

The Agilent / HP 83441B is a lightwave source module used with HP lightwave test systems for optical stimulus. OEM HP lightwave source literature describes stable laser diode sources with fiber output for characterizing optical receivers and components. Optical receiver testing, fiber component stimulus, and lightwave system source substitution in HP 834xx / 8703-style optical setups. Laser Type: semiconductor laser diode class Wavelength Class: telecom laser wavelength Modulation Class: CW and modulated modes class Stability Class: power and wavelength stable source Safety: laser safety classification on label Identity from Agilent/Keysight 83441B Lightwave Source listings. Exact wavelength and output power are on the 83441B datasheet revision matching the serial.



MODEL

**Agilent / Keysight
83441B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

83441B

LISTING

<https://aumictechlabs.com/products/83441b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 83441B is a broadband amplifier module for RF and microwave test and measurement applications requiring high gain and low noise amplification of weak signals. Operating across 10 MHz to 20 GHz, the module delivers approximately 10 dB gain with noise figure of 5 dB or lower, depending on revision and operating conditions. Its 50 Ohm nominal input/output impedance aligns with standard RF/microwave systems, while the compact form factor enables integration into diverse test configurations, laboratories, and field deployments. Technical Specifications Frequency range: 10 MHz to 20 GHz Gain: Typically 10 dB

(varies with revision and operating conditions) Noise figure: Typically 5 dB or lower Input/output impedance: 50 Ohms nominal Output power: Sufficient for signal boosting in RF and microwave chains; P1dB and saturation characteristics available in detailed datasheets Dynamic range: Supports amplification across wide amplitude ranges; linearity assessed via IP2 and IP3 intercept points Stability: Specified over rated frequency and temperature ranges

Key Features Low-noise amplification minimizes signal degradation in sensitive receiver chains Wide frequency coverage from VHF through microwave bands Standard 50 Ohm interfaces for direct compatibility with RF test equipment Compact module design with durable construction for laboratory and field use Stable operation across specified environmental conditions

Typical Applications Radar system testing and characterization Electronic warfare signal analysis Satellite communications measurements General RF/microwave signal analysis Sensitive receiver front-end amplification

Compatibility & Integration The 83441B integrates with Agilent and Keysight measurement platforms and third-party systems requiring broadband amplification in the 10 MHz to 20 GHz band. Standard RF connectors (SMA or N-type) facilitate interconnection with conventional test benches. Power and control interfaces support integration into larger automated measurement systems.

83441B Characteristics / Specifications

PARAMETER	VALUE
Model	83441B
Instrument Type	lightwave source
Manufacturer	HP Agilent Keysight
Output	fiber coupled optical
Laser Type	semiconductor laser diode class
Wavelength Class	telecom laser wavelength
Power Class	calibrated optical output
Form Factor	lightwave source module or benchtop
Remote Interface Class	GPIB
Operating Temperature Class	0 C to 40 C
Storage Temperature Class	minus 40 C to 70 C
Line Power	AC mains or host powered
Humidity Class	non condensing
Connector Class	FC fiber
Modulation Class	CW and modulated modes class
Stability Class	power and wavelength stable source
Cooling	instrument airflow
Duty	continuous optical test
Grounding	chassis ground
Safety	laser safety classification on label
Display	power and status class
Calibration	optical power calibrated
Mass Class	module or benchtop
Compatibility	HP lightwave test systems
Storage temperature	Class: minus 40 C to 70 C

PARAMETER	VALUE
Operating temperature	Class: 0 C to 40 C
Humidity	Class: non condensing

83441B Specifications

PARAMETER	VALUE
Agilent HP 83441B Lightwave Source	Overview
Applications	Optical receiver testing, fiber component stimulus, and lightwave system source substitution in HP 834xx / 8703-style optical setups.
Technical Specifications	Model: 83441B

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	Class: minus 40 C to 70 C
Operating temperature	Class: 0 C to 40 C
Operating Temperature	Class: 0 C to 40 C
Humidity	Class: non condensing
Operating Temperature Class	0 C to 40 C
Storage Temperature Class	minus 40 C to 70 C
Line Power	AC mains or host powered
Humidity Class	non condensing
Connector Class	FC fiber
Modulation Class	CW and modulated modes class
Stability Class	power and wavelength stable source
Cooling	instrument airflow
Duty	continuous optical test
Grounding	chassis ground
Safety	laser safety classification on label
Display	power and status class
Calibration	optical power calibrated
Mass Class	module or benchtop
Compatibility	HP lightwave test systems Notes Identity from Agilent/Keysight 83441B Lightwave Source listings. Exact wavelength and output power are on the 83441B datasheet revision matching the serial.

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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Wavelength Class	telecom laser wavelength
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Remote Interface Class	GPIO
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Storage Temperature Class	minus 40 C to 70 C
Line Power	AC mains or host powered
Humidity Class	non condensing
Connector Class	FC fiber
Modulation Class	CW and modulated modes class
Stability Class	power and wavelength stable source
Cooling	instrument airflow
Duty	continuous optical test
Grounding	chassis ground
Safety	laser safety classification on label
Display	power and status class
Calibration	optical power calibrated
Mass Class	module or benchtop
Compatibility	HP lightwave test systems

Notes

Identity from Agilent/Keysight 83441B Lightwave Source listings. Exact wavelength and output power are on the 83441B datasheet revision matching the serial.

Laser Safety

laser safety classification on label Display: power and status class Calibration: optical power calibrated
Mass Class: module or benchtop Compatibility: HP lightwave test systems Notes Identity from
Agilent/Keysight 83441B Lightwave Source listings. Exact wavelength and output power are on the 83441B
datasheet revision matching the serial.

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