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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 70951B – Optical Spectrum Analyzer Module

Agilent HP 70951B Optical Spectrum Analyzer Module The HP 70951B is the MMS OSA module with monochromator output and photodetector input used in the HP 71451B system. OEM 5963-7040E lists the family 600 to 1700 nm OSA performance plus 70951B-only monochromator insertion loss and photodetector power-meter mode specifications. Stimulus-response optical component test and modular OSA measurements in MMS mainframes. Supports Option 002 white light and Option 003 PDL kits The HP 70951B is the MMS OSA module with monochromator output and photodetector input used in the HP 71451B system. OEM 5963-7040E lists the family 600 to 1700 nm OSA performance plus 70951B-only monochromator insertion loss and photodetector power-meter mode specifications. Stimulus-response optical component test and modular OSA measurements in MMS mainframes. Supports Option 002 white light and Option 003 PDL kits Absolute Wavelength Accuracy: plus or minus 1 nm



MODEL

**Agilent / Keysight
70951B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

70951B

LISTING

<https://aumictechlabs.com/products/70951b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

Optical input: FC/PC monochromator and photodetector inputs Optical output: 62.5 μ m fiber connector (other adapters available) Environmental Operating temperature: 0°C to +55°C Storage

temperature: -40°C to $+71^{\circ}\text{C}$ Humidity: $<95\%$ R.H. (noncondensing) Maximum input power (monochromator): $+30\text{ dBm}$ total Maximum input power (photodetector): $+20\text{ dBm}$ Compatibility & Integration The 70951B module integrates exclusively within the Keysight 70000 Modular Measurement System. Requires HP 70004A display or HP 70001A mainframe. Status: obsolete; technical support availability may vary.

70951B Characteristics / Specifications

PARAMETER	VALUE
Wavelength Range	600 to 1700 nm
Absolute Wavelength Accuracy	plus or minus 1 nm
Absolute Accuracy After User Cal	plus or minus 0.3 nm
Span Linearity Spans Less Than 40 nm	plus or minus 0.05 nm
Resolution Bandwidth Fwhm	less than 0.08 nm and 0.1 to 10 nm in 1 2 5 sequence
Amplitude Calibration Accuracy At Minus 30 dBm 1300 nm	plus or minus 0.5 dB
Sensitivity 1200 To 1600 nm	minus 90 dBm
Dynamic Range 0.1 nm 1250 To 1600 nm	minus 55 dB at greater than or equal to plus or minus 0.5 nm
Compression Level 0.05 dB	greater than or equal to 10 dBm
Maximum Safe Input	plus 20 dBm per 5 nm plus 30 dBm total
Monochromator Loss 850 nm Into 62.5 um	less than 19 dB
Monochromator Loss 1300 nm Into 62.5 um	less than 7 dB
Monochromator Loss 1550 nm Into 62.5 um	less than 10 dB Monochromator Polarization Dependence Resolutions Greater Than Or Equal 0.2 nm 1250 To 1600 nm: plus or minus 0.5 dB
Photodetector Accuracy At Minus 30 dBm 20 To 30 C	plus or minus 0.35 dB
Photodetector Accuracy 0 To 55 C	plus or minus 0.5 dB
Photodetector Maximum Safe Power	plus 20 dBm
Photodetector 1 dB Compression	greater than or equal to plus 7 dBm
Photodetector Scale Fidelity Fixed Reference	plus or minus 0.1 dB
Photodetector Sensitivity 1250 To 1600 nm	minus 95 dBm
Photodetector Sensitivity 600 To 1700 nm	minus 85 dBm
Photodetector Flatness 1250 To 1600 nm	plus or minus 0.4 dB

PARAMETER	VALUE
Photodetector Maximum Displayed Level	10 dBm
Transimpedance Current Range	0 to minus 10 mA
Transimpedance Maximum Current	plus or minus 10 mA
Optical Input Fiber	multimode 62.5 um fiber
Optical Output Fiber	62.5 um fiber
Module Form Factor	standard 4/8-width MMS module
Module Mass	8 kg
Operating Temperature	0 to plus 55 C
Host System Example	HP 71451B
Bandwidth	Fwhm: less than 0.08 nm and 0.1 to 10 nm in 1 2 5 sequence

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to plus 55 C
Operating Temperature	0 to plus 55 C
Host System Example	HP 71451B Notes From HP 71450B/71451B/71452B Technical Specifications 5963-7040E additional specifications for HP 71451B (HP 70951B).

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.

performance plus 70951B-only monochromator insertion loss and photodetector power-meter mode specifications.

Applications

Stimulus-response optical component test and modular OSA measurements in MMS mainframes.

Key Features

Monochromator optical output

Photodetector power meter input

Supports Option 002 white light and Option 003 PDL kits

Standard 4/8-width MMS module

Used in HP 71451B systems

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Wavelength Range	600 to 1700 nm
Absolute Wavelength Accuracy	plus or minus 1 nm
Absolute Accuracy After User Cal	plus or minus 0.3 nm
Span Linearity Spans Less Than 40 nm	plus or minus 0.05 nm
Resolution Bandwidth Fwhm	less than 0.08 nm and 0.1 to 10 nm in 1 2 5 sequence

Amplitude Calibration Accuracy At Minus 30 dBm 1300 nm: plus or minus 0.5 dB

Sensitivity 1200 To 1600 nm: minus 90 dBm

Dynamic Range 0.1 nm 1250 To 1600 nm: minus 55 dB at greater than or equal to plus or minus 0.5 nm

Specifications

PARAMETER	VALUE
Compression Level 0.05 dB	greater than or equal to 10 dBm
Maximum Safe Input	plus 20 dBm per 5 nm plus 30 dBm total
Monochromator Loss 850 nm Into 62.5 um	less than 19 dB
Monochromator Loss 1300 nm Into 62.5 um	less than 7 dB
Monochromator Loss 1550 nm Into 62.5 um	less than 10 dB

Monochromator Polarization Dependence Resolutions Greater Than Or Equal 0.2 nm 1250 To 1600 nm: plus or minus 0.5 dB

Photodetector Accuracy At Minus 30 dBm 20 To 30 C: plus or minus 0.35 dB

Specifications

PARAMETER	VALUE
Photodetector Accuracy 0 To 55 C	plus or minus 0.5 dB

PARAMETER	VALUE
Photodetector Maximum Safe Power	plus 20 dBm
Photodetector 1 dB Compression	greater than or equal to plus 7 dBm
Photodetector Scale Fidelity Fixed Reference	plus or minus 0.1 dB
Photodetector Sensitivity 1250 To 1600 nm	minus 95 dBm
Photodetector Sensitivity 600 To 1700 nm	minus 85 dBm
Photodetector Flatness 1250 To 1600 nm	plus or minus 0.4 dB
Photodetector Maximum Displayed Level	10 dBm
Transimpedance Current Range	0 to minus 10 mA
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Optical Input Fiber	multimode 62.5 um fiber
Optical Output Fiber	62.5 um fiber
Module Form Factor	standard 4/8-width MMS module
Module Mass	8 kg
Operating Temperature	0 to plus 55 C
Host System Example	HP 71451B

Notes

From HP 71450B/71451B/71452B Technical Specifications 5963-7040E additional specifications for HP 71451B (HP 70951B).

Ordering Information

OPTION	DESCRIPTION
Option 002	white light and Option 003 PDL kits

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

788 S 500 E, Pleasant Grove, UT 84062
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<https://aumictechlabs.com>

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.