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Data Sheet
August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 70952B – Optical Spectrum Analyzer Module

HP Agilent 70952B Optical Spectrum Analyzer Module 600 to 1700 nm The HP 70952B is the 4/8-width MMS optical spectrum analyzer module used in the HP 71452B system. OEM 71450B/71451B/71452B Optical Spectrum Analyzers technical specifications (5963-7040E) list 600 to 1700 nm, absolute accuracy plus or minus 0.2 nm after user cal, sensitivity to minus 90 dBm (1200 to 1600 nm), and a 62.5 um optical input on the 70952B module. Spectral measurements of DFB, FP, LED, EDFA, and DWDM components on the HP 70000 Modular Measurement System. The HP 70952B is the 4/8-width MMS optical spectrum analyzer module used in the HP 71452B system. OEM 71450B/71451B/71452B Optical Spectrum Analyzers technical specifications (5963-7040E) list 600 to 1700 nm, absolute accuracy plus or minus 0.2 nm after user cal, sensitivity to minus 90 dBm (1200 to 1600 nm), and a 62.5 um optical input on the 70952B module. Spectral measurements of DFB, FP, LED, EDFA, and DWDM components on the HP 70000 Modular Measurement System. Diffraction-grating OSA module for 70004A/70001A mainframes

MODEL **Agilent / Keysight 70952B**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **70952B**	LISTING **https://aumictechlabs.com/products/70952b-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight 70952B is a grating-based optical spectrum analyzer module engineered for the 70000 series modular measurement system. It delivers characterization of optical components, amplifiers, LEDs, DFB lasers, and Fabry-Perot lasers across multiple wavelength windows. The module achieves –95 dBm sensitivity with dynamic range to +10 dBm and sweeps 40 nm in 50 ms, enabling rapid measurement cycles in high-sensitivity applications.Polarization insensitivity and configurable continuous-sweep operation reduce measurement time and mechanical wear.Technical Specifications Optical Performance Wavelength measurement ranges: 600–1700 nm, 900–1700 nm, 1250–1600 nm, or 1250–1600 nm with Option 002 built-in white light source Sensitivity: –95 dBm Maximum displayed level: +10 dBm Amplitude flatness (≥2 dBm input): ±0.4 dB Sweep speed: 40 nm in 50 ms Accuracy Amplitude accuracy (external photodetector): +0.1/–0.05 dB Amplitude accuracy (internal photodetector): +0.2/–0.1 dB Amplitude accuracy (O/E devices): +0.075/–0.025 dB Polarizer extinction ratio measurement: 0 to 30 dB Environmental Operating temperature: 0°C to 55°C Operating humidity: <95% non-condensing Stabilization: 1 hour continuous operation plus auto-align routineKey Features 4/8-width plug-in module Grating-based analyzer architecture Advanced measurement programs updated after each sweep Supplied optical spectrum analyzer keypad Color display capability with compatible mainframesTypical Applications LED characterization and testing DFB and Fabry-Perot laser measurement Optical component validation Optical amplifier analysisCompatibility & Integration The 70952B requires installation into either an HP 70004A or HP 70001A mainframe. Optional configurations include programmable current source (Option 001), built-in white light source (Option 002), DWDM component test kit (Option 003), enhanced dynamic range performance (Option 122), and rackmount kit (1CM).

Features & description

From manufacturer datasheet

Polarization Dependence 1542 To 1562: plus or minus 0.05 dB

Sensitivity 1200 To 1600: minus 90 dBm Sensitivity 1600 To 1700: minus 80 dBm Sensitivity 900 To 1200: minus 75 dBm Sensitivity 750 To 900 First Order: minus 65 dBm Dynamic Range 0p1 Nm 1250 To 1600: minus 55 dB at greater than or equal to plus or minus 0.5 nm, 0.1 nm resolution Option 122 Dynamic Range: minus 70 dB at plus or minus 0.5 nm, plus or minus 1 nm, and plus or minus 5 nm, 1250 to 1600 nm Maximum Sweep Rate: 40 nm per 50 ms Sweep Cycle 50 Nm Auto Zero Off: less than 180 ms Optical Input Fiber: 62.5 um fiber on HP 70952B Maximum Safe Input: +20 dBm per 5 nm, +30 dBm total Module Weight: 8 kg Operating Temperature: 0 C to +55 C Storage Temperature: minus 40 C to +71 C Warm Up: 1 hour continuous operation then auto-align; specs without USER CAL unless noted Notes Numeric rows from HP 71450B/71451B/71452B Optical Spectrum Analyzers Technical Specifications 5963-7040E, 71452B column. That system includes the HP 70952B module; optical-input fiber is the 70952B row (62.5 um). Sensitivity is signal equal to six times RMS noise.

70952B Characteristics / Specifications

PARAMETER	VALUE
Model	70952B
Instrument Type	Optical spectrum analyzer module
Host System	HP 71452B OSA system; 70004A or 70001A MMS mainframe
Module Width	standard 4/8-width MMS module
Wavelength Range	600 nm to 1700 nm
Span Range	0.2 nm to full range and zero span, continuously variable
Absolute Accuracy	plus or minus 1 nm
Absolute Accuracy After User Cal	plus or minus 0.2 nm (71452B/70952B column)
Absolute Accuracy Near Cal Signal	plus or minus 0.05 nm after user cal within 40 nm of cal signal
Span Linearity	plus or minus 0.05 nm for spans less than 40 nm
Span LinearityCBand	plus or minus 0.02 nm, 1530 nm to 1570 nm
Reproducibility 1 Minute	plus or minus 0.001 nm (71452B column)
Tuning Repeatability	plus or minus 0.005 nm
Settability	plus or minus 0.005 nm
Resolution Bandwidth Fwhm	less than 0.08 nm and 0.1 nm to 10 nm in a 1, 2, 5 sequence
Fwhm Of 0p08 Setting	0.065 nm plus or minus 15 percent
Amplitude Calibration Accuracy	plus or minus 0.5 dB at minus 30 dBm, 1300 nm
Scale Fidelity Autorange Off	plus or minus 0.05 dB, sample detector
Scale Fidelity Autorange On	plus or minus 0.07 dB, sample detector
Display Resolution Log	0.01 dB
Flatness 1530 To 15	plus or minus 0.2 dB
Flatness 1290 To 13	plus or minus 0.25 dB
Polarization Dependence 1300 To 13	plus or minus 0.125 dB
Polarization Dependence 1542 To 15	plus or minus 0.05 dB
Sensitivity 1200 To 16	minus 90 dBm

PARAMETER	VALUE
Sensitivity 1600 To 17	minus 80 dBm
Sensitivity 900 To 12	minus 75 dBm
Sensitivity 750 To 900 First Order	minus 65 dBm
Dynamic Range 0p1 Nm 1250 To 16	minus 55 dB at greater than or equal to plus or minus 0.5 nm, 0.1 nm resolution
Maximum Sweep Rate	40 nm per 50 ms
Sweep Cycle 50 Nm Auto Zero Off	less than 180 ms
Optical Input Fiber	62.5 um fiber on HP 70952B
Maximum Safe Input	+20 dBm per 5 nm, +30 dBm total
Module Weight	8 kg
Operating Temperature	0 C to +55 C
Storage Temperature	minus 40 C to +71 C
Warm Up	1 hour continuous operation then auto-align; specs without USER CAL unless noted
Bandwidth	Fwhm: less than 0.08 nm and 0.1 nm to 10 nm in a 1, 2, 5 sequence

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to +71 C
Operating temperature	0 C to +55 C
Operating Temperature	0 C to +55 C
Warm Up	1 hour continuous operation then auto-align; specs without USER CAL unless noted Notes Numeric rows from HP 71450B/71451B/71452B Optical Spectrum Analyzers Technical Specifications 5963-7040E, 71452B column. That system includes the HP 70952B module; optical-input fiber is the 70952B row (62.5 um). Sensitivity is signal equal to six times RMS noise.

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 (5963-7040E) list 600 to 1700 nm, absolute accuracy plus or minus 0.2 nm after user cal, sensitivity to minus 90 dBm (1200 to 1600 nm), and a 62.5 um optical input on the 70952B module.

Applications
Spectral measurements of DFB, FP, LED, EDFA, and DWDM components on the HP 70000 Modular Measurement System.

Key Features
Diffraction-grating OSA module for 70004A/70001A mainframes
62.5 um optical input (70952B column)
EDFA personalities included (options 051/052/053)
Option 122 improved dynamic range available on 71452B/70952B

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	70952B
Instrument Type	Optical spectrum analyzer module
Host System	HP 71452B OSA system; 70004A or 70001A MMS mainframe
Module Width	standard 4/8-width MMS module
Wavelength Range	600 nm to 1700 nm
Span Range	0.2 nm to full range and zero span, continuously variable
Absolute Accuracy	plus or minus 1 nm
Absolute Accuracy After User Cal	plus or minus 0.2 nm (71452B/70952B column)
Absolute Accuracy Near Cal Signal	plus or minus 0.05 nm after user cal within 40 nm of cal signal
Span Linearity	plus or minus 0.05 nm for spans less than 40 nm
Span LinearityCBand	plus or minus 0.02 nm, 1530 nm to 1570 nm
Reproducibility 1 Minute	plus or minus 0.001 nm (71452B column)
Tuning Repeatability	plus or minus 0.005 nm
Settability	plus or minus 0.005 nm
Resolution Bandwidth Fwhm	less than 0.08 nm and 0.1 nm to 10 nm in a 1, 2, 5 sequence
Fwhm Of 0p08 Setting	0.065 nm plus or minus 15 percent
Amplitude Calibration Accuracy	plus or minus 0.5 dB at minus 30 dBm, 1300 nm
Scale Fidelity Autorange Off	plus or minus 0.05 dB, sample detector
Scale Fidelity Autorange On	plus or minus 0.07 dB, sample detector
Display Resolution Log	0.01 dB
Flatness 1530 To 1570	plus or minus 0.2 dB

PARAMETER	VALUE
Flatness 1290 To 1330	plus or minus 0.25 dB
Polarization Dependence 1300 To 1320	plus or minus 0.125 dB
Polarization Dependence 1542 To 1562	plus or minus 0.05 dB
Sensitivity 1200 To 1600	minus 90 dBm
Sensitivity 1600 To 1700	minus 80 dBm
Sensitivity 900 To 1200	minus 75 dBm
Sensitivity 750 To 900 First Order	minus 65 dBm
Dynamic Range 0p1 Nm 1250 To 1600	minus 55 dB at greater than or equal to plus or minus 0.5 nm, 0.1 nm resolution

Option 122 Dynamic Range: minus 70 dB at plus or minus 0.5 nm, plus or minus 1 nm, and plus or minus 5 nm, 1250 to 1600 nm

Specifications

PARAMETER	VALUE
Maximum Sweep Rate	40 nm per 50 ms
Sweep Cycle 50 Nm Auto Zero Off	less than 180 ms
Optical Input Fiber	62.5 um fiber on HP 70952B
Maximum Safe Input	+20 dBm per 5 nm, +30 dBm total
Module Weight	8 kg
Operating Temperature	0 C to +55 C
Storage Temperature	minus 40 C to +71 C
Warm Up	1 hour continuous operation then auto-align; specs without USER CAL unless noted

Notes
Numeric rows from HP 71450B/71451B/71452B Optical Spectrum Analyzers Technical Specifications 5963-7040E, 71452B column. That system includes the HP 70952B module; optical-input fiber is the 70952B row (62.5 um). Sensitivity is signal equal to six times RMS noise.

Ordering Information

OPTION	DESCRIPTION
Option 122	improved dynamic range available on 71452B/70952B

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

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Generated August 14, 2026

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