BUY – SELL – REPAIR – CALIBRATE
sales@simbol.ca 1-866-396-6248

Simbol Test Systems is the one-stop shop for all your fiber optic test equipment and measurement needs. As we are focused on e-commerce and international distribution of photonic products exclusively since 2000, our customers rely on our **AssetRelay** catalog to find stock listings of thousands of used and refurbished popular test equipment and they know they can get repair, customization and calibration services from our laboratory for their own fiber optic instruments from all renowned brand manufacturers.

If you wish to buy or sell an AQ6370D-01-L1, visit our catalog here to see our current stock with actual photos; our calibrated units!

Yokogawa AQ6370D-01-L1 Optical Spectrum Analyzer (OSA) Calibration and Repair Services

With more than 20 years of expertise in repair of OSA, Tunable Lasers, Wavemeters and more, the quality of our services is renowned amongst the service centers community and highly appreciated by our partners and customers. We developed custom software allowing us to perform automatic calibration tests and write up to date results in the TLS calibration tables. Don't settle for a two-page summary assessment to trust that your TLS is operating on the full range; our report contains the complete table of results, confirming it has really been tested.

Yokogawa AQ6370D-01-L1 Optical Spectrum Analyzer (OSA) Repair and Calibration Services

The AQ6370D-01-L1 OSA goes through a calibration process to ensure it meets or exceeds manufacturers' published specifications. The equipment is shipped with a comprehensive 9-page calibration report including before-and-after data, a calibration sticker and its own dated calibration certificate.

Simbol Test Systems is the only North America independent lab with the capability to calibrate your Optical Spectrum Analyzer (OSA) with a complete process as ours. If your unit does not pass calibration, we will quote a complete repair and get your OSA back to perfect working condition.

List of specifications calibrated

- Optical Alignment
- Wavelength Calibration with Internal Cell
- Wavelength Accuracy calibration with external source
- Wavelength Resolution Accuracy
- Wavelength Reproducibility
- Dynamic Range
- Level Accuracy
- Level Flatness
- Level Response
- Waveform Symmetry, Flatness and Ripple
- Stability

Traceability: Instrumentation used during this calibration is traceable to N.I.S.T (National Institute of Standards and Technology) or C.N.R.C. (Canadian National Research Council.

User's Manual

Model AQ6370D-01, AQ6370D-02 AQ6370D Optical Spectrum Analyzer Limited model

Foreword

This document describes the specifications of the limited model of the AQ6370D (SUFFIX -01, -02).

Specifications

Item	Specifications
Applicable fiber	SM (9.5/125 μm), MMF (50/125 μm, 62.5/125 μm)
Measurement wavelength range[1]	600 to 1700 nm
Wavelength accuracy[1, 2, 5]	Wavelength range
	1520 to 1620 nm ±0.02 nm Entire wavelength range ±0.1 nm
Wavelength linearity[1, 2, 5]	±0.02 nm (1520 to 1620 nm)
Wavelength repeatability[1, 2]	±0.005 nm (1 minute)
Wavelength resolution setting[1, 2]	0.05, 0.1, 0.2, 0.5, 1.0, 2.0 nm
Resolution bandwidth accuracy[1, 2, 5]	±5% (1450 to 1620 nm, resolution setting: 0.1 to 2.0 nm, at the calibration wavelength during user-defined resolution calibration using an external DFB-LD, wavelength sample setting: AUTO)
Minimum sampling resolution[1]	0.001 nm
Measurement data point (Wavelength sampling points)	101 to 50001, AUTO
Level sensitivity setting	NORM_HOLD, NORM_AUTO, NORMAL, MID, HIGH1, HIGH2 and HIGH3
High dynamic range mode	SWITCH (Sensitivity: MID, HIGH1, HIGH2, HIGH3)
Level sensitivity[2, 3, 4, 7]	-90 dBm (1300 to 1620 nm, resolution: 0.05 nm or more, measuring sensitivity: HIGH3) -85 dBm (1000 to 1300 nm, resolution: 0.05 nm or more, measurement sensitivity: HIGH3) -60 dBm (600 to 1000 nm, resolution: 0.05 nm or more, measurement sensitivity:HIGH3)
Level accuracy[2, 3, 4, 6]	±0.4 dB (1310/1550 nm, input level: -20 dBm, measuring sensitivity: NORMAL, MID, HIGH1, HIGH2, HIGH3)
Leval linearity[2, 3]	±0.05 dB (input level: -50 to +10 dBm, measuring sensitivity: HIGH1, HIGH2, HIGH3)
Level flatness[2, 3, 6]	±0.1 dB (1520 to 1580 nm) ±0.2 dB (1450 to 1520 nm, 1580 to 1620 nm)
Maximum input power[2, 3]	+20 dBm (per channel, full span)
Safe max. input power[2, 3]	+25 dBm (total light input power)
Close-in dynamic range[1, 2, 8]	
	±0.2 nm of peak wavelength 43 dB (resolution: 0.05 nm) ±0.4 nm of peak wavelength 61 dB (resolution: 0.05 nm) ±1.0 nm of peak wavelength 71 dB (resolution: 0.05 nm)
Polarization dependency[2, 3, 6]	±0.05 dB (1550/1600 nm) ±0.08 dB (1310 nm)
Sweep time[1, 7, 9]	0.2 s (NORM_AUTO) 1 s (NORMAL) 2 s (MID) 5 s (HIGH1), 20 s (HIGH2), 75 s (HIGH3)
Optical return loss[11]	Typ. 35 dB (with angled-PC connector)
Optical connectors	For optical input, AQ9447(*) connector adapter (option) required. For wavelength reference light source output, AQ9441(*) connector adapter (optional, when the built-in light source specification is -L1) required. (*): Connector types: FC, SC
Built-in calibration light source	For alignment and wavelength calibration (when the built-in light source specification is -L1)
Electrical interfaces	GP-IB, RS-232, Ethernet, USB, SVGA output, analog output port, trigger input port, trigger output port
Remote control [12]	GP-IB, RS-232, Ethernet (TCP/IP) AQ6317 series compliant commands (IEEE488.1) and IEEE488.2

YOKOGAWA

3rd Edition : May 2017 (YMI)

Item	Specifications
Data storage	
Internal storage	512 MB or higher
External storage	USB storage media (USB memory/HDD), format: FAT32
File types	CSV (text), binary, bitmap, TIFF
Display[13]	10.4" color LCD (resolution: 800 x 600 pixels)
External dimensions	Approximately 426 (W) x 221 (H) x 459 (D) mm (excluding the protector and handle)
Mass	Approximately 19 kg
Power requirement	100 to 240 VAC, 50/60 Hz, approximately 100 VA
Environment conditions	Optimal temperature: +18 to +28°C Operating temperature range: +5 to +35°C Storage temperature range: -10 to +50°C Ambient humidity: 20 to 80% RH or less (no condensation)
Recommended calibration period	1 year
Function	
Measurement	
Setting of measuring conditions	Center wavelength, span, wavelength sampling points, wavelength resolution, measurement sensitivity, high dynamic mode, average count (1 to 999), double-speed measurement mode, smoothing, APC level correction
Sweep settings	Single sweep, repeat sweep, AUTO (automatically sets measuring conditions), sweep between marker, data logging
Measurement function	CW measurement, pulse light measurement, external trigger measurement, gate measurement, air/vacuum wavelength measurement
Other	Sweep status output, analog output
Display	
Vertical scale	Level scale (0.1 to 10 dB/div, linear), level subscale (0.1 to 10 dB/div, linear), reference level display, DIV display (8, 10, 12), percentage display, dB/km display, power density (dB/nm) display, noise mask
Horizontal scale	Horizontal wavelength (nm) display, frequency (THz) display, zoom in/zoom out display
Display mode and items	Single waveform display, split screen display, data table display, label display, template display, measurement condition display
Trace	
Display function	Simultaneous display of 7 independent traces, max/min value detection display, calculation between traces display, normalized display, roll averaging (sweep average) display (2 to 100 times), curve fit display, peak curve fit display, marker curve fit display
Other	Trace copy, trace clear, write mode fixed mode setting, show/hide setting
Marker and search	
Marker	Delta marker (1024 points max.), vertical/horizontal line markers, advanced marker
Search	Peak search, bottom search, auto search (ON/OFF), search between vertical axis line markers, search within zoom area
Data analysis	
Analysis feature	Spectral width analysis (threshold, envelope, RMS, Peak-RMS, notch), WDM (OSNR) analysis, EDFA-NF analysis, filter peak/bottom analysis, WDM filter peak/bottom analysis, DFB-LD analysis, FP-LD analysis, LED analysis, SMSR analysis, power analysis, PMD analysis, Pass/Fail judgment from template
Other	Auto analysis execution setting, analysis between vertical axis line markers, analysis within the zoom area
Auto measurement	
Programming	64 programs, 200 steps/program
Other	
Alignment	Auto alignment using built-in calibration light source (when the built-in light source specification is -L1) or an external light source
Wavelength Calibration	Auto wavelength calibration using built-in calibration light source (when the built-in light source specification is -L1) or an external light source
Resolution calibration	User-defined resolution calibration using an external light source (DFB-LD)

1: Horizontal axis scale: In wavelength display mode

2: 9.5/125 μm single mode fiber (PC polishing), after warm-up of 1 hours, after alignment with a built-in wavelength reference light source or single longitudinal mode laser (peak level: –20 dBm or higher, level stability: 0.1 dBpp or less, wavelength stability: ±0.01 nm or less)

3: Vertical scale: absolute value level display mode, resolution setting: 0.05 nm or more, resolution correction: OFF

4: When using 9.5/125 μm single mode fiber (SSMA type in JIS C6835, PC polishing, mode field diameter: 9.5 μm, NA: 0.104 to 0.107)

5: After wavelength calibration using a built-in wavelength reference light source or single longitudinal mode laser (peak level: –20 dBm or higher, absolute waveform accuracy in the wavelength range of 1550 ± 10 nm: ± 0.003 nm or less)

6: With the resolution setting of 0.05 nm, at ambient temperature of 23 ±3 °C.

7: High dynamic mode: OFF, pulse light measurement mode: OFF, resolution correction: OFF

8: 1523 nm, high dynamic mode:SWITCH, resolution correction: OFF

9: Span 100 nm or less, wavelength sampling points: 1001, averaging times: 1

10: When applying a HeNe laser (1523 nm), resolution: 0.1 nm, 1520 nm to 1620 nm (excluding peak wavelength ± 2 nm).

11: When using the Yokogawa signal mode fiber with our standard Angled PC connector, it is 15 dB(Typ.) when using the PC connector.

12: Certain commands may not support the AQ6317 depending on the relationship between the target model specifications and functions.

13: The LDC display may contain defective pixels (always ON or always OFF).
(0.002% or fewer of all pixels including RGB). Does not indicate a general malfunction.

14: Pollution degree refers to the degree of adherence by a solid, liquid, or vapor that reduces the withstand voltage or surface resistance factor. Pollution degree 1 applies to closed atmospheres (no pollution, or only dry, non-conductive pollution). Pollution degree 2 applies to normal indoor atmospheres (with only non-conductive pollution).

15: Use a cable of 3 m in length or less.

16: Use a cable of 30 m in length or less.

*: Typical values(typ.) are typical or mean values. They are not strictly guaranteed.

Safety Standards and EMC Standards

Safety specifications and EMC are the same as those of standard model of the AQ6370D.