

Specifications

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|---|--|
| Applicable fiber | SM (9.5/125 μ m), GI (50/125 μ m, 62.5/125 μ m) |
| Measurement wavelength range ¹⁾ | 600 to 1700 nm |
| Span ¹⁾ | 0.5 nm to full range and zero span |
| Wavelength accuracy ^{1), 2), 3)} | ± 0.02 nm (1520 to 1580 nm) ± 0.04 nm (1450 to 1520 nm, 1580 to 1620 nm) ± 0.1 nm (Full range) |
| Wavelength linearity ^{1), 2), 3)} | ± 0.01 nm (1520 to 1580 nm) ± 0.02 nm (1450 to 1520 nm, 1580 to 1620 nm) |
| Wavelength repeatability ^{1), 2)} | ± 0.005 nm (1 min.) |
| Measurement data point | 101 to 50001 |
| Wavelength resolution setting ^{1), 2)} | 0.02, 0.05, 0.1, 0.2, 0.5, 1.0 and 2.0 nm |
| Resolution accuracy ^{1), 2), 3)} | ± 5 % (1450 to 1620 nm, resolution setting: 0.1 to 2.0 nm, resolution correction: ON, measurement data point setting: AUTO) |
| Level sensitivity setting | NORM_HOLD, NORM_AUTO, NORMAL, MID, HIGH1, HIGH2 and HIGH3 |
| High dynamic range mode | Switch (Sensitivity: MID, HIGH1, HIGH2 and HIGH3) |
| Level sensitivity ^{2), 4), 5), 7)} (resolution: 0.05 nm or wider) (Sensitivity: HIGH3) | -90 dBm (1300 to 1620 nm) -80 dBm (1000 to 1300 nm) -60 dBm (600 to 1000 nm) |
| Level accuracy ^{2), 4), 5), 6)} | ± 0.4 dB (1310/1550 nm, input level: -20 dBm, sensitivity: MID, HIGH1, HIGH2 and HIGH3) |
| Level linearity ^{2), 4)} | ± 0.05 dB (Input level: -50 to +10 dBm, sensitivity: HIGH1, HIGH2 and HIGH3) |
| Level flatness ^{2), 4), 6)} | ± 0.1 dB (1520 to 1580 nm) ± 0.2 dB (1450 to 1520 nm, 1580 to 1620 nm) |
| Maximum input power ^{2), 4)} | +20 dBm (Per channel, full span) |
| Safe max. input power ^{2), 4)} | +25 dBm (Total safe power) |
| Close-in dynamic range ^{1), 2), 9)} (at 1523 nm) | 37 dB (± 0.1 nm from peak, resolution: 0.02 nm) 55 dB (± 0.2 nm from peak, resolution: 0.02 nm) 45 dB (± 0.2 nm from peak, resolution: 0.05 nm) 62 dB (± 0.4 nm from peak, resolution: 0.05 nm) 40 dB (± 0.2 nm from peak, resolution: 0.1 nm) 57 dB (± 0.4 nm from peak, resolution: 0.1 nm) |
| Polarization dependency ^{2), 4), 6)} | ± 0.05 dB (1550/1600 nm) ± 0.08 dB (1310 nm) |
| Sweep time ^{1), 7), 8)} | Per sensitivity mode; NORM_AUTO: 0.5 sec NORMAL: 1 sec MID: 2 sec HIGH1: 5 sec HIGH2: 20 sec HIGH3: 75 sec |

| | | | |
|------------------------------------|--|---|---|
| Function | Automatic measurement | Macro program function (64 programs, 200 steps) | |
| | Setting of measuring conditions | Center wavelength setting, Span setting, Measurement data point setting, Wavelength resolution setting, Sensitivity setting, High dynamic range mode setting, Averaging number setting (1 to 999 times), Automatic measuring conditions setting, Sweep between line markers, zero span sweep, Automatic measurement data point setting, Pulse light measurement, External trigger measurement, Sweep trigger, Sweep status output, Analog output, TLS synchronized sweep, Air/vacuum wavelength measurement, Pass/Fail judgment with template | |
| | Display | Level scale setting (0.1 to 10 dB/div. and linear), Vertical sub scale setting (0.1 to 10 dB/div. and linear), Reference level and position setting, Vertical division number setting (8, 10 or 12), Frequency horizontal scale display, Horizontal scale zoom in/out display, Measurement condition display, Noise mask, Data table, Label, Split display, % display, dB/nm (power spectral density) display, dB/km display, Template display | |
| | Traces | 7 independent traces, Write/Fix setting, Display/Blank setting, Max./Min. hold, calculation between traces, Roll (Sweep) averaging (2 to 100 times), Normalized, Curve fit/Peak curve fit/Marker curve fit, Trace copy function, Trace clear function | |
| | Marker/Search | Delta marker (Max. 1024), Vertical/Horizontal line marker, Peak search, Next peak search, Bottom search, Next bottom search, Auto search, Search between horizontal line markers, Search in the zooming area | |
| | Analysis | Spectral width (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 with template, Auto analysis, Analysis between horizontal line markers, Analysis in the zooming area | |
| | Other | Self optical alignment function with built-in light source, Self wavelength calibration function | |
| | Data storage | Internal memory Internal storage External File type | 64 Traces, 64 programs, 3 template lines Max. 128 MByte USB storage (memory/HDD) Capability, FAT32 format CSV(text)/Binary, BMP/TIFF |
| | Interface | Remote control Category Optical connector | GPIO, RS-232C and Ethernet (TCP/IP) AQ6317 series compliant commands (IEEE488.1) and IEEE488.2 full support GPIO x2 (standard/controller), RS-232C, Ethernet, USB1.1 x2, PS/2 (keyboard), SVGA output, Analog output port, Trigger input port, Trigger output port Free space optical input: Requires AQ9447 (*) connector adapter PC contact built-in light source output: Requires AQ9441 (*) Universal adapter |
| | Printer | Built-in high-speed thermal printer (Factory option) | |
| Display ¹¹⁾ | 10.4-inch color LCD (Resolution: 800 x 600) | | |
| Power requirement | 100 to 240 VAC, 50/60 Hz, approx. 150 VA | | |
| Environmental conditions | Operating temperature: +5 to +35°C Storage temperature: -10 to +50°C Humidity: 80%RH or less (no condensation) | | |
| Dimensions and mass ¹⁰⁾ | Approx. 426 (W) x 221 (H) x 459 (D) mm, Approx. 19 kg (without printer option) | | |

Note:

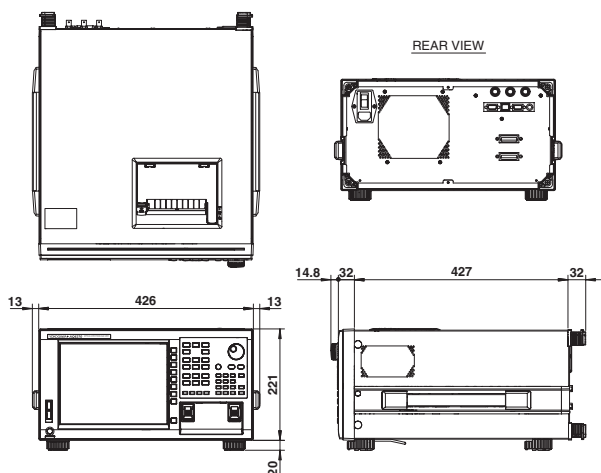
- Horizontal scale: wavelength display mode
- At 23 \pm 5°C, with 10/125 μ m single mode fiber, after 2 hours of warm-up, after optical alignment with built-in reference light source
- After wavelength calibration with built-in reference light source
- Vertical scale: absolute power display mode, resolution setting: 0.05 nm or wider, resolution correction: OFF
- With 10/125 μ m single mode fiber (B1.1 type defined on IEC60793-2, PC polished, mode field diameter: 9.5 μ m, NA: 0.104 to 0.107)
- Temperature condition changes to 23 \pm 3°C at 0.05 nm resolution setting.
- High dynamic range mode: OFF, pulse light measurement mode: OFF, TLS sync sweep: OFF, resolution correction: OFF
- Span: any 100 nm or less, measurement data point: 1001, average number: 1
- High dynamic range mode: SWITCH, resolution correction: OFF
- Excluding feet and handles
- Liquid crystal display may include few defective pixels (within 0.002% with respect to the total number of pixels including RGB).
There may be few pixels on the liquid crystal display that do not emit all the time or remains ON all the time. Note that these are not malfunctions.

Standard Accessories

| Name | Q'ty |
|----------------------|------|
| Power cable | 1 |
| User's manual (1set) | 1 |

Dimensions

Unit : mm
(approx. inch)

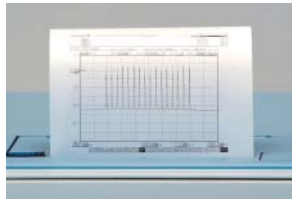


Factory Installed Options

BUILT-IN PRINTER

An optional built-in thermal printer is provided to instantly print out a screenshot of the AQ6370B's display, analysis results, a marker list and a macro program list.

Accessory: printer roll paper (1 roll)



OPTICAL CONNECTOR ADAPTERS



For optical input port
AQ9447 Connector Adapter
/FC, /SC, /ST



For calibration output port
AQ9441 Universal Adapter
/RFC, /RSC, /RST

Ordering Information

Model and Suffix Codes

| Model | Suffix Codes | Descriptions |
|---------------------------|--------------|---|
| 735302 | | Optical Spectrum Analyzer AQ6370B |
| Power cable | -D | Power cord (UL3P) |
| | -F | Power cord (CEE-C7) |
| | -R | Power cord (SAA-3P) |
| | -Q | Power cord (BS3P Rectangular) |
| | -H | Power cord (BS3P Round) |
| | -M | Power cord (UL3P with 3P/2P converter) |
| Factory Installed Options | /FC | AQ9447(FC) Connector adapter for optical input |
| | /SC | AQ9447(SC) Connector adapter for optical input |
| | /ST | AQ9447(ST) Connector adapter for optical input |
| | /RFC | AQ9441(FC) Universal adapter for calibration output |
| | /RSC | AQ9441(SC) Universal adapter for calibration output |
| | /RST | AQ9441(ST) Universal adapter for calibration output |
| | /B5 | Built-in thermal printer |

Accessories (Optional)

| Name | Model | Suffix codes | Specifications |
|--------------------------|-----------|--------------|-----------------------------|
| AQ6370 Viewer | 735371 | | |
| AQ9447 Connector adapter | 810804602 | | For optical Input port |
| Connector type | | -FCC | FC type |
| | | -SCC | SC type |
| | | -STC | ST type |
| AQ9441 Universal adapter | 813917321 | | For calibration output port |
| Connector type | | -FCC | FC type |
| | | -SCC | SC type |
| | | -STC | ST type |
| Printer roll paper | B9988AE | | 10 m roll, 10 rolls/1 unit |

Related Products

Optical Spectrum Analyzer
AQ6319



Superior Performance

Optical Spectrum Analyzer
AQ6375



Long Wavelength (1200 to 2400)

White Light Source
AQ4305



Broadband

Tunable Laser/DFB-LD Sources
AQ2200 Series



Modular Platform

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Note



- Before operating the product, read the user's manual thoroughly for proper and safe operation.
- If this product is for use with a system requiring safeguards that directly involve personnel safety, please contact the Yokogawa sales offices.