ANDO

AQ6317B

The Ando AQ6317B is a high-performance optical spectrum analyzer (OSA) designed for the measurement and evaluation of WDM transmission systems, laser diodes, optical fibers, and passive components. Operating over a broad wavelength range of 600 nm to 1750 nm, it features a double-pass monochromator that delivers high resolution and wide dynamic range. With exceptional wavelength accuracy, precise level flatness, and a variety of built-in analysis functions, the AQ6317B serves as a benchmark instrument for optical fiber communications testing.

SPECIFICATIONS

General

Interfaces	GP-IB (two ports: GP-IB1 and GP-IB2), VGA video output, analog output, external keyboard port
Display	9.4-inch color active matrix LCD, 640 × 480 resolution
Warm-up Time	Approx. 1 hour
Built-In Printer	High-speed thermal printer

Physical

Power Supply	100 to 120 V AC / 200 to 240 V AC, 50/60 Hz, approx. 150 VA
Operating Temperature	10°C to 40°C °C
Dimensions (W×H×D)	426 mm × 221 mm × 450 mm mm
Weight	Approx. 30 kg kg

Wavelength Performance

Wavelength Range	600 nm to 1750 nm
Wavelength Accuracy (1520 to 1580 nm)	±0.02 nm
Wavelength Accuracy (1580 to 1620 nm)	±0.04 nm
Wavelength Accuracy (600 to 1750 nm)	±0.5 nm
Wavelength Resolution Settings	0.01, 0.02, 0.05, 0.1, 0.2, 0.5, 1.0, 2.0 nm
Wavelength Linearity (1520 to 1580 nm)	±0.01 nm
Wavelength Linearity (1580 to 1620 nm)	±0.02 nm
Wavelength Repeatability	±0.005 nm (within 1 minute)
Wavelength Resolution Accuracy	±3% (at 0.1 nm resolution, 1523 nm)
Minimum Wavelength Resolution	0.01 nm

Level (Power) Performance

Level Measurement Range (1200 to 1600 nm)	-90 to +20 dBm (resolution ≥ 0.05 nm)
Level Measurement Range (1000 to 1200 nm)	-85 to +20 dBm
Level Measurement Range (1600 to 1700 nm)	-85 to +20 dBm
Level Measurement Range (600 to 1000 nm)	-60 to +20 dBm
Level Measurement Range (1700 to 1750 nm)	-60 to +20 dBm
Maximum Safe Input Power	+23 dBm (total)
Maximum Input Power per Channel	+20 dBm
Level Accuracy	±0.3 dB (at 1550 nm, -20 dBm input, resolution ≥ 0.1 nm)
Level Linearity (-10 to -50 dBm)	±0.05 dB
Level Linearity (-50 to -70 dBm)	±0.10 dB
Level Flatness (1520 to 1580 nm)	±0.1 dB
Polarization Dependency	±0.05 dB (at 1550 nm)

Measurement Capabilities

Dynamic Range (at ±0.2 nm)	60 dB (at 1523/1550/1625 nm, resolution 0.01 nm)
Dynamic Range (at ±0.4 nm)	70 dB (at 1523/1550/1625 nm, resolution 0.01 nm)
Sweep Time (Span ≤ 50 nm)	0.5 s or less (resolution 0.1 nm, sensitivity Normal)

Connectivity & Ports

Optical Input Connector	FC-type (standard), SC-type or ST-type (optional)
Analog Output Voltage	0 to 5 V (Y-axis output corresponding to level)

Software & Analysis

Built-In Analysis Functions	WDM analysis, DFB-LD analysis, FP-LD analysis, LED analysis, Spectral width analysis, Optical fiber amplifier (EDFA) analysis, PMD measurement

General Features

Data Storage Media	Internal memory, 3.5-inch MS-DOS compatible Floppy Disk Drive (FDD)

Environmental

Storage Temperature Range	-10°C to 50°C
Operating Humidity Range	80% RH or less (no condensation)

Performance

Number of Sampling Points	101 to 10001
Wavelength Display Resolution	0.001 nm
Level Display Resolution	0.01 dB
Level Scale	0.1 to 10 dB/div, Linear

Optical Features

Applicable Fiber Type	Single-mode (9.5/125 µm), GI (50/125 µm, 62.5/125 µm)

Power

Power Consumption	Approx. 150 VA

Storage

Internal Memory Capacity	32 traces, 20 programs

Sweep Characteristics

Sweep Span Range	0 nm, 0.1 to 1150 nm
Sweep Sensitivity Settings	NORM_HLD, NORM_RNG, HIGH1, HIGH2, HIGH3
Sweep Modes	Single, Repeat, Auto

Optical Performance

Dynamic Range (at ±1.0 nm)	70 dB (at 1523 nm, resolution 0.05 nm)

Inputs & Outputs

External Video Output	VGA (D-Sub 15-pin, on rear panel)

Data Storage

PC Card Slot	PCMCIA Type II (1 slot)

Interfaces

Keyboard Interface	PS/2 (for external keyboard, on rear panel)

TECHNOLOGY

Optical Spectrum Analysis

APPLICATIONS

Wavelength Division Multiplexing (WDM) testing, optical amplifier characterization, laser diode spectral analysis

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.