

ANDO

AQ6331

The Ando AQ6331 is a compact, portable Optical Spectrum Analyzer (OSA) designed for high-performance DWDM network installation, maintenance, and R&D testing in both the C and L bands. It combines bench-top level wavelength accuracy, resolution, and dynamic range with a lightweight, field-ready design featuring an integrated 8.4-inch color display and a built-in high-speed printer.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488.2), RS-232C, PS/2 Keyboard/Mouse, VGA Output
Display	8.4-inch color TFT LCD
Printer Paper Width	58 mm

Physical

Power Supply	100 to 240 V AC, 50/60 Hz, approx. 100 VA
Operating Temperature	5 to 40 °C °C
Dimensions (W×H×D)	320 (W) × 225 (H) × 360 (D) mm mm
Weight	13 kg kg

Wavelength Specifications

Wavelength Range	1200 to 1700 nm
Wavelength Accuracy	±0.05 nm (1520 to 1580 nm, after calibration with internal light source)
Wavelength Accuracy (Full Range)	±0.10 nm (1200 to 1700 nm)
Wavelength Linearity	±0.02 nm (1520 to 1580 nm)
Wavelength Repeatability	±0.01 nm (1 minute)
Wavelength Span Range	0.2 to 500 nm, and 0 nm
Wavelength Temperature Stability	±0.005 nm/°C (1520 to 1580 nm)

Resolution and Bandwidth

Resolution Bandwidth Settings	0.05, 0.1, 0.2, 0.5, 1.0, 2.0 nm
Minimum Resolution Bandwidth	0.05 nm
Maximum Resolution Bandwidth	2.0 nm
Resolution Bandwidth Accuracy	±5% (at 0.1 nm resolution setting)

Optical Power and Amplitude

Power Measurement Range	-65 to +10 dBm (1520 to 1580 nm, resolution 0.05 nm)
Power Measurement Range (Full Range)	-60 to +10 dBm (1200 to 1700 nm)
Maximum Input Power	+20 dBm (safe maximum input level)
Power Level Accuracy	±0.3 dB (at 1550 nm, -20 dBm input)
Level Flatness	±0.5 dB (1520 to 1580 nm)
Polarization Dependency	±0.05 dB (1520 to 1580 nm)
Level Linearity	±0.05 dB (0 to -40 dBm)
Level Linearity (Full)	±0.10 dB (0 to -50 dBm)
Optical Dynamic Range (at ±0.2 nm)	45 dB (resolution 0.05 nm, typ.)
Optical Dynamic Range (at ±0.4 nm)	50 dB (resolution 0.05 nm, typ.)
Optical Return Loss	35 dB or more

Measurement Speed and Sweep

Sweep Time (100nm Span)	0.5 s or less
Sampling Points	101 to 10001 (settable)
Measurement Modes	Single, Continuous, Repeat, Average

Optical Interfaces

Optical Input Connector	FC (standard, others optional)
Compatible Fiber Types	9/125 µm Single-mode fiber (GI 50/125 µm compatible)
Internal Calibration Light Source	Built-in reference source for wavelength calibration

Analysis and Application Software

WDM Analysis Functions	Channel wavelength, Channel power, OSNR (up to 300 channels)
DFB-LD Analysis	SMSR, Peak wavelength, Peak level, Bandwidth
FP-LD Analysis	Mean wavelength, Spectral width (FWHM, RMS), Total power
LED Analysis	Peak wavelength, FWHM spectral width, Mean wavelength
EDFA Analysis	Gain, Noise Figure (NF) using interpolation/polarization methods
Spectral Width Analysis	RMS, FWHM (Envelope), Threshold methods
Trace Capacity	Three waveform traces (A, B, C) can be displayed and written
Built-in Marker Functions	Delta marker, Interval marker, Line markers

External Connectivity and Control

GPIB Interface	IEEE-488.2 compatible
Serial Interface	RS-232C (D-sub 9-pin)
Internal Storage Drive	3.5-inch Floppy Disk Drive (FDD), MS-DOS format
Built-in Printer	High-speed internal thermal printer

Environmental and Regulatory

Maximum Operating Humidity	80% RH or less (no condensation)
Warm-up Time	Approx. 1 hour (for specified accuracy)

Control & Programming

User Program Capacity	Up to 200 steps for custom automated measurements
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Display & Analysis

3D Display Mode	Supported (visualizes spectral changes over time)
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Measurement & Analysis

Pulse Light Measurement	Peak hold function included for measuring pulsed optical sources
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Performance

Level Repeatability	±0.05 dB (within 1 minute)
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Display

Wavelength Display Resolution	0.01 nm
Level Display Resolution	0.01 dB

TECHNOLOGY

Diffraction Grating Spectroscopy

APPLICATIONS

DWDM Network Testing & Fiber Optic 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.