

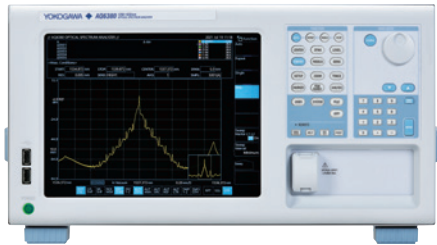
# The world's most trusted OSAs

## Optical Spectrum Analyzer Selection Guide



# Selection guide

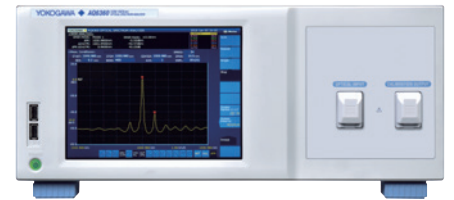
Yokogawa offers diffraction grating based optical spectrum analyzers with high-speed and high-performance that meets the measurement needs of a wide range of R&D and industrial manufacturing applications. An extensive product lineup covers a wide wavelength range from visible to mid-wavelength infrared (350 to 5500 nm). This document will help you choose the best model for your measurement needs.



AQ6375E, AQ6376E  
and AQ6380

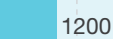





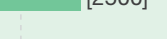




AQ6370D, AQ6373B,  
AQ6374 and AQ6377



AQ6360

## Specifications and features

Wavelength band / Feature / Model			Wavelength range (nm)	Wavelength resolution (nm)		Wavelength accuracy (nm)				
				Max.	Min.	VIS 0.6 μm	Optical comm.			Full range
							1.31 μm	1.55 μm	1.6 μm	
VIS	High resolution	<b>AQ6373B</b>	350  1200	10	0.01 (400 to 470 nm) 0.02	±0.05				±0.2
VIS Optical comm.	Wide band	<b>AQ6374</b>	350  1750	10	0.05	±0.05	±0.2	±0.05	±0.2	±0.2
Optical comm.	High performance	<b>AQ6370D</b>	600  1700	2	0.02		±0.1	±0.01	±0.02	±0.1
	Highest performance	<b>AQ6380</b>	1200  1650	2	0.005		±0.05	±0.005	±0.01	±0.05
	High speed & Space saving	<b>AQ6360</b>	1200  1650	2	0.1		±0.1	±0.02	±0.04	±0.1
SWIR	2 μm	<b>AQ6375E</b>	1200  2400 [1000]  [2500] <sup>*2</sup>	2	0.05		±0.5	±0.05	±0.1	±0.5
MWIR	3 μm	<b>AQ6376E</b>	1500  3400	2	0.1			±0.5	±0.5	±0.5
	5 μm	<b>AQ6377</b>	1900  5500	5	0.2					±0.5

\*1: Purge feature for th AQ6360 are available on request. \*2: The values in parentheses are for wavelength extended model.

# Applications

## Optical communications

- Emission spectrum evaluation of optical transceivers, LD chips, and LD modules
- OSNR measurement of WDM transmission signals
- Optical Amplifier testing
- Wavelength-dependent loss characterization of optical fiber



## VIS

- Characterization of light sources used in biomedical and consumer products
- Color analysis of visible LED



## SWIR MWIR

- Characterization of cascade lasers used in Laser Absorption Spectroscopy
- Characterization of broadband light such as optical frequency combs and supercontinuum light sources
- Spectral measurement of nonlinear lasers such as optical parametric oscillators



VIS: Visible, SWIR: Short-wavelength infrared, MWIR: Mid-wavelength infrared

Close-in dynamic range (dB)						Level sensitivity (dBm)				Applicable fiber			Purge feature	Higher-order diffracted light suppression
Resolution minimum		Resolution 0.02 nm		Resolution 0.1 nm		VIS ≤ 1 μm	Optical comm. 1.3-1.6 μm	SWIR ≤ 2.2 μm	SWIR/MWIR ≥ 2.2 μm	SM	GI	Large core		
60 (±0.5 nm)		60 (±0.5 nm)				-80 typ. (500 to 1000 nm) -60 typ. (400 to 500 nm)				●	●	●		●
60 (±1.0 nm)						-70 (400 to 900 nm)	-80			●	●	●	●	●
45 (±0.1 nm)	58 (±0.2 nm)	45 (±0.1 nm)	58 (±0.2 nm)	50 typ. (±0.2 nm)	67 typ. (±0.4 nm)	-60 (600 to 1000 nm)	-90			●	●	●		
45 (±0.05 nm)	60 (±0.1 nm)	55 (±0.1 nm)	65 (±0.2 nm)	55 typ. (±0.2 nm)	67 typ. (±0.4 nm)		-85			●			●	●
40 (±0.2 nm)	55 (±0.4 nm)			40 (±0.2 nm)	55 (±0.4 nm)		-80			●	●		*1	
45 (±0.4 nm)	55 (±0.8 nm)						-62	-67 (1500 to 1800 nm) -70 (1800 to 2200 nm)	-67 (2200 to 2400 nm)	●	●	●	●	●
45 (±1.0 nm)	55 (±2.0 nm)							-65 (1500 to 2200 nm)	-55 (2200 to 3200 nm)	●	●	●	●	●
50 typ. (±5.0 nm)								-40 typ. (1900 to 2200 nm)	-50 typ. (2200 to 2900 nm) -60 typ. (2900 to 4500 nm)	●	●	●	●	●

● : Available

# Related products

## AQ6150 Series Optical Wavelength Meters

The AQ6150B and AQ6151B Optical Wavelength Meters are fast, accurate and cost-effective instruments for carrying out measurements in the telecommunications wavelength range from 900 to 1700 nm.



## AQ2200 Series Multi-Application Test System (MATS)

The AQ2200 series is an ideal test platform for measuring and evaluating a variety of optical devices and transmission systems.

Various measurement modules can be mounted in any combination on a single frame.

Frame and module lineup:

Products	Descriptions
Frame controllers	3 slots type, 9 slots type
Light source modules	High output level stability light sources, Grid TLS
Sensor modules	High power type, Large-diameter sensor head, dual sensor type
Optical attenuator modules	Standard type, with monitor output, with built-in monitor power meter
Optical switch modules	1×2, 2×2, 1×4, 1×8, and 1×16 channels
Modules for Optical Transceiver	—



\*For more information about the features and specifications of the each product, please refer to the brochure (AQ6380-01EN, AQ6370SR-20EN, AQ6360-01EN).

### Yokogawa's Approach to Preserving the Global Environment

- Yokogawa's electrical products are developed and produced in facilities that have received ISO14001 approval.
- In order to protect the global environment, Yokogawa's electrical products are designed in accordance with Yokogawa's Environmentally Friendly Product Design Guidelines and Product Design Assessment Criteria.

# YOKOGAWA

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