

6362 Series

Optical Spectrum Analyzer

6362C/D/E

(350nm-1200nm, 600 nm-1700 nm, 1200nm-2500nm)



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Product Overview

6362 series Optical Spectrum Analyzer is a high-resolution, large-dynamic, high-speed, high-performance optical spectrum analyzer. The wavelength cover from 300nm to 2500nm. They are perfect for testing optical systems, such as DWDM and optical amplifiers; It can also be used for optical active and passive device testing, such as LED, FP-LD, DFB-LD, optical transceivers and optical fibers and fiber gratings and other optical passive devices. It can be widely used in the R&D, production in communication, biomedicine, material, health care areas.

Main Features

- Excellent minimum spectrum resolution
- 350 nm to 2500 nm spectrum scanning range
- Very large dynamic range
- Small sensing sensitivity
- Support spatial light input
- Built-in light source output configuration
- Powerful spectrum data analysis function for multiple applications
- 12.1-inch touch screen

Excellent minimum spectrum resolution

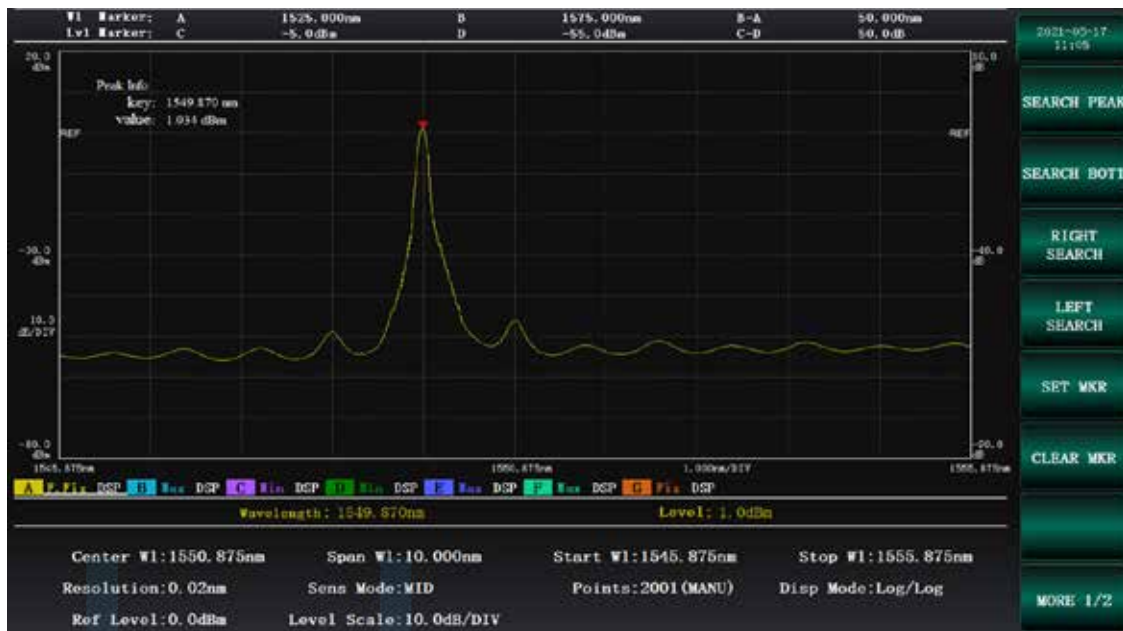
6362D optical spectrum analyzer supports different resolution settings with flexible switching methods. The minimum spectrum resolution is better than 20 pm. 6362C optical spectrum analyzer has a minimum spectrum resolution of 10 pm. And 6362E optical spectrum analyzer as a minimum spectrum resolution of 50pm.



Different Spectrum Resolution

Peak Search

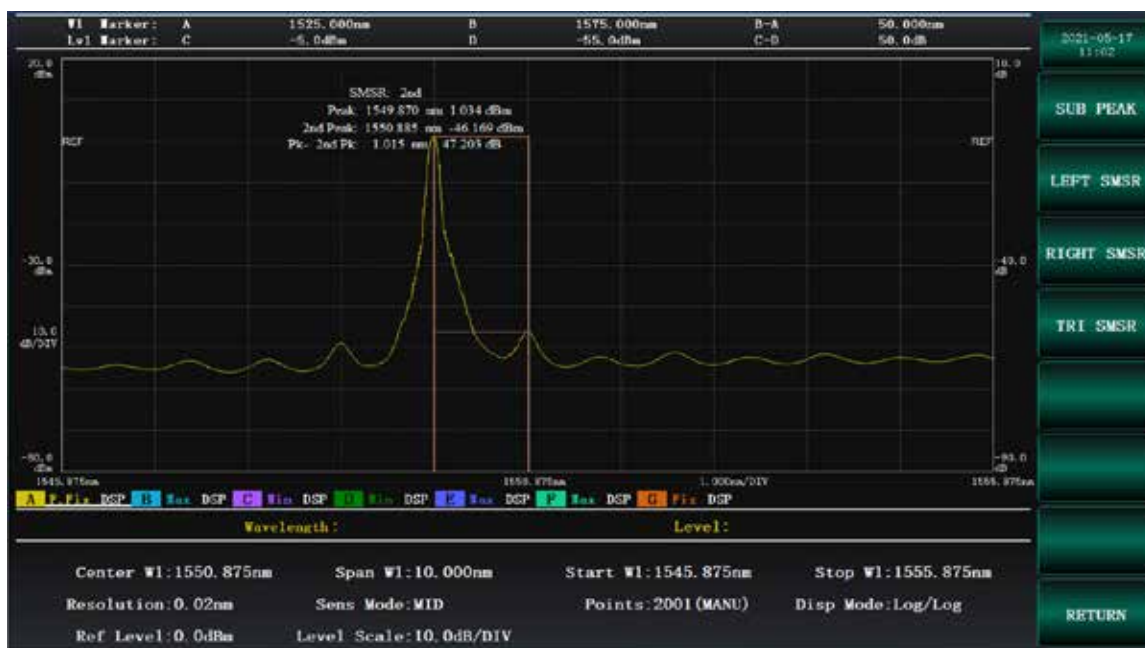
6362 series optical spectrum analyzer adopts the spectral adaptive peak retrieval algorithm. The peak retrieval accuracy is high. The adaptability and robustness are strong, and the calculation speed is very fast.



Spectrum Peak Searching

Single Longitudinal Mode Laser Spectrum Analysis

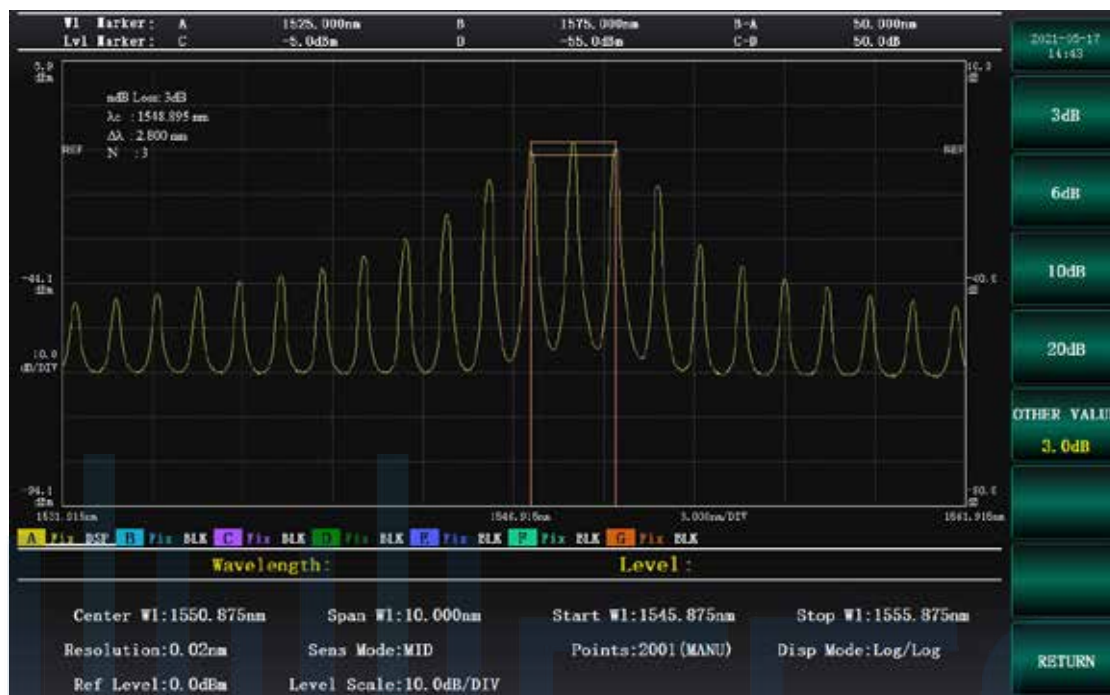
6362 series optical spectrum analyzer has multi-scenario spectrum analysis functions. For single longitudinal mode laser light sources such as DFB-LD, the instrument provides two analysis methods of threshold analysis and side mode suppression ratio analysis. These methods can effectively and accurately evaluate the center wavelength, spectrum bandwidth and side mode suppression ratio of the single longitudinal mode light source to be measured.



DFB-LD suppression ratio analysis

Multi-longitudinal mode laser spectroscopy

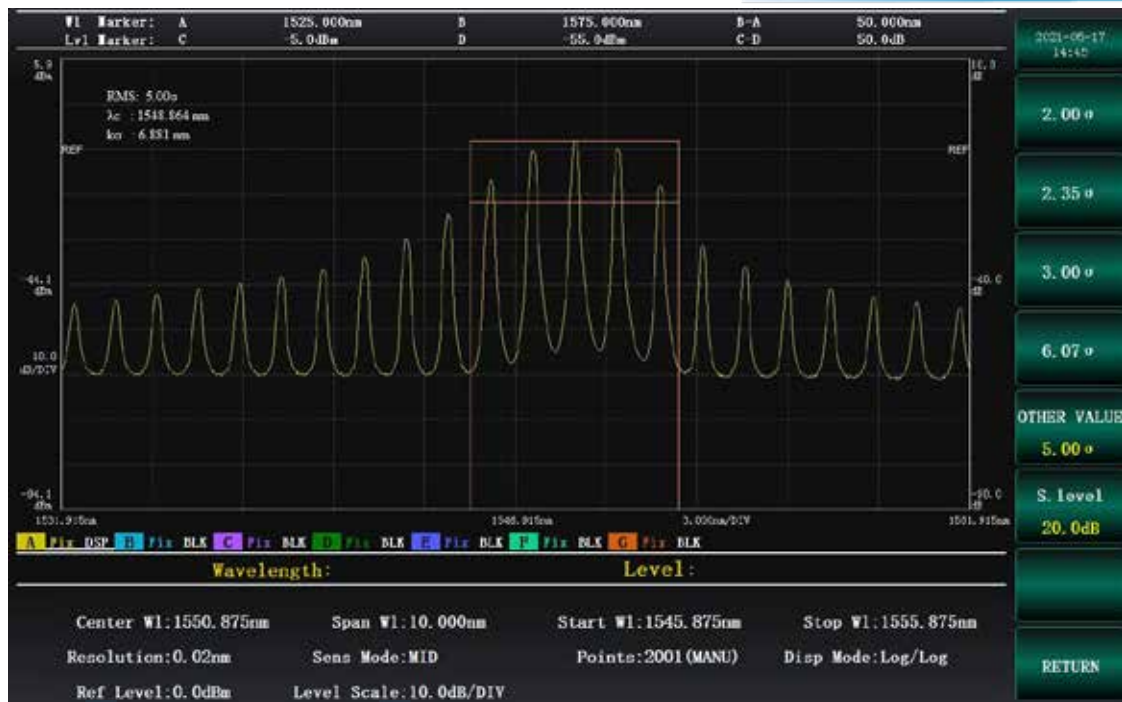
For multi-longitudinal mode laser sources such as FP-LD, the 6362D optical spectrum analyzer provides three analysis methods: ndB loss analysis, envelope analysis and root mean square analysis. These methods can comprehensively evaluate the center wavelength and bandwidth of the multi-longitudinal mode light source to be measured.



Center wavelength and bandwidth test based on ndB Loss Method



Center wavelength and bandwidth test based on envelope analysis

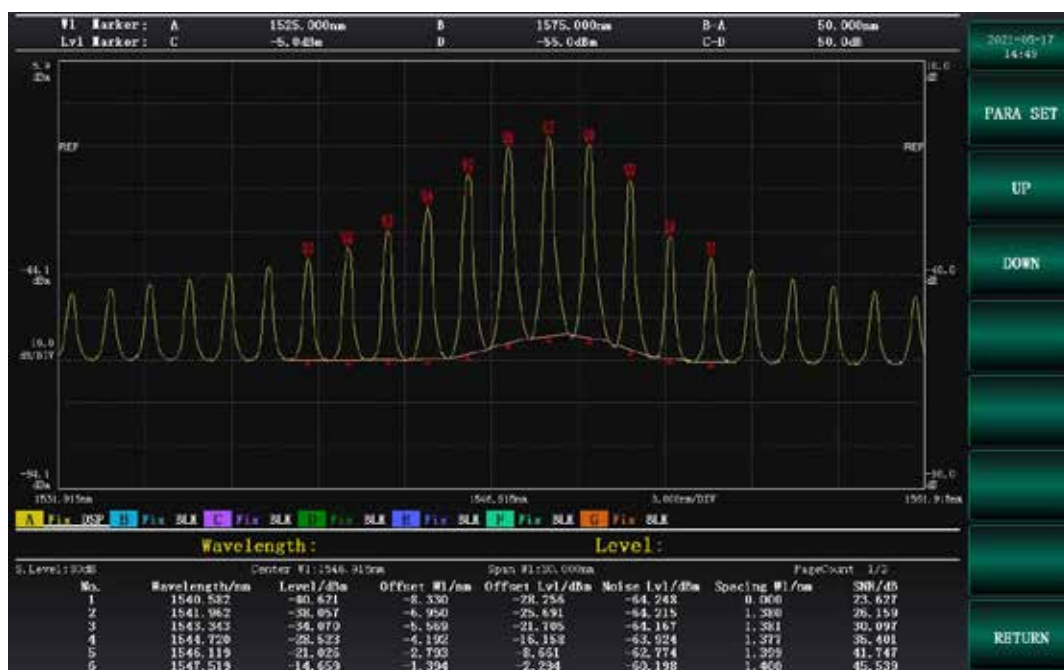


Center wavelength and bandwidth test based on root mean square analysis

Various optoelectronic device application analysis functions

The 6362 series spectrum analyzer can perform one-key test and analysis of various types of lasers such as LED, FP-LD, DFB-LD, and LD modules. It can realize batch processing for all test items.

In addition to semiconductor laser light source spectral measurement applications, the instrument also integrates optical fiber polarization mode dispersion measurement applications, wavelength division multiplexing applications, fiber amplifier applications, wavelength division multiplexing filter applications, wavelength division multiplexing fiber amplifier applications and other spectrum application functions. The figure below is a typical WDM application analysis.



Typical Applications

Spectrum parameter test and analysis for optical ICs, FP-LD, DFB-LD, optical transceiver modules, optoelectronic systems and so on.



Technical Specifications

6362D Optical Spectrum Analyzer

Items		Specifications
Wavelength Range		600~1700nm
Scan Span		0.2 nm to 1100 nm (full span), 0 nm
Wavelength Accuracy		±0.02 nm (1520nm to 1620nm) ±0.04 nm (1450nm to 1520nm) ±0.10 nm (full span)
Wavelength Linearity		±0.01nm (1520~1580nm)
Wavelength Repeatability		±0.005nm (2 minutes)
Wavelength Resolution Setting		0.02, 0.05, 0.1, 0.2, 0.5, 1, 2 nm
Minimum Sampling Resolution		0.001 nm
Sampling Points		101 to 50001, AUTO
Power Sensitivity Settings		NORMAL, MID, HIGH1, HIGH2 and HIGH3
Power Sensitivity		-90 dBm (1300 to 1620nm) -85 dBm (1000 to 1300nm) -60 dBm (600 to 1000nm) (Sensitivity: HIGH3)
maximum input power		+20 dBm (per channel, full wavelength band)
Maximum safe input power		+25 dBm (Total input power)
Power accuracy		±0.4 dB (1310/1550nm, input power: -20dBm, sensitivity: MID)
Power Linearity		±0.05 dB (input power: -50dBm to +10dBm)
Power flatness		±0.1dB (1520nm to 1580nm) ±0.2dB (1450nm to 1520nm, 1580nm to 1620nm)
Polarization Dependence		±0.05 dB (1550nm), ±0.08 dB (1310nm)
Dynamic Range	Resolution: 0.02 nm	63dB (peak ±0.2nm, typical 66dB) 46dB (peak ±0.1nm, typical 50dB)
	Resolution: 0.05 nm	73dB (peak ±1.0nm, typical 76dB) 70dB (peak ±0.4nm, typical 73dB) 63dB (peak ±0.2nm, typical 66dB)
	Resolution: 0.1 nm	67dB (peak ±0.4nm, Typical 70dB) 57dB (peak ±0.2nm, Typical 60dB)
Stray Light Suppression Rate		76 dB
Optical Return Loss		35dB (using APC connectors)
Applicable Fiber Type		SM (9.5/125um), GI (50/125um, 62.5 um, 125um), Large core diameter fiber (maximum 200um)
Optical Output Options		Standard C-band DFB calibration light source DFB/FP light source (standard 1550nm, other wavelengths are optional) SLED light source (band range optional), SLED+C2H2 light source Other light source type accessories can be customized
Displaying		12.1 inch touch screen
Storage		128 GB
Instrument Interface		USB/Ethernet/GPIB/HDMI/DP
Working Conditions		Working Temperature: 0°C to 40°C; Humidity: ≤ 80% Performance guarantee temperature: 18°C to 28°C
Dimensions		Width × Height × Depth = 426mm × 221mm × 450mm
Weight		19 kg
Power Supply		100~240 VAC, 50/60 Hz
Maximum Power Consumption		100 W

Remarks: Wavelength calibration and optical axis alignment can be performed with an external light source.

6362C Optical Spectrum Analyzer

Items	Specifications
Wavelength Range	350nm ~ 1200nm
Scan Span	0.5nm to 1850 nm (full span), 0 nm
Wavelength Accuracy	±0.05nm (633nm) ±0.2nm (400nm~1100nm) (After calibration using 633nm He-Ne Laser source)
Wavelength Linearity	±0.01nm (1520~1580nm)
Wavelength Repeatability	±0.005nm (2 minutes)
Wavelength Resolution Setting	0.02, 0.05, 0.1, 0.2, 0.5, 1, 2, 5, 10nm (Full scope), 0.01nm(400~470nm)
Minimum Sampling Resolution	0.001nm
Sampling Points	101~50001 and AUTO
Power Sensitivity Settings	NORMAL、MID、HIGH1、HIGH2和HIGH3
Power Sensitivity	-80dBm (500~1000nm) -60dBm(400~500nm, 1000~1100nm) (Typical Resolution: ≥0.2nm, Average: 10, Sensitivity: HIGH3)
Maximum safe input power	+20 dBm (550~1100nm), +10 dBm (400~550nm)(Total Input Power)
Power accuracy	±1.0dB (850nm, Input power: -20dBm, Resolution: ≥0.2nm, Sensitivity: MID, HIGH1-3, SMF[MFD 5 μm@850nm, NA0.14]
Power Linearity	±0.2dB(Input power: -40~0dBm, Sensitivity: HIGH1-3)
Dynamic Range	60dB(Peak ±0.5nm, Resolution 0.02nm,633nm)
Optical Port	FC Type (Optical input and Calibration output)
Scan Time	NORMAL: 1s, MID: 2s, HIGH1: 5s, HIGH2: 20s, HIGH3: 75s
Applicable Fiber Type	SM (9.5/125um), GI (50/125um, 62.5 um, 125um), Large core diameter fiber (maximum 800um)
Build-in Laser Source	Optical axis alignment laser source(Optical axis alignment, no need of wavelength reference laser source)
Displaying	12.1 inch touch screen
Storage	128GB
Instrument Interface	USB/Ethernet/GPIB/DP
Working Conditions	Working Temperature: 0°C to 40°C; Humidity: ≤80% Performance guarantee temperature: 18°C to 28°C
Dimensions	Width × Height × Depth = 426mm × 221mm × 450mm
Weight	19kg
Power Supply	100~240VAC, 50/60Hz
Maximum Power Consumption	100W

6362E Optical Spectrum Analyzer

Items	Specifications	
Model	6362E Optical Spectrum Analyzer	6362EA Optical Spectrum Analyzer
Wavelength Range	1200~2400nm	1000~2500nm
Scan Span	0.5~1200nm (Full Span), 0nm	0.5~1500nm (Full Span), 0nm
Wavelength Accuracy	$\pm 0.05\text{nm}$ (1520-1580nm); $\pm 0.10\text{nm}$ (1580-1620nm); $\pm 0.50\text{nm}$ (Full Span)	
Wavelength Linearity	$\pm 0.01\text{nm}$ (1520~1580nm)	
Wavelength Repeatability	$\pm 0.015\text{nm}$ (1 minute)	
Wavelength Resolution Setting	0.05、0.1、0.2、0.5、1、2nm	
Minimum Sampling Resolution	0.002nm	
Sampling Points	101~50001 and AUTO	
Power Sensitivity Settings	NORMAL、MID、HIGH1、HIGH2、HIGH3	
Power Sensitivity	+65dBm(1800-2200nm) -52dBm(1500-1800nm, 2200-2400nm) -50dBm(1300-1500nm) (Sensitivity: HIGH3)	+65dBm(1800-2200nm) -52dBm(1500-1800nm, 2200-2500nm) -50dBm(1300-1500nm) (Sensitivity: HIGH3)
Maximum safe input power	+20 dBm (550~1100nm) (Each channel, full range)	
Power accuracy	$\pm 1.0\text{dB}$ (1550nm, Input Power: -20dBm, Sensitivity: MID, HIGH1-3)	
Power Linearity	$\pm 0.05\text{dB}$ (Input power: -30~+10dBm, Sensitivity: HIGH1-3)	
Polarization Dependence	$\pm 0.2\text{dB}$ (1550nm)	
Dynamic Range	40dB (Peak: $\pm 0.4\text{nm}$, Resolutio: 0.025nm) 50dB (Peak: $\pm 0.8\text{nm}$, Resolutio: 0.05nm) (1523nm, sensitivity: HIGH1-3)	
Aplicable Fiber Type	SM (9.5/125um), MM (GI 50/125um, GI 62.5 um, 125um), Large core diameter fiber (maximum 200um)	
Calibration Laser Source	Standard DFB calbiratioin laser source.	
Optical Port	FC Type (Optical input and Calibration output)	
Displaying	12.1 inch touch screen	
Storage	128GB	
Instrument Interface	USB/Ethernet/GPIB/DP	
Working Conditions	Working Temperature: 0℃ to 40℃; Humidity: $\leq 80\%$. Performance guarantee temperature: 18℃ to 28℃	
Dimensions	Width × Height × Depth = 426mm × 221mm × 450mm	
Weight	19 kg	
Power Supply	100~240VAC, 50\60Hz	
Maximum Power Consumption	100W	

Ordering Information

● Main Unit:

6362C	Optical Spectrum Analyzer	350nm – 1200nm
6362D	Optical Spectrum Analyzer	600nm – 1700nm
6362E/EA	Optical Spectrum Analyzer	1200nm – 2400nm/ 1000nm – 2500nm

Standard Configuration:

No.	Name	Remarks
1	Power Supply Cable	Standard power cable for power supply
2	User Manual	
3	Quality Certificate	

● Options:

No.	Name	Remarks
6362D-H03	Build-in Source	Type: SLED + C2H2 absorption tank for higher calibration; Power: $\geq -10\text{dBm}$; Center Wavelength: 1550nm. This source can also be used to calibrate the 6362D OSA. Only for 6362D
6362C-H04 6362D-H04 6362E-H04	Interface Option	GPIB programming interface, Trigger input and trigger output
6362C-H05 6362D-H05 6362E-H05	English Option	English version