

FINISAR®

Product Features

- ▶ Full C-band coverage
- ▶ Resolution bandwidth: 1.75 GHz
- ▶ Fast: >1 updates / second
- ▶ Battery operated
- ▶ Remote Control via Ethernet
- ▶ No moving parts

Applications

- ▶ System Turn up and Trouble Shooting
- ▶ DWDM testing
- ▶ Channel power and OSNR testing
- ▶ Channel equalizing
- ▶ Lab, Network and Data Center

WaveAnalyzer 200A

Portable Optical Spectrum Analyzer

Overview

The WaveAnalyzer 200A is a lightweight portable Optical Spectrum Analyzer covering the C-band of optical communications. It has been designed for flexible use in the laboratory and also during installation, turn up and trouble shooting of optical networks in telecom and datacenter applications. Automatic ranging allows signals from +20 dBm to -50 dBm to be characterized without adjusting settings or adding attenuators. The instrument is controlled via touch-screen using Finisar's WaveAnalyzer Graphical User Interface. A protective rubber bumper comes along with the instrument allowing operation of the unit in rugged environments.

The WaveAnalyzer 200A is based on a coherent measurement principle which allows operation without any moving part inside the instrument.

In-built Signal Analysis

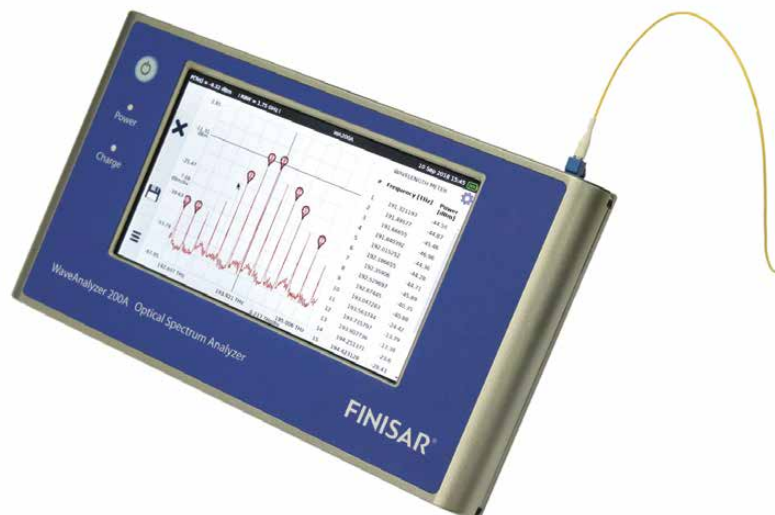
The WaveAnalyzer 200A provides full channel analysis of 50- and 100 GHz channels, as well as supporting proposed non-standard channel spacings such as 37.5 GHz for future high-capacity 400 Gbit/sec interconnects. Reporting includes Channel Power, Center Frequency and Optical Signal to Noise Ratio (OSNR) measurements.

Control

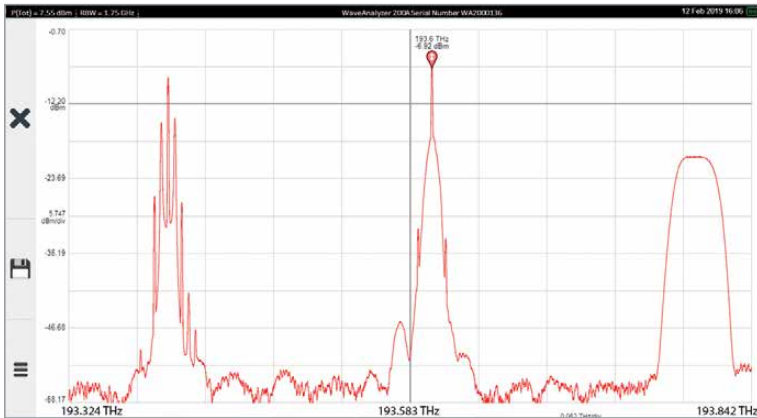
The WA 200A integrates with Finisar's well-known WaveAnalyzer PC software. The WA 200A can be connected through an Ethernet port to LANs and allows signal monitoring and data gathering or simply remotely controlling via a RESTful API. The USB port allows time-stamped data to be saved for later analysis when no network is available.

Measurement

The screenshots on the following page show measurements taken with the WaveAnalyzer 200A on DWDM channels across the C-band.

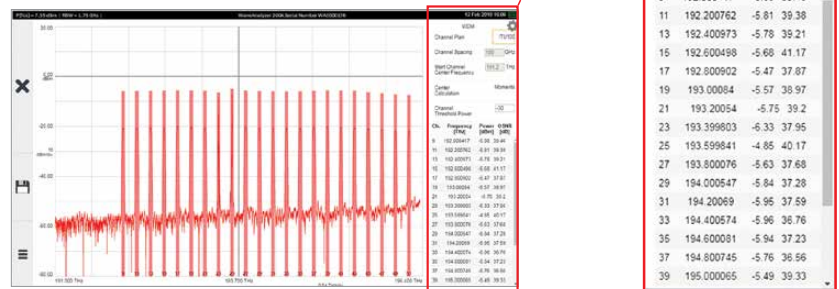


WaveAnalyzer 200A: Portable Optical Spectrum Analyzer



Modulation sidebands on signals modulated with 10 Gb/s can be identified on the channel in the center and on the left; the channel on the right has been shaped out of an ASE signal

The DWDM Analysis provides precise information on the ITU channel number, the center frequency, power level and the OSNR



Specifications (preliminary)

Spectral	Frequency Range	191.1 to 196.2 THz (1527.8 to 1568.8 nm)	
	Spectral Sampling Resolution	312.5 MHz	
	Resolution Bandwidth (FWHM)	1.75 GHz (15 pm)	
	Absolute Frequency Accuracy (1)	+/- 1 GHz	
	Frequency Repeatability (sweep to sweep)	200 MHz	
	Measurement Update Rate Full C-band scan	>1 updates / s	
Power	Max Total Power	27 dBm	
	Max Power Density	+11.5 dBm / 1.75 GHz	
	Noise floor	-58.5 dBm / 1.75 GHz	
	Relative Power Accuracy	+/-0.5 dB (2)	
Mechanical, Electrical and Environmental	Operating Temperature	5°C to 35°C	
	Operating Humidity	10% to 85%	
	Communications Interface	Ethernet, USB 2.0 (master)	
	Power Consumption (3)	100 V - 240 V; 40 VA	
	Connector Type	FC/APC, LC/PC	
	Size	Instrument only instrument including protective bumper	255 mm x 140 mm x 30 mm 273 mm x 168 mm x 50 mm
	Weight	Instrument only instrument including protective bumper	1.25 kg 1.5 kg

- Notes:**
- Valid within recommended recalibration period
 - Guaranteed when using an ASE source
 - Condition: Battery is charging and instrument is operated

Part Number	Description
WA-00200A-C-P-1-AA-00	WaveAnalyzer 200A Portable Optical Spectrum Analyzer, C-Band, FC-APC Connector
WA-00200A-C-P-4-AA-00	WaveAnalyzer 200A Portable Optical Spectrum Analyzer, C-Band, LC-PC Connector



Finisar is Now
Part of II-VI

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