

# AE8500 Optical Spectrum Analyzer

## Key Benefits

- Measure the full range of communication wavelengths and spectrum channels
- Test spectral properties of various types of laser sources
- Test transmission characteristics of optical devices
- Diagnose and monitor key parameters of DWDM signals to check system stability
- View all DWDM channel characteristics at 50GHz/100GHz intervals

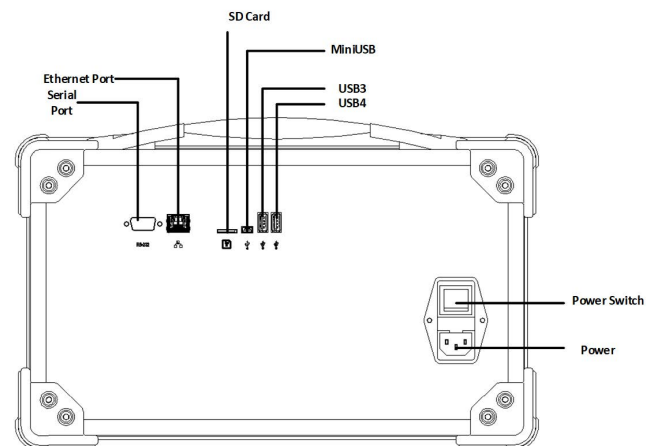
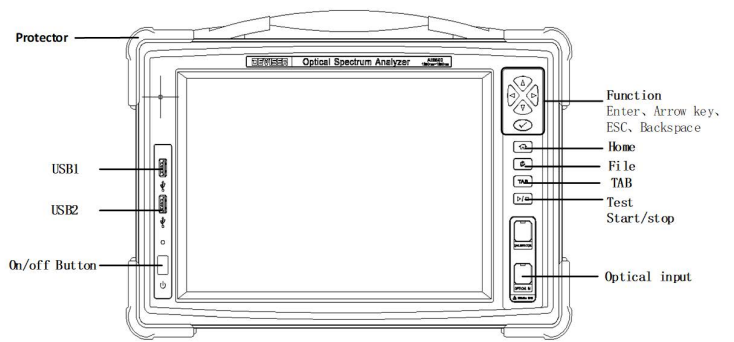


## Overview

Brought to you by Deviser Instruments Inc, the AE8500 is a high-precision, high-resolution spectrometer with a wavelength range of 1250 ~ 1650nm. Users can test optical signals with excellent accuracy, and the 12.1" LCD touchscreen and concise UI design make the AE8500 easy to master. It also provides customizable CWDM/DWDM testing, in-band OSNR, light source, EDFA, fiber probe, auto testing, and more. The AE8500 meets the optical spectrum analysis requirements for several years to come - at superior cost-performance.

## Main Features

- Measures optical power input of +20dBm ~ -70dBm, over a wavelength range of 1250 ~ 1650nm
- OSNR dynamic range exceeds 35dB
- Up to 60nm resolution bandwidth
- 12.1" touchscreen optimized for ease of use
- Fast scan displays both full wavelength range and detailed spectrum view
- Good stability and consistency
- Complete user data interface supports LAN connection, USB, SD card, GPIB, and more



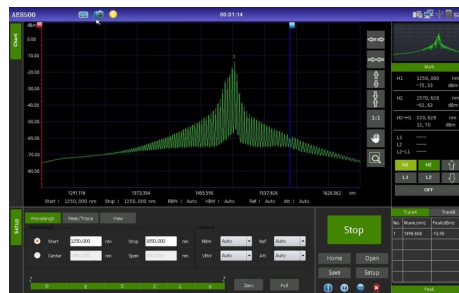
## Spectrum Analysis

The AE8500's main measurement mode shows the spectrum trace in split-screen format. View detailed peaks and valleys in the central window, with the overall waveform in the top-right for the perfect balance of broad and narrow analysis.



## Additional Tests

The AE8500 offers a broad suite of optical measurement modes, granting technicians a complete picture of the test signal. These include EDFA (erbium-doped fiber amplifier), FP-LD (Fabry-Perot laser diode), and DFB (distributed-feedback laser diode).



## Specifications

OSA Technical Parameters	
Wavelength range	1250nm ~ 1650nm
Wavelength uncertainty	± 0.05nm
Resolution bandwidth	0.06nm
Wavelength repeatability	± 0.01nm
PDL @ 1550nm	± 0.1 dB
Power uncertainty	± 0.5nm
Power repeatability	± 0.1 nm
Power input range	-70 ~ +20dBm; max power 23dBm
OSNR / ORL	>35dB / >45dB (APC)
Dynamic range	>-36dB @ ± 0.2nm; >-45dB @ ± 0.4nm
Data Storage & Display	
Display	12.1" 1280x800 TFT LCD touchscreen
Storage & Interface	2x Type-A USB 2.0 ports USB power supply, DC5V ± 0.05V @ 500mA 1x RJ45 LAN port, 10M/100M 6GB hard drive, add'l 16GB SD card included
AC adapter	100-240V, 50 ~ 60 Hz

Test Modes	
Language support	English, Chinese
File format support	.osa, .txt, .bmp, .pdf
Web browser	√
Universal spectrum test	√
Custom function test	√
Test Connectivity	
Optical port	PC/FC (standard); APC/SC (optional)
Adapters	FC (standard); SC, ST, LC (optional)
Fiber	9/125 μm SM fiber
Miscellaneous	
Sweep	≤1.2s (@ normal mode, sweep width 400nm)
Operating temperature	0°C ~ +50°C
Storage temperature	-10°C ~ +70°C
Relative humidity	0 ~ 95%, no condensation
Dimensions (LxWxH)	15.5" x 9.1" x 10.4" (394mm x 230mm x 264mm)

©2018 Deviser Instruments Incorporated. 780 Montague Expressway, Suite 701, San Jose, CA 95131. All rights reserved. Specifications subject to change without notice. All product and company names are trademarks of their respective corporations. Deviser Instruments manufacturing facilities are ISO 9001 certified. Do not reproduce, redistribute, or repost without written permission from Deviser Instruments. AE8500 180313