

AE8200 Series Optical Wavelength Meter

Key Features

- Wavelength range: 900 to 1700 nm
- Wavelength accuracy: ± 0.2 ppm
- Simultaneously measurement of up to 1024 wavelengths
- Built-in WDM and FP analysis functions
- Multiple data storage and interface: Ethernet, USB, GP-IB, etc.
- 7-inch capacitive touch touchscreen enhances operational efficiency
- Customizable automated test solutions with flexible system integration



Applications

Laser/optical Transceiver

- High-precision tuning and verification of tunable lasers
- Signal wavelength measurement for optical transceiver

WDM Transmission Systems

- Simultaneous measurement of multi-channel and narrow spacing WDM systems
- High-precision adjustment and inspection of laser sources

Calibration of test systems

- Calibration of optical spectrum analyzers
- Calibration of DFB lasers for optical amplifier test systems
- Calibration of tunable lasers for passive component test systems

Overview

Brought to you by Deviser photoelectric, the AE8200 Series Optical Wavelength Meter is a new benchmark that delivers high-precision wavelength measurements from 900 to 1700 nm with an accuracy of ± 0.2 ppm. Integrating Michelson interferometry and FFT-based signal processing technology, it precisely analyzes both single-wavelength and multi-wavelength signals (such as DWDM systems and FP laser multi-channel optical signals).

Designed for superior stability, reliability, and high-speed operation, the AE8200 features an open data interface to ensure seamless integration with automated test systems, effectively overcoming complex wavelength measurement challenges.

Model Guide

The AE8200 Series Optical Wavelength Meters are available in two configurations: the AE8202 Single-Wavelength Model and the AE8211 Multi-Wavelength Model. Select the appropriate model based on your specific wavelength range and detection channels.

Model		Wavelength range	Accuracy	Maximum number of wavelengths	Application
Single-wavelength type	AE8202A	1270-1650nm	± 0.2 ppm	1	DFP-LDs, tunable lasers, optical transceivers, etc
	AE8202B	1200-1700nm			
	AE8202C	900-1700nm			
Multi-wavelength type	AE8211A	1270-1650nm		1024	DFP-LDs, tunable lasers, optical transceivers, FP-LDs, WDM transmission systems, etc
	AE8211B	1200-1700nm			
	AE8211C	900-1700nm			

Specifications

Applicable optical fiber	SM
Wavelength range	1270 to 1650 nm 1200 to 1700 nm 900 to 1700 nm
Wavelength accuracy	±0.2 ppm (1200 to 1700 nm, ±0.3 pm at 1550 nm, update rate: Normal), ±0.5 ppm (1200 to 1700 nm, ±0.8 pm at 1550 nm, update rate: Fast), ±1.5 ppm (900 to 1200 nm, ±1.4 pm at 900 nm)
Minimum resolvable separation	5 GHz (40 pm at 1550 nm, update rate: Normal) 10 GHz (80 pm at 1550 nm, update rate: Fast)
Display resolution	0.1 pm
Power accuracy	±0.5 dB (1550 nm, -10 dBm) (excluding polarization effects)
Power linearity	±0.3 dB (1550 nm, -30 dBm) (excluding polarization effects)
Power polarization dependency	±0.5 dB (1550 nm)
Power display resolution	0.01 dB
Maximum number of wavelengths	1024
Minimum input power	-40 dBm (1200 to 1600 nm), -30 dBm (other wavelengths)
Maximum input power	+10 dBm (total input power)
Safe maximum input power	+18 dBm (total input power)
Measurement time	0.2 s or less (update rate: Fast), 0.3 s or less (update rate: Normal)
Return Loss	35 dB
Optical connector	FC/PC or SC/PC
Warm-up time	60 minutes
Display	7-inch TFT touchscreen (Resolution: 1280 × 800)
Data storage	120GB hard drive, available storage space >40GB
Interfaces	USB 2.0 × 3, USB 3.0, HDMI, VGA, GP-IB, Ethernet
Environmental conditions	Performance guarantee temperature: +10 to +30 °C, operating temperature: +5 to +35 °C, storage temperature: -10 to +50 °C, humidity: 20 to 85%RH (no condensation)
Dimensions	Approx. 440 (W) × 133 (H) × 480 (D) mm
Weight	Approx. 15 kg