

Optical Spectrum Analyzer AE8600D

Key Benefits

- Single mode and multi-mode wavelength range from 600nm to 1700nm.
- Wide range of power measurement from +23dBm to -90dBm and wide dynamic range up to 75dB typical
- Outstanding wavelength & power measurement accuracy with wavelength resolution up to 0.02nm and built-in calibration source(Optional)
- WDM, Laser, and EDFA test modes
- 10.1" 1280x800 TFT touchscreen LCD
- Multiple data storage and interface – LAN (RJ-45), USB, RS232, GP-IB(Optional) ... etc.
- Customizable auto-test scenario



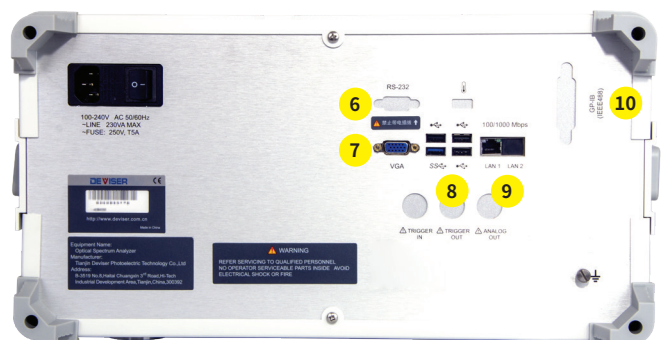
Overview

Brought to you by Deviser Instruments Inc, the AE8600D is a high-precision diffraction-grating, high-resolution optical spectrometer with wavelength range of 600nm to 1700nm. The 10.1" LCD touchscreen and concise graphical user interface of AE8600D offer the easiest way to handle optical spectrum analysis.

AE8600D provides a wide selection of test methodology, including laser spectrum scans (DPB, FP), WDM system testing, EDFA system testing, transmittance and drift testing, which are essential for in-field and factory applications. The AE8600D offers exceptional stability and reliability, high-speed spectral sweeping, and multiple ways to export and analyze measurement data. It's the ideal instrument for fast and precise optical spectral testing to satisfy long-term investment with the best cost performance value.

A wealth of functions and connection interfaces

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|--|----------------|----------|--------|---------------------|
| 1. 10.1 inch TFT LCD touchscreen | 3. Rotary knob | 5. USB | 7. VGA | 9. Ethernet |
| 2. Optical Input(Left)/Calibration Output(Right) | 4. USER button | 6. RS232 | 8. USB | 10. GB-IB(Optional) |



Specifications

Model no.	AE8600D-01	AE8600D-11	AE8600D-22
Optical Spectrum Measurement Specifications			
Applicable fiber	SM(9.5/125μm), MMF(50/125μm, 62.5/125μm), Large core: up to 400μm		
Wavelength range ¹	600 to 1700nm		
Wavelength resolution bandwidth	0.02 to 2nm		
Wavelength resolution setting ^{1,2}	0.02nm, 0.05nm, 0.1nm, 0.2nm, 0.5nm, 1nm, 2nm		
Wavelength accuracy ^{1,2,5}	1520 to 1620nm ±0.015nm; 1450 to 1520nm ±0.025nm; entire wavelength range ±0.08nm	1520 to 1620nm ±0.01nm 1450 to 1520nm ±0.02nm entire wavelength range ±0.08nm	1520 to 1620nm ±0.01nm 1450 to 1520nm ±0.02nm entire wavelength range ±0.06nm
Wavelength repeatability ^{1,2}	±0.008nm (1 min.)		
Wavelength linearity ^{1,2,5}	±0.01nm (1520 to 1580nm) ±0.02nm (1450 to 1520nm, 1580 to 1620nm)		
Min. sampling resolution ¹	0.001nm		
Optical Power Measurement Specifications			
Level sensitivity ^{2,3,4,7}	-90dBm(1300 to 1620nm, Resolution ≥0.05nm, Sensitivity: HIGH3) -85dbm(1000 to 1300nm, Resolution ≥0.05nm, Sensitivity: HIGH3) -55dBm(600 to 1000nm, Resolution ≥0.05nm, Sensitivity: HIGH3)		
Maximum input power ^{2,3}	+23dBm(Per channel, full range)		
Level accuracy ^{2,3,4,6}	±0.3dB(1310/1550nm, Input level: -20dBm)		
Level linearity ^{2,3}	±0.08dB(Input level: -50 to +10dBm, sensitivity: HIGH1/HIGH2/HIGH3)		
Wavelength sampling points	101 to 50001, AUTO		
Optical return loss ¹¹	>35dB (with APC connector)		
Polarization dependence ^{2,3,6}	±0.05dB(@1550nm)		
Dynamic range ^{1,2,8}	Peak ±0.1nm 45dB(Resolution: 0.02nm) Peak ±0.4nm 70dB(Resolution: 0.05nm) Peak ±1.0nm 75dB(Resolution: 0.05nm)	Peak ±0.1nm 45dB(Resolution: 0.02nm) Peak ±0.4nm 70dB(Resolution: 0.05nm) Peak ±1.0nm 78dB(Resolution: 0.05nm)	Peak ±0.1nm 45dB(Resolution: 0.02nm) Peak ±0.4nm 70dB(Resolution: 0.05nm) Peak ±1.0nm 80dB(Resolution: 0.05nm)
Level sensitivity setting	NORM_HOLD, NORM_AUTO, NORMAL, MID, HIGH1, HIGH2, HIGH3		
Stray-light suppression ratio ^{7,10}	73dB	75dB	
Wavelength reference source	Option	Standard	
Sweep time ^{1,7,9}	0.3s(Sensitivity: MID, Span:30nm, Resolution:0.1nm, Sampling:501,2x)	0.25s(Sensitivity: MID, Span:30nm, Resolution:0.1nm, Sampling:501,2x)	0.2s(Sensitivity: MID, Span:30nm, Resolution:0.1nm, Sampling:501,2x)
Warm-up time	Minimum 1 hour		
General Specificatons			
Display	10.1 inch TFT LCD touchscreen (Resolution: 1280×800)		
Interface	USB 2.0 × 3, USB 3.0, VGA		
	RJ45 LAN port (10M/100M/1000M), RS232-DB9		
GP-IB	Option	Standard	
Data storage	Internal storage: 128GB hard-drive File types: CSV, Binary, BMP		
Operating temperature	+5 to +35°C		
Storage temperature	-10 to +50°C		
Power supply	AC	100-240V 1.7A 50~60Hz	
Dimensions	427 x 221 x 448 (mm)		
Weight	17kg		
Performance quadrate temperature	+18 ~ +28°C		

1. Horizontal axis scale: In wavelength display mode.

2. 9.5/125μm single mode fiber (PC polishing), after warm-up of 1 hours, after alignment with a built-in wavelength reference light source or single longitudinal mode laser (wavelength: 1520 to 1560nm, wavelength stability: ±0.01nm or less).

3. Vertical scale: absolute value level display mode, Resolution setting: 0.05nm or more, Resolution correction: OFF.

4. When using 9.5/125μm single mode fiber.

5. After wavelength calibration using a built-in wavelength reference light source or single longitudinal mode laser.

6. With the resolution setting of 0.05nm, at ambient temperature of 23 ± 3°C.

7. High dynamic mode: OFF, Pulse light measurement mode: OFF, Resolution correction: OFF.

8. 1523nm, High dynamic mode: SWITCH, Resolution correction: OFF.

9. Span 100nm or less, Wavelength sampling points: 1001, Averaging times: 1.

10. When applying a He-Ne laser (1523nm), Resolution: 0.1nm, 1520nm to 1620nm (excluding Peak ± 2nm).

11. When using the signal mode fiber with our standard Angled PC connector, it is 15dB(Typ.) when using the PC connector.