

Fiber Analyzer

Product Description

This fiber analysis system can provide high-performance spectral attenuation and cutoff wavelength measurement, as well as measure fiber geometry. Measurement of multimode fiber spectral loss within an extended wavelength range through automatic axial emission adjustment, as well as high-speed measurement of single-mode fiber mode field diameter/effective area and multimode fiber numerical aperture. At the same time, the coating geometry and fiber bending performance of the optical fiber can be measured.



Product Characteristics

- This analyzer can measure the performance parameters of optical fibers:
 - Fiber Geometry
 - Cut-off Wavelength
 - Spectral Attenuation
 - Coating Geometry
 - Fiber Curl
 - Mode Field Diameter and Effective Area
 - Numerical Aperture.
- Combine geometry and cut-off measurements at one test station
- Configure to fit your specific test requirements
- Maximize test station throughput
- Customize measurement capability
- Integrate with manufacturing information systems

Product Specifications



Fiber Analyzer Product Specifications

Items	Features	Indicator
General Specifications	Storage Temperature	0 to 50 °C
	Humidity	< 80% RH, non-condensing
	Voltage	100, 120, 220, 240 VAC nominal, + 10%
	Frequency	50 Hz or 60 Hz nominal + 5%
	Operating Temperature	10 to 40 °C
Specialty Fiber Geometry Specifications	/	PMF
	Core Diameter	< 0.10 μm
	Cladding Diameter	< 0.02 μm
	Core non-circularity	< 1.0 %
	Cladding non-circularity	< 0.1 %
	Core/Clad Concentricity	< 0.05 μm
Coating Geometry Specifications	Fiber Types	Nominal coating OD < 500 μm
	Coating Diameter	< 0.5 μm
	Clad/Coating Concentricity	< 0.5 μm
	Coating Non-Circularity	< 0.5 %
	Measurement Time	< 20 seconds
Spectral Attenuation Specifications	Scanning Range	300 to 1800 nm
	Spectral Width	< 10 nm ²
	Accuracy	< ± 3 nm
	Repeatability	< 1 nm
	Wavelength Scanning Speed	> 5 wavelengths/second (standard)
	Measurement Technique	Cutback, stored or direct reference
	Measurement Time	< 25 seconds (80 wavelengths)
Cut-off Wavelength Specifications	Repeatability	< 0.005 dB RMS
	Measurement Technique	Bend or stored multimode reference
Fiber Geometry Specifications	Measurement Time	< 5 seconds
	Measurement Wavelength	850 + 25 nm
	Fibers Measured	Cladding diameter: 60 to 140 μm
	Numerical Aperture (launch and measurement)	0.4
	Measurements	Core and cladding diameter and non-circularity, core/cladding concentricity
Mode Field Diameter Specifications	Measurement Time 1	< 5 seconds
	Wavelength Range	1100 to 1625 nm
Fiber Curl Specifications	Dynamic Range, SNR=1 Repeatability	> 36 dB (largest aperture)
	Applicable Standards Repeatability 1	< 1.0 % @ 4 m radius
	Reproducibility 1	< 2.5 % @ 4 m radius
Numerical Aperture Specifications	Measurement Time	< 15 seconds
	Fiber Types	Multimode fibers with NA < 0.35
	Wavelength	850nm
	Dynamic Range, SNR=1	> 26 dB
	Repeatability	< 0.005 dB
	Measurement Time	< 30 seconds