

Full-Spectrum Transmittance Meter

GY8120

Features

- Non-destructive, fast testing with one-touch operation.
- Wide spectral range: 200nm - 2500nm.
- Multiple models available based on sample properties.
- Flexible transmission measurement for full spectrum.
- High-precision measurement with fast speed and stability.
- Wavelength repeatability: 0.1nm.
- High signal-to-noise ratio with minimal stray light ($\geq 1000:1$).
- Short testing time.
- Adjustable spot size for various sample sizes.
- High accuracy with error $< 0.2\%$.
- Real-time online detection.

Application

- Mobile phone cover IR hole measurement.
- Transmission measurement of various thin films.
- Flashlight lens transmittance measurement.
- Coated mirrors, glued mirrors, and parallel plate transmittance.
- Solar film and filter transmission measurement.
- Concentrating glass, frosted glass, and lenses.
- Jewelry and coating analysis.
- Lens transmittance measurement.

Description

The GY8120 from Optosky is a newly launched, high-performance full-spectrum transmittance measurement system. Known for its precision, ease of use, and exceptional value, this advanced device provides rapid, accurate measurements for mobile phone panels and various transparent and semi-transparent materials, making it ideal for optical, chemical, and research applications.

Equipped with a high-quality spectrometer and an integrated uniform light system, the GY8120 ensures reliable accuracy with adjustable spot sizes for different sample dimensions. Its user-friendly interface allows both technical and non-technical users to operate it effortlessly.

Achieve superior quality and efficiency with the GY8120—control is in your hands!



1. Parameter

Model	GY8120	GY8120-I	GY8120-II	GY8120-17	GY8120-25
Light source	High stability deuterium halogen combination lamp	High stability deuterium halogen combination lamp	High stability deuterium halogen combination lamp	High stability tungsten halogen lamp	High stability tungsten halogen lamp
Maximum spectral range*1	200-1100nm	200-1100nm	200-1100nm	900-1700nm	900-2500nm
Actual working spectral range	Within the above range, all can be customized				
Detector	Linear CMOS	Back-illuminate d CCD	Scientific-grade CCD	InGaAs detector	InGaAs detector
Pixels	2048	2048 x 64	1044 x 64	512	512
CCD cooling	Unrefrigerated	Refrigeration	Cooling to -15°C	Cooling to -20°C	Cooling to -20°C
Features	High cost-performance ratio	High stability	Long integration time and high stability	High sensitivity	High sensitivity
Signal-to-noise ratio	> 600:1	> 800: 1	> 1000:1	>800: 1 (900-1700nm)	> 300: 1 (900-2500nm)
Wavelength accuracy*2	1-3nm	1-3nm	1-3nm	1nm-5nm	3nm-5nm
Sample size	≥Φ1.5mm				
Test angle	Vertical incidence				
Single sampling time	< 1s				
Detection accuracy	< 1%	< 0.4%	< 0.2%	< 1%	< 1%
Wavelength repeatability	0.1nm	0.1nm	0.1nm	0.5 nm	0.7 nm
Light source	Deuterium lamp and halogen lamp (optional)				
Light source life	2000 hours				
Operating system/interface	Windows , USB2.0				
Power supply	220V				
Device size	345*290*260mm				
Weight	5.35KG				
Storage temperature	-30°C to +70°C				

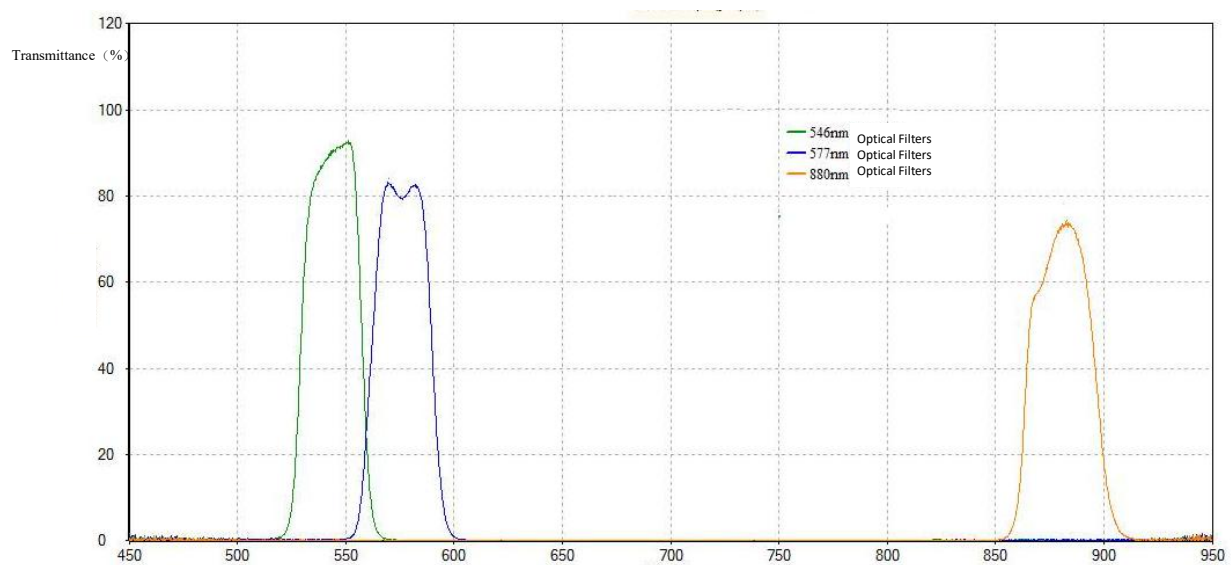
Operating temperature	-20°C to +45°C
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*Note:

*1: The widest range is marked here, which is the actual working wavelength range. You can specify it when placing an order, and we can provide customization;

*2: The wavelength resolution is related to many factors, including wavelength range, instrument slit width, etc. The conventional resolution is marked here; if other wavelength resolutions are required, you can specify it when placing an order, and we can provide customization.

The instrument uses fast spectrum detection technology, which can obtain the spectrum data and spectrum of any wavelength of the sample within 1 second, and can be used for real-time and online detection. High signal-to-noise ratio and minimized stray light enable higher detection accuracy.



Application:

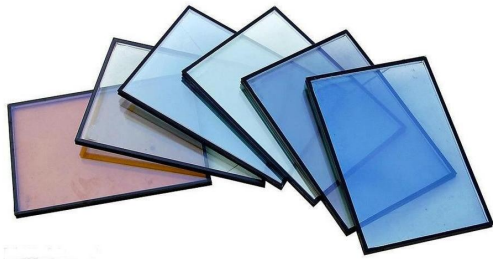
The GY8120 is a full-wavelength 0-degree transmittance meter, covering a range of 200-2500nm. It can quickly and accurately measure the transmittance of various planar optical components and is suitable for real-time online inspection, enabling full product testing. This device is ideal for testing prisms, coated mirrors, cemented lenses, parallel plates, solar films, and filters.



Mobile phone panel IR hole



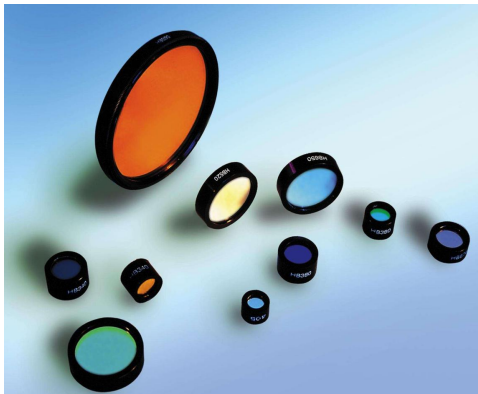
Coating transmittance test



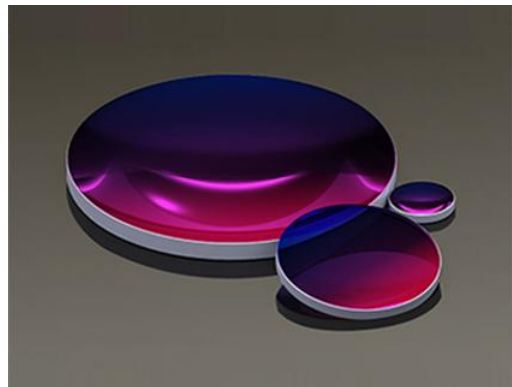
Various Types of Glass



Jewelry and Diamonds



Optical Filters



Lens Transmittance Testing



Lens Transmittance Testing



Film Transmittance Testing