

## NWS3000 Spectrometer

### Description

NWS3000 Designed and developed specifically for industrial application customers. Its notable features include high-speed spectral output, high-speed sampling, and high-speed transmission. This model spectrometer has a stable structure and low drift characteristics, which support large-scale industrial customized OEM applications. It supports cross-platform secondary development packages (SDK), and customers can complete rapid development and application by using the provided function libraries.

### Resolution

Wavelength Range	Wavelength Resolution (nm)	30 μm slit	40 μm slit	50 μm slit	60 μm slit	70 μm slit	100 μm slit	150 μm slit	200 μm slit
200-500nm	0.32	0.80	1.00	1.10	1.20	1.40	2.10	3.00	4.00
350-950nm	0.66	1.20	2.00	2.20	2.40	2.80	3.80	5.80	7.70
600-1100nm	0.64	1.20	2.00	2.20	2.40	2.80	3.80	5.80	7.70

### Application

Wafer inspection

Optical spectroscopy inspection

Online high-speed spectroscopy inspection - Film transmittance inspection

Industrial integration inspection

Teaching and research

### Product Features:

High sensitivity

High-speed chromatogram output: up to 10 MHz

Ultraviolet response: 200 - 1000 nm

High-speed sampling: up to 0.8 ms per frame

Low stray light

One low drift characteristic

One automatic zeroing function

High cost-effectiveness

### Specification

Spectral Specification

Spectral Range:	200-1100nm
Spectral Resolution:	Maximum 0.32 nm
Optical Resolution:	Maximum 0.8nm FWHM
Higher-Order Diffraction:	Add a high-order diffraction suppression filter
Stray Light:	<0.1%
Detector:	
Detector Model:	Hamamatsu CMOS linear array sensor
Spectral Detection Range:	200~1100nm
Pixel:	1024 pixels
Pixel Size:	25*500um
High Sensitivity:	2600V(Ix*s)
Fastest Speed:	10M
Optical Table	
Optical Path:	F/4, symmetrical cross Czerney-Turner optical path
Focal Length:	70mm; 90mm
Incident Slit:	Standard 70um (optional)
Optical Fiber:	SMA905 0.22NA
Electronic Property	
Signal-to-Noise Ratio:	500:01:00
Linearity:	>99.8%
Integration Time:	0.1ms~1s
Dynamic Range:	150000
AD:	No distortion 16-bit
Test Speed:	1.8ms + integration time
Communication Interface:	USB 2.0; RS232; RS485
Power Consumption:	16-pin expansion interface; with external trigger function
Cooling:	300mA@5VDC
Other Characteristics	
Support System:	Windows, Android, Linux, Wince
Dimensions:	128mm*72mm*40mm
Weight:	500g
Fixed:	3-direction standard installation holes