

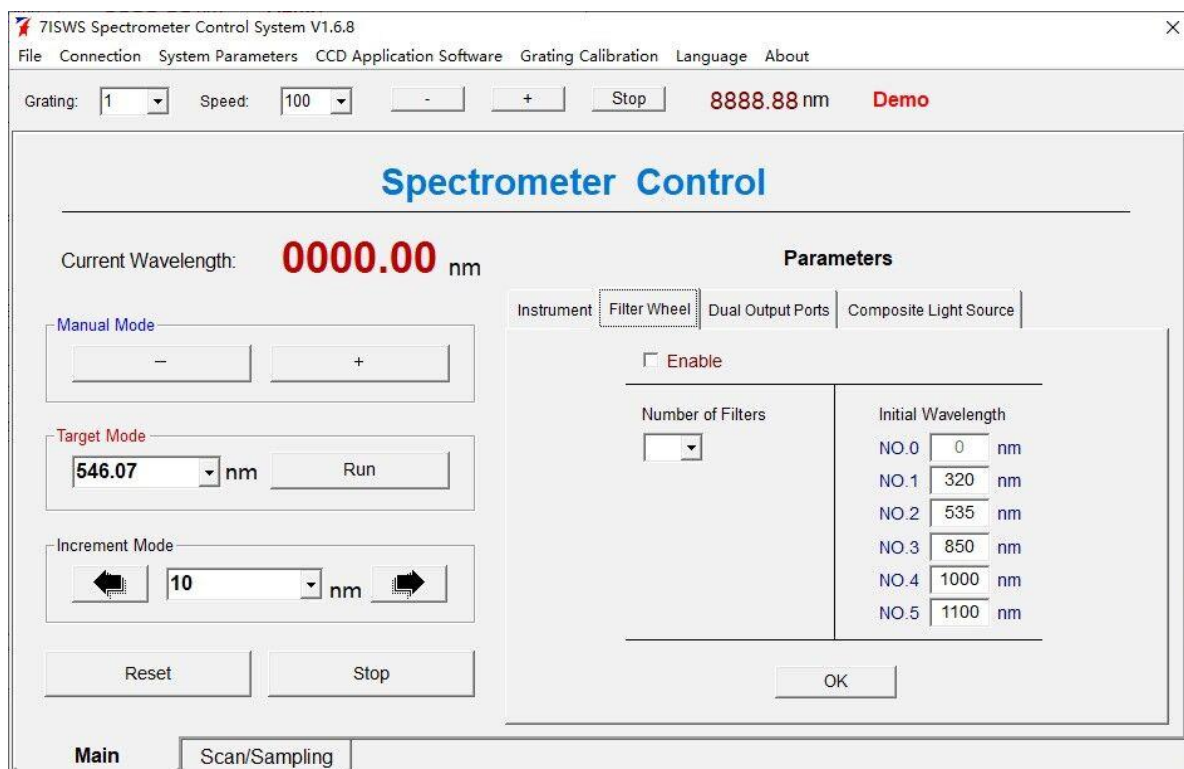
Photoelectric Instrument – Accessories

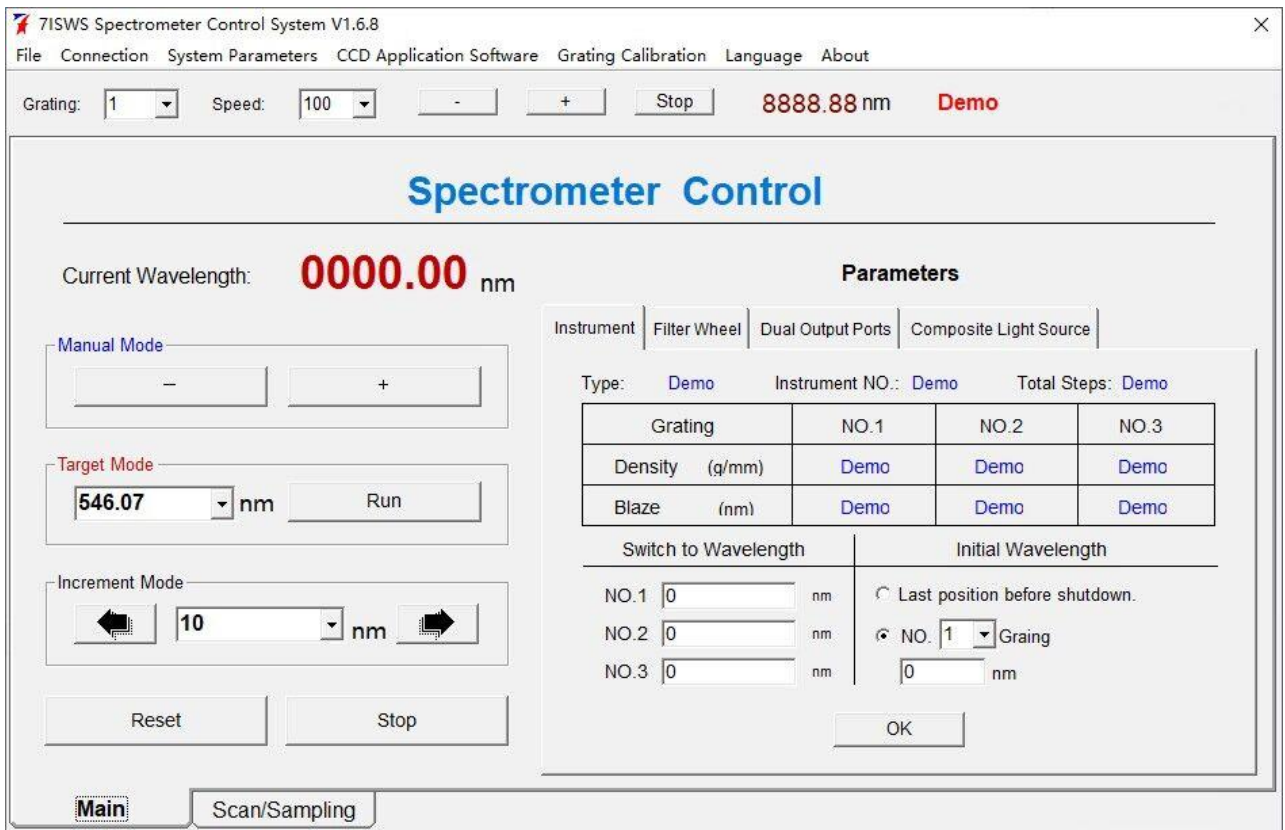
DATA ACQUISITION

7IDA1 Data Acquisition

Technical parameters and characteristics:

- 1 to 256 times for the gain transform, wide measuring range
- The high performance operational amplifier and ± 15 Bits A/D converter, signal acquisition in the high dynamic range, high measuring accuracy
- Double way Input channel has the same performance, It can be set as the input DC voltage or DC current input
- Current $\pm 5\text{pA} \sim \pm 40\mu\text{A}$
- Voltage $\pm 0.5\text{mV} \sim \pm 4\text{V}$
- The double way D/A transform output channel, can be used to control other experimental equipment
- Output range: 0V ~ 10V
- The D/A conversion precision: 12Bits
- Be used for a single channel measurements and ratio measurement
- With a trigger input and a output channel, It can achieve synchronous experiment
- Standard RS232 serial interface and parallel interface of 7ISW series spectrometer
- Active X plug in 7IDA1U.ocx integrates functions, convenient for second development
- The special software 7IMSS used with 7IMS series monochromator.
- The special software 7ISWS used with 7ISW series spectrometer
- Weight: 3kg





The scanning software interface for 7ISWS multi grating spectrometer used with data collector

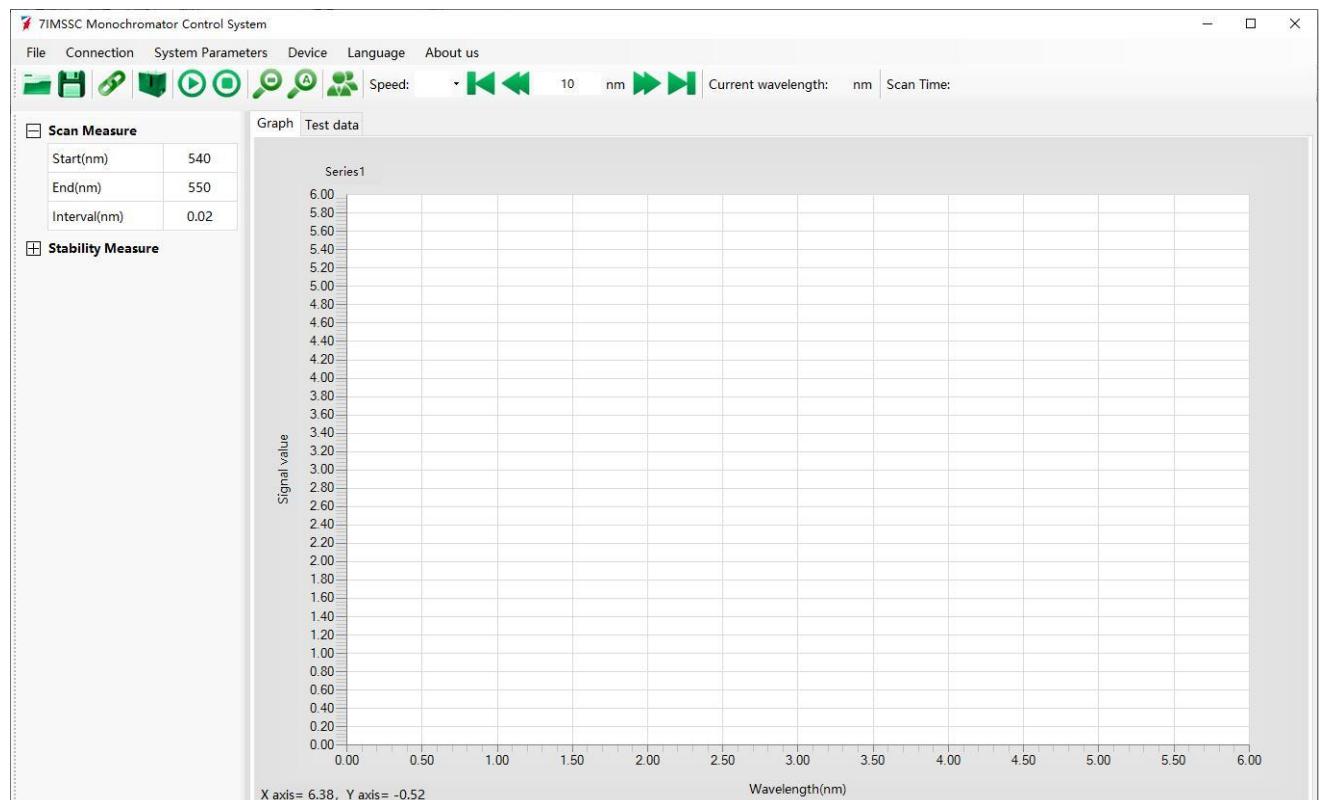


7IDA3 Data Acquisition

Technical parameters and characteristics:

- Standard USB2.0 interface
- Using high speed ARM7 core microcontroller
- High sampling rate: 100KHz
- High performance operational amplifier, 16BitsA/D converter, signal acquisition in high dynamic range, high measuring accuracy
- 1 to 256 times for gain transform -, wide measuring range
- Dual way input, can be set as the input DC voltage or DC current input
 - ◆ Current : $\pm 5\text{pA} \sim \pm 40\mu\text{A}$
 - ◆ Voltage : $\pm 0.5\mu\text{V} \sim \pm 4\text{V}$
- The double way D/A transform output channel, It can be used to control other experimental equipment.
- Output range: -10V ~ 10V
- D/A conversion accuracy: 12Bits
- Can carry out single channel measurement
- It has a trigger input and an output channel, It can achieve synchronous experiment
- It is equipped with +24V DC power supply
- Support second the development for LabVIEW, VB, VC etc.
- Net weight: 1.35Kg

7IDA3 Special software interface



7IA3000 PRE-AMPLIFIER

Technical Specifications:

Gain Range	$10^3 \sim 10^9$ (V / A), 10times , adjustable
Input Current	$10^{-9} \sim 10^{-3}$ A
Working Frequency	DC~3KHz
Cut-off frequency of the LPF	3KHz
Noise (opening on input)	0.8 fA/ $\sqrt{\text{Hz}}$
Output Voltage Range	± 5 V
Input Impedance	$< 10\Omega$
Output Impedance	$< 10\Omega$
Adjusting Method	manual /serial interface
Power	DC 12V5A
Environmental Conditions	Temperature 0~35 度; humidity <85%
Weight	1.5kg

FILTER WHEELS

7IFW6/7IFW6A Filter wheels

7IFW6 / 7IFW6A has six stalls, the first stall does not install any filter, second to five stalls can be placed 18mm in diameter, thickness of 2mm filter to eliminate the multi spectrum. When using with series of monochromator / the spectrometer produced by our company can be auto zero position in the enabled state, so that you can realize filter automatic replacement in the scanning process, and to manually select filter by hand wheel in non enabled state.

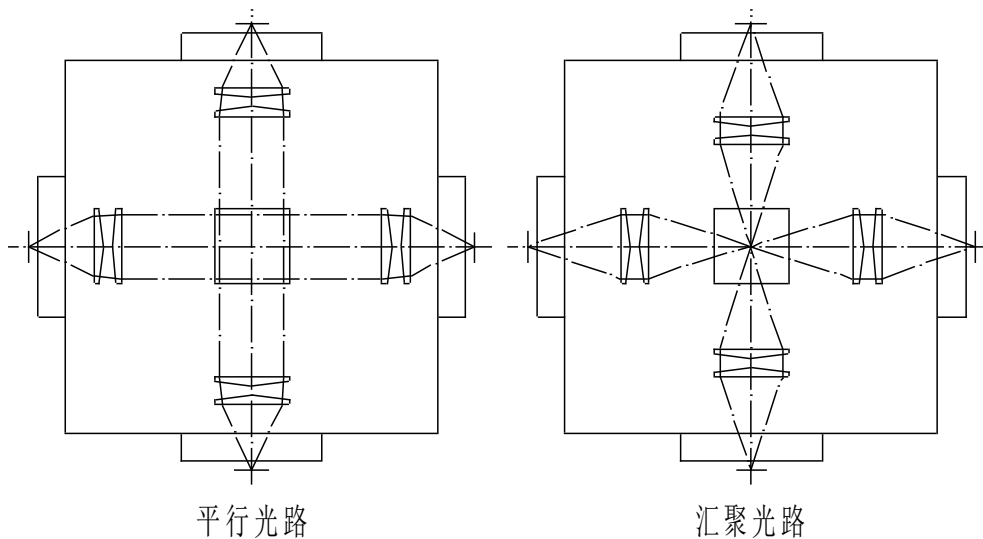
Model	7IFW6	7IFW6A	7IFW6B
Spectral range	185-1600nm	185-2800nm	185-5000nm
Quantity of filters installed	3	4	5
Installation position reserved	2	1	0



Sample Chambers

7ISC1 Multi-function Sample Chamber

- Four light exit and entrance, can be used for measurement of the transmission, reflection, absorption, fluorescence, and Raman spectrum
- Each entrance equipped with a set of high-quality far ultraviolet quartz converging lens group, transmittance of spectral range from 185nm to 2.5 μ m, average transmittance in the visible region is more than 90%, no absorption peak
- Can be matched with Series monochromator / spectrometer produced by our company
- Quartz lens position can be adjusted, so that the beam of sample transmitted either parallel beam, but also convergent beam. Parallel light path can be used to measure the interference filter, reflection, absorption, and transmission of the colored glass, etc. Convergent light path can be used to measure the absorption, reflection, transmission, density, concentration of the gas / liquid sample.
- The bearing sample table can rotate within the range of 360 DEG, precision adjustment can be made 10 DEG range, also can be a two-dimensional linear translation (2D translation stage), easy to adjust the position of the sample
- Sample mount can be used for fixing cuvette, filter, fluorescent plate, a diffuse reflection plate and other samples
- Dimensions 248l X 246w X 176h (not including the base corner)
- Net weight 8.3kg



7ISC2 Sample Chamber with fiber connectors)

There are four entrance/exit on the small sample chamber, each entrance/exit can be equipped with the SMA905 mount of fiber, beam is derived through the fiber. A 12.5mm X 12.5mm standard colorimetric dish with compact size, simple structure and convenient operation can be placed in the sample chamber. Also be built in a long wave pass filter HB600 which can be used with 7IGF10 grating spectrometer to compose a small fluorescence and Raman spectrum measurement system.

Size: 60L x 45W x 38h

Weight: 0.07kg



Accessory

Fiber for spectral analysis

The joint SMA905 are generally used on the optical fiber for spectral analysis. The fiber can be together used with series monochromator, spectrometer and spectrograph produced by our company, just screw thread connection and extremely easy to use.

Model	specification	Material	Wavelength range	external packing	Fiber joint
7IFG05-500	Diameter 0.5mm long 0.5m	Domestic optical glass	380-1300nm	PVC plastic	SMA905 on both ends
7IFG05-500J				Metal soft tube	
7IFG05-1000	Diameter 0.5mm long 1m			PVC plastic	
7IFG05-1000J				Metal soft tube	
7IFG05-2000	Diameter 0.5mm long 2m			PVC plastic	
7IFG05-2000J				Metal soft tube	
7IFS05-500	Diameter 0.5mm long 0.5m	UV quartz Imported	200-1100nm	PVC plastic	
7IFS05-500J				Metal soft tube	
7IFS05-1000	Diameter 0.5mm long 1m			PVC plastic	
7IFS05-1000J				Metal soft tube	
7IFS05-2000	Diameter 0.5mm long 2m			PVC plastic	
7IFS05-2000J				Metal soft tube	

Fiber for other forms can be customized

- All kinds of connecting accessories: fiber joint

The light source and the connection accessories of the fiber.		
Model	Name	Applications
7ILT75-SMA905	Fiber joint	Fiber for connecting 7ILD30 deuterium lamp, 7ILT75/250 tungsten lamp light source, 7ILX150 series and SM905 joint
7ILT75-FC	Fiber joint	Fiber for connecting 7ILD30 deuterium lamp, 7ILT75/250 tungsten lamp light source, 7ILX150 series and FC joint
7ILT75-Φ10	Fiber joint	Fiber bundle for connection 7ILD30 deuterium lamp, 7ILT75/250 tungsten lamp light source, 7ILX150 series and 10mm diameter
7ILX500-SMA905	Fiber joint	Fiber for connecting 7ILX350, 7ILX500 series and SM905 joint
7ILX500-FC	Fiber joint	Fiber for connecting 7ILX350, 7ILX500 series xenon lamp light source and FC joint
7ILX500-Φ10	Fiber joint	Fiber bundle for connection 7ILX350, 7ILX500 series and 10mm diameter

The connection accessories for monochromator and the fiber		
Model	Name	Applications
7IMS30-SMA905	Fiber joint	Fiber for connecting 7IMS30/7IMU30, 7ISW/7ISU series monochromator and SM905 joint
7IMS30-FC	Fiber joint	Fiber for connecting 7IMS30/7IMU30, 7ISW/7ISU series of monochromator and FC joint
7IMS30-Φ10	Fiber joint	Fiber bundle for connection 7IMS30/7IMU30, 7ISW/7ISU series of monochromator and a 10mm diameter
7IMS10-SMA905	Fiber joint	Fiber for connecting 7IMS10/7IMU10 series of monochromator and SM905 joint
7IMS10-FC	Fiber joint	Fiber connecting 7IMS10/7IMU10 series of monochromator and FC joint
7IMS10-Φ10	Fiber joint	Fiber bundle for connection 7IMS10/7IMU10 series of monochromator and a 10mm diameter

The connection accessories for light source and the monochromator		
Model	Name	Applications
7ILT75-7IMS30	Connection part for light source and monochromator	Connects the 7ILD30 deuterium lamp, 7ILT75/250 tungsten lamp light source, 7ILX150 series xenon lamp light source and 7IMS30/7IMU30, 7ISW/7ISU series monochromator
7ILT75-7IMS10	Connection part for light source and monochromator	Connects the 7ILD30 deuterium lamp, 7ILT75/250 tungsten lamp light source, 7ILX150 series xenon lamp light source and 7IMS10/7IMU10 series monochromator
7ILX500-7IMS30	Connection part for light source and monochromator	Connects the 7ILX350, 7ILX500 series xenon lamp light source and 7IMS30/7ISU30 7ISW/7ISU series monochromator
7ILX500-7IMS10	Connection part for light source and monochromator	Connect the 7ILX350, 7ILX500 series xenon lamp light source and 7IMS10/7IMU10 series of monochromator

connection accessories for light source and chopper		
Model	Name	Applications
7ILT75-SR540	connection part for the light source and the chopper	Connects the 7ILD30 deuterium lamp, 7ILT75/250 tungsten lamp light source, 7ILX150 series xenon lamp light source and SR540 chopper
7ILX350-SR540	connection part for The light source and the chopper	Connects the 7ILX350 xenon lamp light source and SR540 chopper
7ILX500-SR540	connection part for The light source and the chopper	Connects the 7ILX350, 7ILX500 xenon lamp light source and SR540 chopper
7ILX1000-SR540	connection part for	Connects the 7ILX1000 series xenon lamp light source

	The light source and the chopper	and the SR540 chopper
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Others		
Model	Name	Applications
7IMS10-7IFW6	Keysets	Connects the 7IMS10/7IMU10 series monochromator and 7IFW6 series filter wheel or 7ID series detectors
7IF-C25	Adjustable collimation lens	Connects the exit of monochromator, the monochromatic light transmitted from the monochromator is collimated, and carries out that the diameter of light spot can be adjusted in the range of 1.5-22mm through the adjustable diaphragm