NWSPEC

Understanding the world using
Nwspec's spectrometers

PRODUCTS CATALOG (2025)

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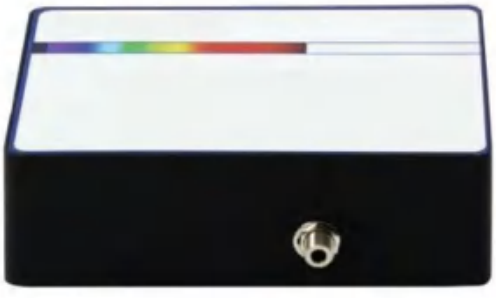
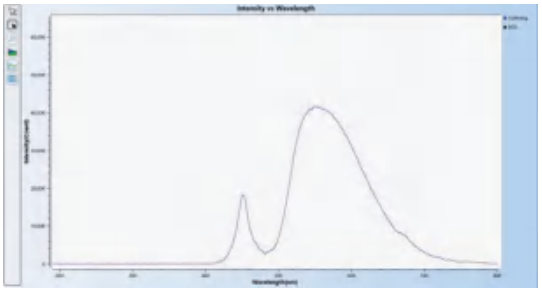
Fiber spectrometers NWSP600

Features

- Czerny–Turner optical structure with a grating, a CCD detector and a SMA905 fiber connector
- Controlled and powered by the computer through USB
- Unique software features, automatic configuration of spectrometers, automatic reading of calibration coefficients, spectral acquisition and measurement, logging and color bar display
- Spectral measurements including radiation, transmittance, absorbance and reflectivity
- Excellent thermal and vibrating stability
- Compact size and pleasant appearance
- GLA600–UVN fiber spectrometers include UV band spectrometer, VIS band spectrometer and NIR band spectrometer





Applications


Environmental inspection: inspection of water quality and air pollution etc.


Chemical industry


Optical coating inspection


Glass and transparent materials inspection


Measuring light sources such as LEDs


R&D in science and technology

Fiber spectrometers NWSP600

Specifications of UV fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA 905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190–380nm/190–480nm	Depending on the grating used
Spectral Resolution	FWHM 0.3nm@Hg 253nm @25μm slit/ FWHM 0.47nm@Hg 253nm @25μm slit	Depending on wavelengths and slits used
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.08%@253nm	Depending on wavelengths
Light Detector	Toshiba TCD1304DG (UV enhanced)	
Pixel Number	3648	
Pixel Size	8 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms–15min	Depending on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/250mA	
Trigger Mode	Trigger in or out with TTL	
Communication	USB	
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

Fiber spectrometers NWSP600

Specifications of UV/VIS fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190–750nm	Depending on the grating used
Spectral Resolution	FWHM 0.96nm@Hg 253nm @25μm slit	Depending on wavelengths and slits used
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.1%@253nm	Depending on wavelengths
Light Detector	Toshiba TCD1304DG (UV enhanced)	
Pixel Number	3648	
Pixel Size	8 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms–15min	Depending on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/250mA	
Communication	USB	
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

Fiber spectrometers NWSP600

Specifications of VIS fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	350–1000nm	Depending on the grating used
Spectral Resolution	FWHM 0.76nm@576nm@25μm slit	Depending on wavelengths and slits used
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.05%@546nm	Depending on wavelengths
Light Detector	Toshiba TCD1304DG	
Pixel Number	3648	
Pixel Size	8 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms–15min	Depending on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/250mA	
Communication	USB	
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

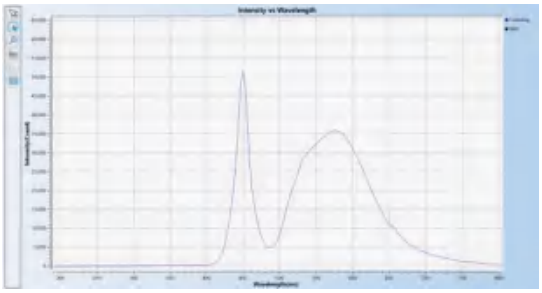
Specifications of NIR fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA 905	
Slit	10, 25, 50, 100μm	
Wavelength Range	750–960nm	Depending on the grating used
Spectral Resolution	FWHM 0.83nm@785nm@ 25μm slit	Depending on wavelengths
Stray Light	0.03%@785nm	Depending on wavelengths
Light Detector	Toshiba TCD1304DG	
Pixel Number	3648	
Pixel Size	8 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms–15min	Depending on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/250mA	
Communication	USB	
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

Fiber spectrometers for industrial control NWSP630

Features

- Czerny–Turner optical structure with a grating, a high end light detector and a SMA905 fiber connector
- Controlled by the computer through USB, RS232 or other connector for industrial control
- Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement
- Spectral measurements including radiation, transmittance, absorbance and reflectivity
- Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.
- Compact size and pleasant appearance
- Excellent thermal and vibrating stability
- GLA639 fiber spectrometers include UV band spectrometer, VIS band spectrometer and NIR band spectrometer



Fiber spectrometers for industrial control NWSP630

Applications

Environmental inspection: inspection of water quality and air pollution etc.

Chemical industry

Optical coating inspection

Glass and transparent materials inspection

Measuring light sources such as LEDs

R&D in science and technology

Fiber spectrometers for industrial control NWSP630

Specifications of UV fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190–380nm/190–480nm	Depending on the grating used
Spectral Resolution	FWHM 0.3nm@Hg 253nm@25μm slit/ FWHM 0.5nm@Hg 253nm @25μm slit	Depending on wavelengths
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.1%@ 253nm	Depending on wavelengths
Light Detector	High end detector	
Pixel Number	2048	
Pixel Size	14 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	700:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms–15min	Depending on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/250mA	
Trigger Mode	Trigger in or out with TTL	
Communication	USB o RS 232	
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

Fiber spectrometers for industrial control NWSP630

Specifications of UV/VIS fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190–800nm	Depending on the grating used
Spectral Resolution	FWHM 1.2nm@Hg 546nm@25μm slit	Depending on wavelengths
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.2%@253nm	Depending on wavelengths
Light Detector	High end detector	
Pixel Number	2048	
Pixel Size	14 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	700:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms–15min	Dependingon detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	D5V/250mA	
Trigger Mode	Trigger in or out with TTL	
Communication	USB or RS 232	
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

Fiber spectrometers for industrial control NWSP630

Specifications of VIS fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA905	
Entrance Slit	10, 25, 50, 100μm	
Wavelength Range	350–1000nm	Depending on the grating used
Spectral Resolution	FWHM 1.1nm@546nm@25μm slit	Depending on wavelengths and slits used
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.1%@253nm	Depending on wavelengths
Light Detector	High end detector	
Pixel Number	2048	
Pixel Size	14 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	700:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms–15min	Depending on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/250mA	
Trigger Mode	Trigger in or out with TTL	
Communication	USB or RS232	
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

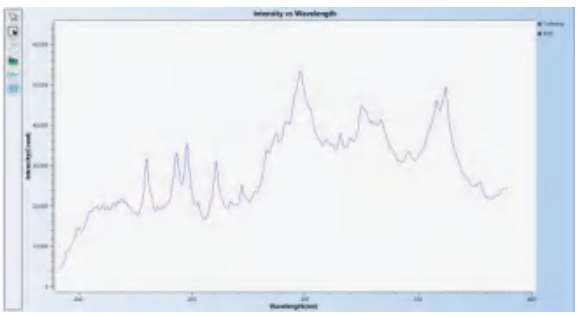
Specifications of NIR fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA 905	
Slit	10, 25, 50, 100μm	
Wavelength Range	750–960nm	Depending on the grating used
Spectral Resolution	FWHM 0.5nm@912nm@25μm	Depending on wavelengths
Stray Light	0.3%@785nm	Depending on wavelengths
Light Detector	High end detector	
Pixel Number	2048	
Pixel Size	14 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	700:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms–15min	Depending on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/250mA	
Trigger Mode	Trigger in or out with TTL	Optional upon request
Communication	USB or RS232	
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

Mini fiber spectrometer NWMini100

Features

- Czerny–Turner optical structure with a grating, a CMOS light detector and a SMA905 fiber connector
- Controlled by the computer through USB, RS232 or other connector for industrial control
- Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement
- Spectral measurements including radiation, transmittance, absorbance and reflectivity
- Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.
- Compact size and pleasant appearance
- Excellent thermal and vibrating stability
- NSP01H fiber spectrometers include UV bands spectrometer, VIS band spectrometer and NIR band spectrometer



Mini fiber spectrometer NWMini100

Applications

Environmental inspection: inspection of water quality and air pollution etc.

Chemical industry

Optical coating inspection

Glass and transparent materials inspection

Measuring light sources such as LEDs

R&D in science and technology

Mini fiber spectrometer NWMini100

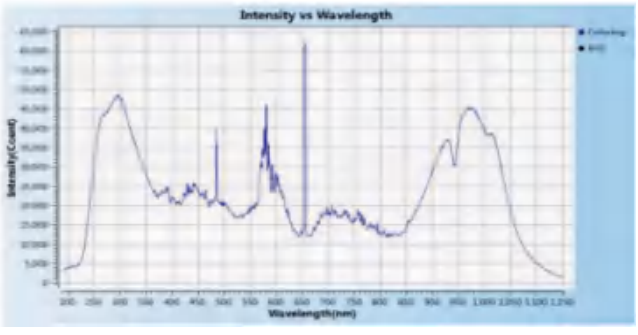
Specifications

Items	Specifications	Remarks
Fiber Connector	SMA 905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190–380nm	Depending on the grating used
Spectral Resolution	FWHM 0.6nm@Hg253nm@10 μ m slit	Depending on wavelengths and slit
Stray Light	0.5%@253nm	Depending on wavelengths
Light Detector	High end detector	
Pixel Number	1024	
Pixel Size	14 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	600:1	Room temperature
ADC Resolution	16 bits	
Integration Time	1ms–15min	Depending on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/100mA	
Trigger Mode	Trigger in or out with TTL	Optional upon request
Communication	USB or RS232	
Operation Software	SPEC–GLA600	
Dimensions	50mmx50mmx28mm	
Weight	110g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50C°	
Storage Temperature	–20–70℃	

Broadband fiber spectrometer NWB200

Features

- Unique M–optical structure with a grating, a high end light detector and a SMA905 fiber connector
- Controlled by the computer through USB, RS232 or other connector for industrial control
- Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement
- Spectral measurements including radiation, transmittance, absorbance and reflectivity
- Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.
- Excellent thermal and vibrating stability
- NWB200 fiber spectrometers include UV bands spectrometer, VIS band spectrometer and NIR band spectrometer



Broadband fiber spectrometer NWB200

Applications

Environmental inspection: inspection of water quality and air pollution etc.

Chemical industry

Optical coating inspection

Glass and transparent materials inspection

Measuring light sources such as LEDs

R&D in science and technology

Broadband fiber spectrometer

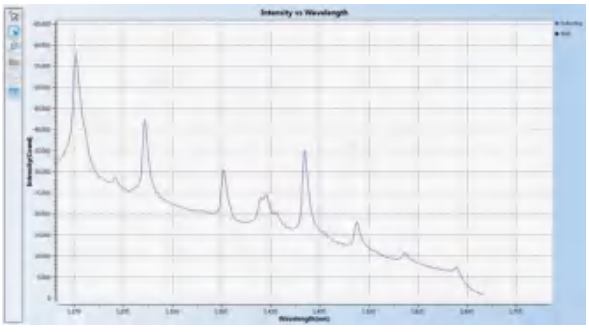
Specifications

tems	Specif cat ons	Remarks
F ber Connector	SMA 905	
S it	10, 25 50, 100μm	
Wavelength Range	190–1100nm	Depend ng on the grat ng used
Spectra Resolution	FWHM 1.3nm@Hg 546nm @25 μ m slit	Depending on wavelengths and slit
Order Sorting F ter	To eliminate higher order spectrum	
Stray L ght	0 2%@253nm	Depending on wavelengths
L ght Detector	H gh end detector	
P xe Number	2048	
P xe S ze	1 μ mx200 μ m	
Detector Col ect ng Lens	Yes	
SN	1500:1	Room temperature
ADC Resolut on	16 bits	
ntegrat on T me	1ms–15m n	Depend ng on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/500mA	
Trigger Mode	Tr gger in or out with TTL	
Communicat on	USB or RS 232	
Operat on Software	SPEC–GLA600	
Application Programming Interface	g aDevSys	For developing software by users
D mens ons	135mmx116mmx47mm	
Weight	775g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

NIR fiber spectrometer IRSP01B

Features

- Unique M–optical structure with a grating, a cooled high end light detector and a SMA905 fiber connector
- Controlled by the computer through USB or RS232 connector for industrial control
- Unique software features automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement
- Spectral measurements including radiation, transmittance, absorbance and reflectivity
- Software interface suitable for industrial control
- Compact size and pleasant appearance
- Characteristics of mass–produced industrial–grade optical fiber spectrometers: excellent consistency, stability, and reliability



NIR fiber spectrometer IRSP01B

Applications

- Industrial process control
- Agricultural and food testing
- Petroleum and chemical industry
- R&D in science and technology

NIR fiber spectrometer IRSP01B

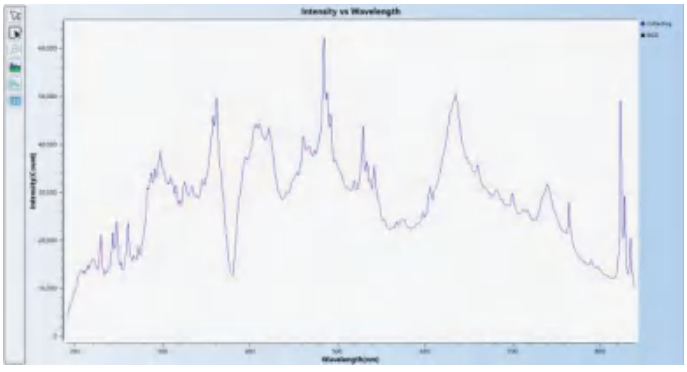
Specifications

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	100μm	
Wavelength Range	950–1500nm	Depending on the grating used
Spectral Resolution	FWHM 8 nm@Hg 1130nm@100μm slit	Depending on wavelengths and slit
Light Detector	High end detector	
Detector Cooling	15℃	
Cooling Power Supply	5V/3A	
Pixel Number	516	
Pixel Size	25 μ mx25 μ m	
Detector Collecting Lens	Yes	
SNR	600:1	Room temperature
ADC Resolution	16 bits	
Integration Time	3ms–2min	Depending on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/500mA	
Communication	RS232 and USB type–B	
Data Average	1–100 times	The average can be done by embedded chip in the spectrometer
Dimensions	185mmx120mmx46mm	
Weight	~1Kg	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–40℃	Pay attention to the heat dissipation
Storage Temperature	–20–70℃	

Mini M fiber spectrometer NWM100

Features

- Unique M–optical structure with a grating, a CMOS light detector and a SMA905 fiber connector
- Controlled by the computer through USB, RS232 or other connector for industrial control
- Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement
- Spectral measurements including radiation, transmittance, absorbance and reflectivity
- Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.
- Compact size and pleasant appearance
- Excellent thermal and vibrating stability



Mini M fiber spectrometer NWM100

Applications

Environmental inspection: inspection of water quality and air pollution etc.

Chemical industry

Optical coating inspection

Glass and transparent materials inspection

Measuring light sources such as LEDs

R&D in science and technology

Mini M fiber spectrometer NWM100

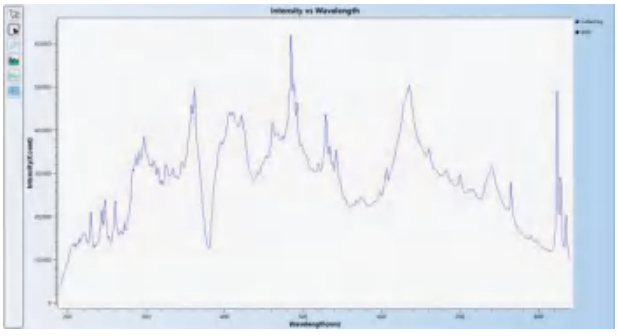
Specifications

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190–840nm	Depending on the grating used
Spectral Resolution	FWHM 1.6nm@Hg 253nm@10 μm slit	Depending on wavelengths and slit
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.2%@253nm	Depending on wavelengths
Light Detector	High end detector	
Pixel Number	1024	
Pixel Size	14 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	600:1	Room temperature
ADC Resolution	16 bits	
Integration Time	1ms–15min	Depending on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/100mA	
Trigger Mode	Trigger in or out with TTL	
Communication	USB or RS232	
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	60mmx55mmx26mm	
Weight	120g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

Straight mini M fiber spectrometer N4SP

Features

- Unique M–optical structure with a grating, a high end light detector and a SMA905 fiber connector
- Controlled by the computer through USB, RS232 or other connector for industrial control
- Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement
- Spectral measurements including radiation, transmittance, absorbance and reflectivity
- Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.
- Compact size and pleasant appearance
- Characteristics of mass–produced industrial–grade optical fiber spectrometers: excellent consistency, stability and reliability



Applications

- Environmental inspection: inspection of water quality etc.
- Industrial process control

Straight mini M fiber spectrometer N4SP

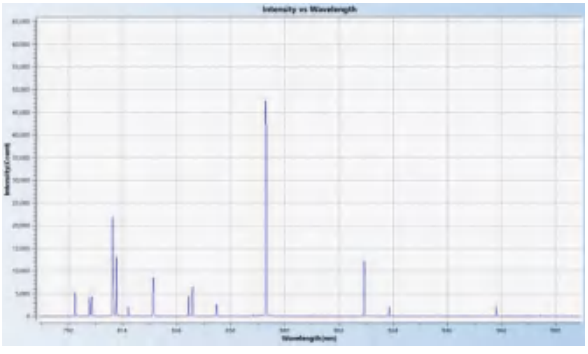
Specifications

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190–500nm	Depending on the grating used
Spectral Resolution	FWHM 0.55nm@Hg 253nm@10 μ m slit	Depending on wavelengths and slit
Sorting Filter	Eliminate higher order spectrum	
Light Detector	High end detector	
Pixel Number	1024	
Pixel Size	14 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	530:1	Room temperature
ADC Resolution	16 bits	
Integration Time	1ms–15min	Depending on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/100mA	
Trigger Mode	Trigger out with TTL	
Communication	USB or RS232	
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	65.5mmx63mmx25.5mm	
Weight	120g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

High resolution fiber spectrometer MHSP03P

Features

- Unique M–optical structure with a grating, a CMOS light detector and a SMA905 fiber connector
- Controlled by the computer through USB, RS232 or other connector for industrial control
- Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement
- Spectral measurements including radiation, transmittance, absorbance and reflectivity
- Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.
- Compact size and pleasant appearance
- Excellent thermal and vibrating stability



High resolution fiber spectrometer MHSP03P

Applications

Environmental inspection: inspection of water quality and air pollution etc.

Chemical industry

Optical coating inspection

Glass and transparent materials inspection

R&D in science and technology

High resolution fiber spectrometer MHSP03P

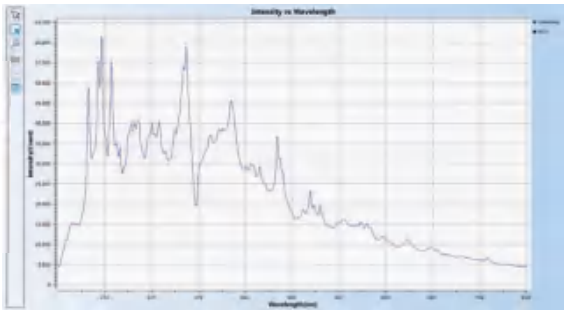
Specifications

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	540–700nm	Depending on the grating used
Spectral Resolution	FWHM 0.3nm@Hg 546nm@10 μ m slit	Depending on wavelengths and slit
Light Detector	High end detector	
Pixel Number	4096	
Pixel Size	14 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	300:1	Room temperature
ADC Resolution	16 bits	
Integration Time	1ms–15min	Depending on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/100mA	
Trigger Mode	Trigger in or out with TTL	
Communication	USB or RS232	
Data Average	1–100 times	The average can be done by embedded chip in the spectrometer
Data Interception	1–2048 pixels	Data segment can be selected
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	97mmx81mmx31mm	
Weight	340g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

Seahorse fiber spectrometer FMSP

Features

- Particular optical system with a grating, a high end light detector and a SMA905 fiber connector
- Controlled by the computer through RS232 connector for industrial control
- Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement
- Spectral measurements including radiation, transmittance, absorbance and reflectivity
- Compact size and pleasant appearance
- Characteristics of mass–produced industrial–grade optical fiber spectrometers: excellent consistency, stability, and reliability



Applications

- Environmental inspection: inspection of water quality(particularly for the immersion probe for in situ water measurement)
- Industrial process control etc.

Seahorse fiber spectrometer FMSP

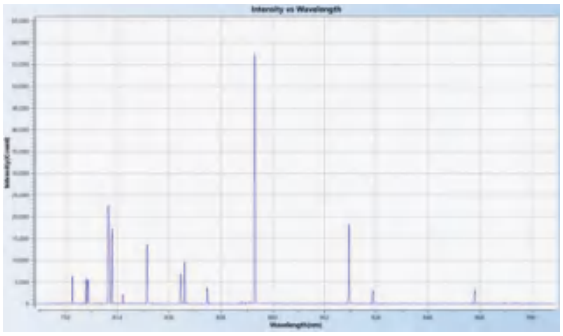
Specifications

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50μm	
Wavelength Range	190–820nm	
Spectral Resolution	FWHM 1.9nm@Hg 253nm@25 μm slit	Depending on wavelengths and slit
Light Detector	High end detector	
Data Interception	1–1024pixels	Data segment can be selected
SNR	600:1	Room temperature
ADC Resolution	16 bits	
Integration Time	1ms–15min	Depending on detector used
Data Output	Count vs. wavelength or pixel	
Data Average	1–100 times	The average can be done by the spectrometer
Power Supply	DC5V/200mA	
Trigger Mode	Trigger out with TTL	
Communication	RS232	
Operation Software	SPEC–GLA600（Glit）	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	123mmx32mmx33mm	
Weight	100g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

Cooled fiber spectrometer RMSP01H

Features

- Czerny–Turner optical structure with a grating, a CMOS light detector and a SMA905 fiber connector
- Controlled by the computer through USB or other connector for industrial control
- Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement
- Spectral measurements including radiation, transmittance, absorbance and reflectivity
- Compact size and pleasant appearance
- Excellent thermal and vibrating stability



Cooled fiber spectrometer RMSP01H

Applications

- Spectrum analysis
- Raman spectrum
- Chemical industry
- R&D in science and technology

Cooled fiber spectrometer RMSP01H

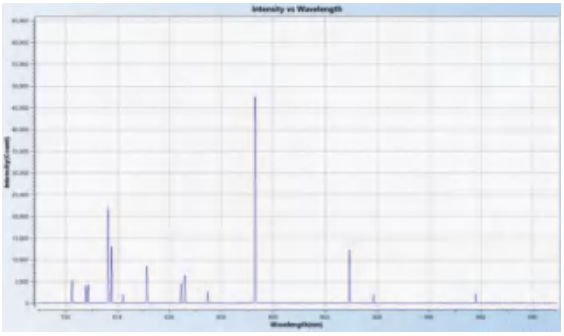
Specifications

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	25μm	
Wavelength Range	780–1000nm	Depending on the grating used
Spectral Resolution	FWHM 0.45nm@Hg 912nm@25 μ m slit	Depending on wavelengths and slit
Raman Spectrum Range	200–3100cm–1	
Raman Spectral Resolution	5cm–1@Hg912nm	785nm excitation laser
Light Detector	High end detector	
Detector Cooling	10℃	
Cooling Power Supply	5V/3A	
Pixel Number	2048	
Pixel Size	14 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	500:1	Room temperature
ADC Resolution	16 bits	
Integration Time	1ms–15min	Depending on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/500mA	
Communication	USB type–B	
Data Average	1–100 times	The average can be done by embedded chip in the spectrometer
Data Interception	1–2048 pixels	Data segment can be selected
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	124mmx80mmx34mm	
Weight	470g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

High resolution fiber spectrometer MISP03P

Features

- Unique M–optical structure with a grating, high end light detector and a SMA905 fiber connector
- Controlled by the computer through USB, RS232 or other connector for industrial control
- Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement
- Spectral measurements including radiation, transmittance, absorbance and reflectivity
- Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.
- Compact size and pleasant appearance
- Characteristics of mass–produced industrial–grade optical fiber spectrometers: excellent consistency, stability and reliability



High resolution fiber spectrometer MISP03P

Applications

- Integration of LIBS
- Glass and transparent materials inspection
- Optical film measurement
- Chemical industrial measurement
- R&D in science and technology

High resolution fiber spectrometer MISP03P

Specifications

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190–320nm、320–430nn、430–580nm 580–705nm、705–925nm、925–1100nm	Depending on the grating used
Spectral Resolution	FWHM 0.14nm@Hg253nm@10 μm slit FWHM 0.12nm@Hg365nm@10 μm slit FWHM 0.13nm@Hg435nm@10 μm slit FWHM 0.16nm@Hg577nm@10 μm slit FWHM 0.21nm@Hg763nm@10 μm slit FWHM 0.21nm@Hg912nm@10 μm slit	Depending on wavelengths and slit used
Light Detector	High end detector	
Pixel Number	4096	
Pixel Size	14 μ mx200 μ m	
Detector Collecting Lens	Yes	
SNR	300:1	Room temperature
ADC Resolution	16 bits	
Integration Time	1ms–15min	Depending on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/100mA	
Trigger Mode	Trigger in or out with TTL	

High resolution fiber spectrometer MISP03P

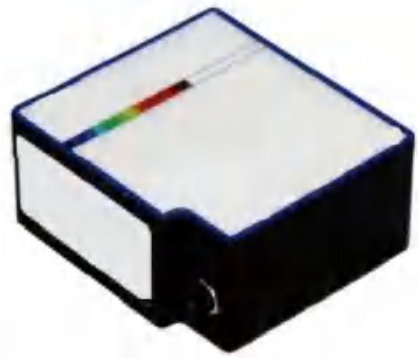
Specifications

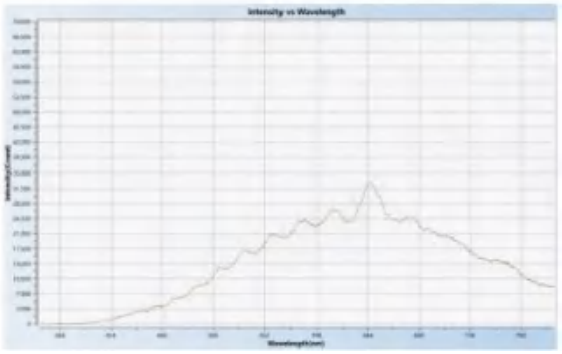
Communication	USB or RS232	
Data Average	1–100 times	The average can be done by embedded chip in the spectrometer
Data Interception	1–4096 pixels	Data segment can be selected
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	97mmx81mmx31mm	
Weight	1980g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

Mercury fiber spectrometer MCSP

Features

- Unique M–optical structure with a grating, high end light detector and a SMA905 fiber connector
- Controlled by the computer through Micro–USB, RS232 or other connector for industrial control
- Unique software features automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement
- Spectral measurements including radiation, transmittance, absorbance and reflectivity
- Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.
- Wide band spectrum, large dynamic range, compact size and pleasant appearance
- Characteristics of mass–produced industrial–grade optical fiber spectrometers: excellent consistency, stability and reliability





Mercury fiber spectrometer MCSP

Applications

- Industrial process control
- Chemical industry
- Optical coating inspection
- Glass and transparent materials inspection
- Measuring light sources such as LEDs
- Fruit,vegetable residues, food and drugs detection
- Authenticity and year of jewelry relics detection
- R&D in science and technology

Mercury fiber spectrometer MCSP

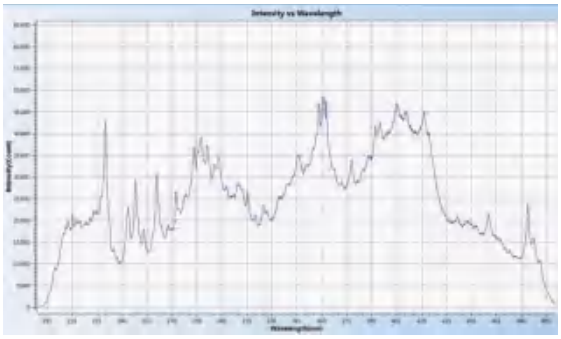
Specifications

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	360–800nm	
Spectral Resolution	FWHM 3nm@Hg 365nm@25μm slit	Depending on wavelengths and slit
Sorting Filter	Eliminate higher order spectrum	
Light Detector	Line array light detector	
SNR	600:1	Room temperature
ADC Resolution	16 bits	
Integration Time	1ms–15min	Depending on detector used
Data Output	Count vs. wavelength or pixel	
Data Average	1–100 times	The average can be done by embedded chip in the spectrometer
Data Interception	1–1500 pixels	Data segment can be selected
Power Supply	DC5V/100mA	
Communication	USB or RS232	
Operation Software	SPEC–GLA600	
Application Programming Interface	glaDevSys	For developing software by users
Dimensions	63mmx53mmx27mm	
Weight	150g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Storage Temperature	–20–70℃	

Portable analytical module for environmental gas DOAS-4010UV

Features

- The module includes a fiber spectrometer, an optical gas cell, a light source (xenon lamp or deuterium lamp) , a DOAS algorithm and a PC etc.
- High resolution
- Optional spectral range
- Optional light source
- Optional absorption length
- Excellent thermal and vibrating stability
- Easy to upgrade through modular design
- Easy to do assembly due to compact structure



Applications

- For analyzing and monitoring gases having UV band absorption, such as environmental gas analysis, industrial process monitoring and CEMS etc.

Portable analytical module for environmental gas DOAS-4010UV

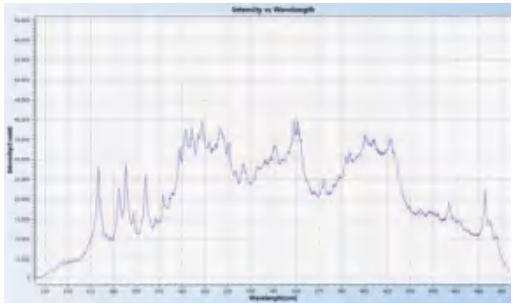
Specifications

Items	Specifications	Remarks
Light Path	0.6 or 1.1m	Optional upon request
Light Source	Xenon lamp or deuterium lamp	Optional upon request
Wavelength Range	190–380/190–480nm	Optional upon request
Communication	USB or RS232	
Gas Connector	Ø6mm	
Material of Main Part	Aluminium with coating	
Power Supply	DC12V/3A (spectrometer and xenon lamp) , DC12V/5A (industrial computer) , Average power 12W	
Lamp Cooling	Heatsink with a fan	For deuterium lamp
Weight	~3Kg	
Dimension	222mmx10mmx55mm	

Online analytical module for environmental gas DOAS-6010UV

Features

- The module includes a fiber spectrometer, an optical gas cell, a light source (xenon lamp or deuterium lamp) , a DOAS algorithm and a PC etc.
- High resolution
- Optional spectral range
- Optional light source
- Optional absorption length
- Excellent thermal and vibrating stability
- Easy to upgrade through modular design
- Easy to do assembly due to compact structure



Applications

- For analyzing and monitoring gases having UV band absorption, such as environmental gas monitoring, industrial process monitoring and CEMS etc.

Specifications

Items	Specifications	Remarks
Light Path	0.6m	Optional upon request
Light Source	Xenon lamp or deuterium lamp	Optional upon request
Wavelength Range	190–380/190–480nm	Optional upon request
Communication	USB or RS232	
Gas Connector	Ø6mm	
Material of Main Part	Aluminium with coating	
Power Supply	DC12V/3A (spectrometer and xenon lamp) , DC12V/5A（industrial computer）, Average power 12W	
Lamp Cooling	Heatsink with a fan	For deuterium lamp
Weight	~3Kg	
Dimension	222mmx10mmx55mm	

Spectral Sensing Module

Analytical module for ultra-low concentration emission DA3020UV

Features

- The module includes a fiber spectrometer, an optical gas cell, a light source (xenon lamp or deuterium lamp) , a DOAS algorithm and a PC etc.
- High resolution
- Optional spectral range
- Optional light source
- Optional absorption length
- Excellent thermal and vibrating stability
- Easy to upgrade through modular design
- Easy to do assembly due to compact structure

Applications

- For analyzing and monitoring gases (SO2、NO and NO2) having UV band absorption, such as environmental gas analysis, industrial process monitoring and CEMS etc.

Specifications

1.1 Two–factor conventional type

Order Number	Measurement range	Specifications	Remark
M–1100A2C	S02:0 ~ 100mg/m3 NO:0 ~ 100mg/m3	Indication Error：≤ ± 2%FS; Repeatability：≤1 %; Response Time：≤60 s; One Day Drift ：1.5%FS; One Week Drift：2%FS; Design Standard：HJ76–2017	

1.2 Direct measurement of nitrogen dioxide type by three factors

Order Number	Measurement range	Specifications	Remark
M–2800A3C	S02:0 ~ 100mg/m3 NO:0 ~ 100mg/m3 NO2:0 ~ 100mg/m3	Indication Error：≤ ± 2%FS; Repeatability：≤2 %; Response Time：≤120 s; One Day Drift ：2%FS; One Week Drift：3%FS; Design Standard：HJ76–2017	No additional installation of the NOx converter is required

1.2 Two factors are very low emission type

Order Number	Measurement range	Specifications	Remark
M–1100A2C	S02:0 ~ 50mg/m3 NO:0 ~ 50mg/m3	Indication Error：≤ ± 2%FS; Repeatability：≤2%; Response Time：≤60 s; One Day Drift ：2%FS; One Week Drift：3%FS; Design Standard：HJ76–2017	

Spectral Sensing Module

LED measurement module for environmental water analysis TLD2000

Features

- Consists of transmitting module and receiving module
- Unique–optical optical path structure, with LED light source and PD detector
- Total phosphorus, total nitrogen and COD are inspection in the water
- Small size to facilitate integration

Applications

- Environmental monitoring: water quality inspection

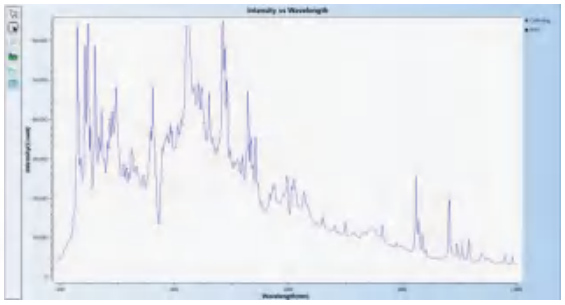
Specifications

Items	Specifications	Remarks
Light Source	LED	
Measurement Wavelength	420nm，600nm etc	Optional
Dimensions	Transmitting module：Φ34*52.5mm Receiving module：Φ34*37.5mm	
Weight	Transmitting module：60g Receiving module：90g	
Mounting	2xΦ3 countersunk	
Operating Temperature	25℃–40℃	
Operation Humidity	0–90%RH（No Condensation）	

Analytical module for environmental water WQD1000

Features

- Optional wavelength range of 190–380nm/190–840nm
- Unique spectral balance of 220nm and 275nm for better analysis of water
- Easy to do assembly due to compact structure



Applications

- Environmental water monitoring etc., for example, analyzing total nitrogen, total phosphor, chlorine ion, phosphate, TOC, COD and turbidness in water etc.

Specifications

Items	Specifications	Remarks
Spectral Range	190–380nm/190~840nm	Optional upon request
Spectral Resolution	<2.5nm	
Light Source	Xenon lamp	
Power of Light Source	2W/10W	
Stability	4%	Without average
Communication	RS232/USB	
Power Supplier	DC12V/3A	
Weight	~650g	

Spectral Sensing Module

Detection module for liquid fluorescence measurement FRM3000

Features

- The module includes a UV LED light source, a cuvette holder, a photodetector and an associated control circuit
- A short–wavelength light source is used to excited the liquid emission fluorescence, the photodetector measures the liquid fluorescence intensity thus achieving the correlation measurements
- Optional wavelength, compact structure, easy assembly, excellent thermal stability and vibration resistance etc.

Applications

- Water quality monitoring
- Blood inspection
- Other liquid inspection

Detection module for liquid fluorescence measurement FRM3000

Specifications

Items	Specifications	Remarks
Excitation Wavelength	254nm、365nm	Optional
Fluorescence Wavelength	420nm、560nm	Optional
Bandwidth	10nm	
Cuvette Dimensions	12.5x12.5mm	Customizable
Cuvette Material	Quartz	
Communication	RS232、485	Optional
Power Supply	DC5V/2A	
Light Source	UV LED、white light LED	Optional
Dimensions	58.6x35.6x40mm	
Weight	120g	

Spectral Sensing Module

Optical module for total nitrogen analysis WNSP01Y

Features

- Grating spectroscopy, CCD or CMOS light detector and SMA905 fiber connector
- Controlled to a computer through USB, RS232 connector for industrial control
- Direct output 220nm and 275nm light intensity for the total nitrogen inspection
- Large dynamic range
- Compact size and pleasant appearance
- Software interface suitable for industrial control
- Characteristics of a mass–produced industrial–grade optical fiber spectrometer: excellent consistency, stability, and reliability

Applications

- Environmental water monitoring: analysis of water quality etc.

Optical module for total nitrogen analysis WNSP01Y

Specifications

Items	Specifications	Remarks
Fiber Connector	SMA905	
Measuring Wavelength	220nm、275mn	
SNR	300:1	Room temperature
Integration Time	1ms–15min	Depending on detector used
Power Supply	5V/280mA	
Communication	RS232	
TTL Output	TTL triggers and controls the xenon lamp	
Data Average	1–100 times	The average can be done by embedded chip in the spectrometer
Dimensions	60mmx55mmx26mm	
Weight	160g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	–10–50℃	
Operation Humidity	0 ~ 80%RH（No Condensation）	

Spectral Module for Total Nitrogen Analysis WAM1000

Features

- Directly outputs of 220nm and 275nm light intensity for the total nitrogen inspection, easy for customers to calculate the total nitrogen concentration in the water
- Easy to do assembly due to compact structure, excellent thermal stability and vibration resistance
- Suitable for large-scale environmental water quality monitoring application

Applications

- Environmental water monitoring etc., for example, analyzing and measuring total nitrogen in water

Spectral Module for Total Nitrogen Analysis WAM1000

Specifications

Items	Specifications	Remarks
Measuring Wavelength	220nm、275nm	8 channel at most
Light Source	Xenon lamp	
Light Source Pulse–frequency	Max.70Hz	
Power of Light Source	Max.2W	
Dissolve Cup Outer Diameter	25mm	
Stability	2%	With 20 average
Heating Coil	8Ω	
Heating Coil Power Supply	DC24V/2.5~4.1A	60~100W
Thalposis	PT100	
Gas Vent/Water Inlet and Outlet	M6 or 1/4–28	Optional upon request
Communication	RS232	
Power Supplier	DC12V/3A	
Weight	~1060g	

Spectral Module for Total Nitrogen Analysis WAM1010

Features

- Direct outputs of 220nm and 275nm light intensity for the total nitrogen inspection, easy for customers to calculate the total nitrogen concentration in the water
- Easy to do assembly due to compact structure, excellent thermal stability and vibration resistance
- Suitable for large–scale environmental water quality monitoring application

Applications

- Environmental water monitoring etc., for example, analyzing and measuring total nitrogen in water

Spectral Module for Total Nitrogen Analysis WAM1010

Specifications

Items	Specifications	Remarks
Measuring Wavelength	220nm、275nm	8 channel at most
Light Source	Xenon lamp	
Light Source Pulse–frequency	Max.70Hz	
Power of Light Source	Max.2W	
Dissolve Cup Outer Diameter	25mm	
Stability	2%	With 20 average
Heating Coil	8Ω	
Heating Coil Power Supply	DC24V/2.5~4.1A	60~100W
Thalposis	PT100	
Gas Vent/Water Inlet and Outlet	M6 or 1/4–28	Optional upon request
Communication	RS232	
Power Supplier	DC12V/3A	
Weight	~1100g	

Spectral Module for Total Nitrogen Analysis WAM4000

Features

- Direct outputs of 220nm and 275nm light intensity for the total nitrogen inspection, easy for customers to calculate the total nitrogen concentration in the water
- Easy to do assembly due to compact structure, excellent thermal stability and vibration resistance
- Assembled magnetic valves
- Suitable for large–scale environmental water quality monitoring application

Applications

- Environmental water monitoring etc., for example, analyzing and measuring total nitrogen in water

Spectral Module for Total Nitrogen Analysis WAM4000

Specifications

Items	Specifications	Remarks
Measuring Wavelength	220nm、275nm	8 channel at most
Light Source	Xenon lamp	
Light Source Pulse–frequency	Max.70Hz	
Power of Light Source	Max.2W	
Dissolve Cup Outer Diameter	17mm	
Stability	2%	With 20 average
Heating Coil	5.5Ω	
Heating Coil Power Supply	DC24V/2.5~4.1A	60~100W
Thalposis	PT100	
Gas Vent/Water Inlet and Outlet	1/4–28UNF	Optional upon request
Communication	RS232	
Power Supplier	DC12V/3A	
Weight	~1200g	
Magnetic Valve	Voltage:24V/1.5Mpa	

Spectral Sensing Module

Spectral Module for Total Nitrogen Analysis WAM4001

Features

- Direct outputs of 220nm and 275nm light intensity for the total nitrogen inspection, easy for customers to calculate the total nitrogen concentration in the water
- Easy to do assembly due to compact structure, excellent thermal stability and vibration resistance
- Suitable for large–scale environmental water quality monitoring application

Applications

- Environmental water monitoring etc., for example, analyzing and measuring total nitrogen in water

Spectral Module for Total Nitrogen Analysis WAM4001

Specifications

Items	Specifications	Remarks
Measuring Wavelength	220nm、275nm	8 channel at most
Light Source	Xenon lamp	
Light Source Pulse–frequency	Max.70Hz	
Power of Light Source	Max.2W	
Dissolve Cup Outer Diameter	17mm	
Stability	2%	With 20 average
Heating Coil	5.5Ω	
Heating Coil Power Supply	DC24V/2.5~4.1A	60~100W
Thalposis	PT100	
Gas Vent/Water Inlet and Outlet	1/4–28UNF	Optional upon request
Communication	RS232	
Power Supplier	DC12V/3A	
Weight	~1000g	

Spectral Module for Total Nitrogen Analysis WAM4010

Features

- Direct outputs of 220nm and 275nm light intensity for the total nitrogen inspection,easy for customers to calculate the total nitrogen concentration in the water
- Easy to do assembly due to compact structure, excellent thermal stability and vibration resistance
- Assembled magnetic valves
- Suitable for large–scale environmental water quality monitoring application

Applications

- Environmental water monitoring etc., for example, analyzing and measuring total nitrogen in water

Spectral Module for Total Nitrogen Analysis WAM4010

Specifications

Items	Specifications	Remarks
Measuring Wavelength	220nm、275nm	8 channel at most
Light Source	Xenon lamp	
Light Source Pulse–frequency	Max.70Hz	
Power of Light Source	Max.2W	
Dissolve Cup Outer Diameter	17mm	
Stability	2%	With 20 average
Heating Coil	5.5Ω	
Heating Coil Power Supply	DC24V/2.5~4.1A	60~100W
Thalposis	PT100	
Gas Vent/Water Inlet and Outlet	1/4–28UNF	Optional upon request
Communication	RS232	
Power Supplier	DC12V/3A	
Weight	~1000g	
Magnetic Valve	Voltage:24V/1.5Mpa	

Spectral Sensing Module

Spectral Module for Total Nitrogen Analysis WAM4011

Features

- Direct outputs of 220nm and 275nm light intensity for the total nitrogen inspection,easy for customers to calculate the total nitrogen concentration in the water
- Easy to do assembly due to compact structure, excellent thermal stability and vibration resistance
- Suitable for large–scale environmental water quality monitoring application

Applications

- Environmental water monitoring etc., for example, analyzing and measuring total nitrogen in water

Spectral Module for Total Nitrogen Analysis WAM4011

Specifications

Items	Specifications	Remarks
Measuring Wavelength	220nm、275nm	8 channel at most
Light Source	Xenon lamp	
Light Source Pulse–frequency	Max.70Hz	
Power of Light Source	Max.2W	
Dissolve Cup Outer Diameter	17mm	
Stability	2%	With 20 average
Heating Coil	5.5Ω	
Heating Coil Power Supply	DC24V/2.5~4.1A	60~100W
Thalposis	PT100	
Gas Vent/Water Inlet and Outlet	1/4–28UNF	Optional upon request
Communication	RS232	
Power Supplier	DC12V/3A	
Weight	~1000g	

UV small optical gas cell GC3030UV

The optical gas cells produced by Glit has two types: single reflection and multiple reflection, featuring long 0ptical path(such as 12 and 18m etc), stable optics, good anti–contamination, long lifetime and cost effective etc. The products are mainly applied in air pollution detection, environmental gas monitoring, industrial production process monitoring and CEMS etc. Customization can be fulfilled according to the requirements.

Specifications

Items	Specifications
Wavelength Range	190–900nm
Optical Path Length	2.8m、3.6m
Fiber Interface	SMA905
External Dimensions	247mmx88mmx52mm
Volume	447ml
Pressurization	<0.15Mpa
Temperature Resistance	≤120℃
Cavity Material	Aluminium alloy
Window Material	UV fused silica
Air Inlet and Outlet	PC6–01

UV small optical gas cell GC3040UV

Specifications

Items	Specifications
Wavelength Range	190–900nm
Optical Path Length	2.8m、3.6m
Fiber Interface	SMA905
External Dimensions	260mmx75mmx50mm
Volume	282ml
Pressurization	<0.15Mpa
Temperature Resistance	⩽120℃
Cavity Material	Aluminium alloy
Window Material	UV fused silica
Air Inlet and Outlet	PC6–01

UV medium optical gas cell GC2000UV

Specifications

Items	Specifications
Wavelength Range	190–900nm
Optical Path Length	1400, 2800, 4200mm
Fiber Interface	SMA905
External Dimensions	386.5mmx88mmx52mm
Volume	762ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminium alloy with anti–corrosion treatment

UV mini optical gas cell GC4010UV

Specifications

Items	Specifications
Wavelength Range	190–900nm
Optical Path Length	380–1100mm
Fiber Interface	SMA905
Maintenance of Optics	Cleaning window
External Dimensions	125mmx44mmx27mm
Volume	48ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminium alloy with anti–corrosion treatment

UV long path optical gas cell GC5010UV

Specifications

Items	Specifications
Wavelength Range	190–900nm
Optical Path Length	4000–12000mm
Fiber Interface	SMA905
External Dimensions	542.8mmx75mmx50mm
Volume	682ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminium alloy with anti–corrosion treatment

UV portable optical gas cell GC7010UV

Specifications

Items	Specifications
Wavelength Range	190–900nm
Optical Path Length	600mm
Fiber Interface	SMA905
Volume	47ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminium alloy with anti–corrosion treatment

UV high temperature optical gas cell GC8010UV

Specifications

Items	Specifications
Wavelength Range	190–900nm
Optical Path Length	2000mm
Fiber Interface	SMA905
External Dimensions	223mmx63mmx50mm
Volume	122ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminium alloy with anti–corrosion treatment

UV high temperature optical gas cell GC8020UV

Specifications

tems	Specifications
Wavelength Range	190–900nm
Optical Path Length	340mm
Fiber Interface	SMA905
External Dimensions	217.5mmx50mmx50mm
Volume	140ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminium alloy with anti–corrosion treatment

Infrared conventional optical gas cell GC2010NR

Specifications

tems	Specifications
Wavelength Range	0.8–14 μ m
Optical Path Length	4200, 5600, 7100, 8100mm
Optical Coupling	Spatial beam: 0.1–3mmx0.5° conic angle
External Dimensions	386.5mmx88mmx52mm
Volume	762ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminium alloy with anti–corrosion treatment

Infrared miniature optical gas cell GC3030NR

Specifications

Items	Specifications
Wavelength Range	0.8–14 μ m
Optical Path Length	2m、2.8m、3.6m、4.4m、5.2m、6m
Fiber Interface	SMA905
External Dimensions	247mmx88mmx52mm
Volume	447ml
Pressurization	<0.15Mpa
Temperature Resistance	⩽120℃
Cavity Material	Aluminium alloy

Infrared long optical gas cell GC5010NR

Specifications

Items	Specifications
Wavelength Range	0.8–14 μ m
Optical Path Length	10000, 12000, 24000mm
Optical Coupling	Spatial beam: 0.1–3mmx0.5° conic angle
External Dimensions	540mmx75mmx50mm
Volume	682ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminium alloy with anti–corrosion treatment

FTIR optical gas cell GCDL3020NR

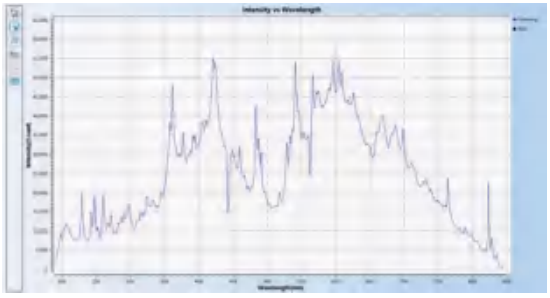
Specifications

Items	Specifications
Wavelength Range	0.8–14 μ m (Gold–plated and protective film)
Optical Path Length	2.8m、3.6m、4.4m、5.2m、6.0m
Optical Coupling	Space light
External Dimensions	252.5mmx88mmx52mm
Pressurization	<0.2Mpa
Warming–up time	30min（Related to the working ambient temperature）
Constant temperature	40℃
Volume	430ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminium alloy with anti–corrosion treatment

Xenon lamp XYM1010

Features

- Xenon light source with fiber coupling output
- Work in pulse mode with adjustable repetition
- Easily integrated with spectrometers and other devices
- Excellent stability
- Default fiber interface is SMA905, other fiber interfaces such as FC etc. are optional



Applications

- Environmental inspection: inspection of water quality and air pollution
- Spectral analysis
- Instrument lighting
- Online inspections
- R & D in science and technology

Xenon lamp XYM1010

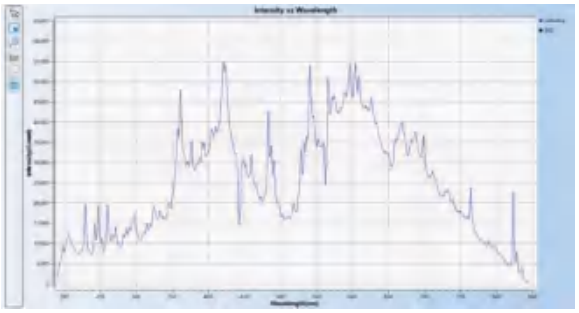
Specifications

Items	Specifications	Units
Wavelength Range	185–2000	nm
Fiber Connector	SMA 905	
Power Supply	DC12/2	V/A
Lamp Power	10	W
Pulse Repetition	Max 100	Hz
Trigger Input Resistance	330	Ω
Stability	2.5%	
Life Time	10^9	times
Dimensions	110x71x43	mm
Operating Temperature	0–45	°C

Xenon lamp XYM2020

Features

- Xenon light source with fiber coupling output
- Work in pulse mode with adjustable repetition
- Easily integrated with spectrometers and other devices
- Excellent stability
- Compact and cost effective
- Default fiber interface is SMA905, other fiber interfaces such as FC etc. are optional



Applications

- Environmental inspection: inspection of water quality and air pollution
- Spectral analysis
- Instrument lighting
- Online inspections
- R & D in science and technology

Xenon lamp XYM2020

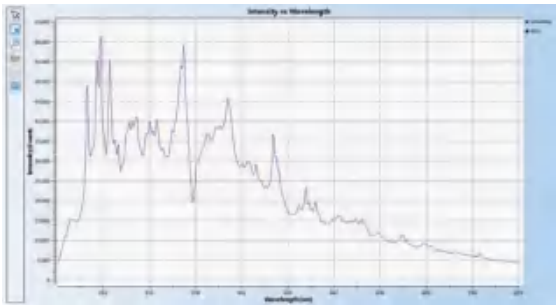
Specifications

Items	Specifications	Units
Wavelength Range	185–2000	nm
Fiber Connector	SMA905	
Power Supply	DC12/1.5	V/A
Lamp Power	2	W
Pulse Repetition	Max 72	Hz
Trigger Input Resistance	330	Ω
Stability	1.5%	
Life Time	10^9	pulses
Dimensions	42x46x53	mm
Operating Temperature	0–45	°C

Seahorse xenon lamp XYM3010

Features

- Xenon light source with fiber coupling output
- Work in pulse mode with adjustable repetition
- Easily integrated with spectrometers and other devices
- Excellent stability
- Compact and cost effective
- Default fiber interface is SMA905, other fiber interfaces such as FC etc. are optional



Applications

- Environmental inspection: particularly for the immersion probe for in situ water measurement
- Industrial process control
- Online inspection
- R & D in science and technology

Seahorse xenon lamp XYM3010

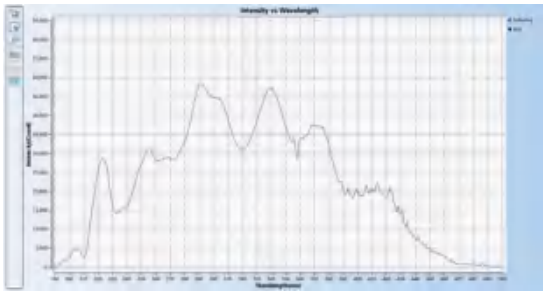
Specifications

Items	Specifications	Units
Wavelength Range	185–2000	nm
Arc Length	1.5	mm
Light Window Material	UV fused silica	
Fiber Connector	SMA905	
Input Voltage	DC5 ~ 12	V
Main Discharge Capacity	0.099	μ F
Lamp Power	3	W
Trigger Input Resistance	330	Ω
Stability（Peak to Peak）	1.5	%
Life Time	10^9	pulses
Dimensions	Φ36x107	mm
Weight	115	g
Operation Humidity	85	% RH
Operating Temperature	0–45	° C

Deuterium lamp DYM 1000

Features

- High power deuterium light source with fiber coupling output
- Easily integrated with spectrometers and other devices
- Excellent stability
- Default fiber interface is SMA905, other fiber interfaces such as FC etc. are optional



Applications

- Environmental inspection: inspection of water quality and air pollution
- Spectral analysis
- Instrument lighting
- Online inspections
- R & D in science and technology

Deuterium lamp DYM 1000

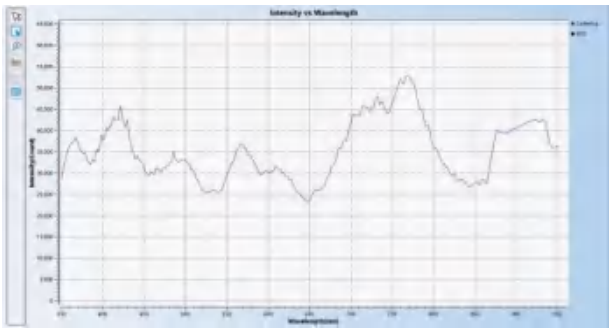
Specifications

Items	Specifications	Units
Wavelength Range	185–400	nm
Fiber Connector	SMA905	
Power Supply	AC220/0.4	V/A
Trigger Voltage	2.5	V
Trigger Current	~3.3	A
Output Drift	0.16%	Peak–Peak
Life Time	2000	hrs
Dimensions	105x83x115	mm
Operating Temperature	0–45	°C

NIR enhanced broad band light source GL-D2T-V01

Features

- A broad spectrum of 200nm to 2500nm (depending on the filter used) equalized with near–infrared light enhancement
- Combines with a CCD or CMOS spectrometer for wide dynamic range and broadband spectral analysis without saturating the detector, effectively improving signal–to–noise ratio of the near– infrared band
- Adjust the output intensity of two tungsten lamps using knobs and adjust the output intensity of the deuterium lamp using filters



Applications

- Instrument lighting
- Chemical industry
- Jewelry inspection
- Optical coating inspection
- Glass inspection
- Auto dimming film inspection
- Mobile phone mask inspection
- R & D in science and technology

NIR enhanced broad band light source GL-D2T-V01

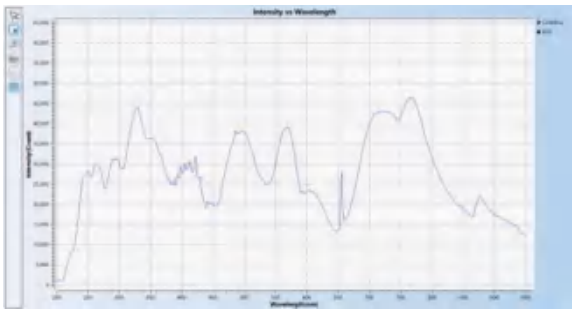
Specifications

Items	Deuterium Lamp	Tungsten Lamp1	Tungsten Lamp2
Wavelength Range	300–500nm depending on the filter used	400–2500nm depending on the filter used	850–2500nm depending on the filter used
Light Output Connector	SMA905 fiber connector		
Output Stability	0.16%	0.14%	0.22%
Tungsten Lamps Adjustable Range	0–100%		
Warm–up Time	20min	20min	20min
Lamp Power	Anode: max75VDC/300mA Filament operation: 1VDC, 1.8A Filament warm–up: 2.5VDC, 4A	20W/12V	20W/12V
Lamp Lifetime	2000hrs	2000hrs	2000hrs
Current Drift	± 0.05%/hr after 30min	––	––
Voltage Drift	––	<0.5%	<0.5%
Color Temperature	––	3000K	3000K
Power Supply	AC220V/1.2A		
Dimensions	322mmx203mmx115mm		
Weight	~4 Kg		
Operating Temperature	0–45 °C		

NIR enhanced broad band light source GL-D2T-V02

Features

- A broad spectrum of 200nm to 2500nm (depending on the filter used) equalized with near–infrared light enhancement
- Combines with a CCD or CMOS spectrometer for wide dynamic range and broadband spectral analysis without saturating the detector, effectively improving signal–to–noise ratio of the near– infrared band
- Adjust the output intensity of two tungsten lamps using knobs and adjust the output intensity of the deuterium lamp using filters



Applications

- Instrument lighting
- Chemical industry
- Jewelry inspection
- Optical coating inspection
- Glass inspection
- Auto dimming film inspection
- Mobile phone mask inspection
- R & D in science and technology

NIR enhanced broad band light source GL-D2T-V02

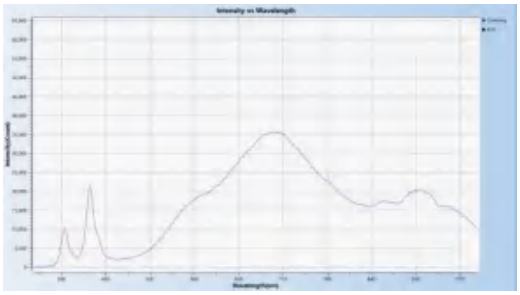
Specifications

Items	Deuterium Lamp	Tungsten Lamp
Wavelength Range	300–500nm depending on the filter used	400–2500nm depending on the filter used
Light Output Connector	SMA905 fiber connector	
Output Stability	0.16%	0.14%
Tungsten Lamps Adjustable Range	0–100%	
Warm–up Time	20min	20min
Lamp Power	Anode: max75VDC/300mA, Filament operation: 1VDC, 1.8A, Filament warm–up: 2.5VDC, 4A	20W/12V
Lamp Lifetime	2000hrs	2000hrs
Current Drift	± 0.05%/hr after 30min	––
Voltage Drift	––	<0.5%
Color Temperature	––	3000K
Power Supply	AC220V/0.6A	
Dimensions	250mmx140mmx180mm	
Weight	~3 Kg	
Operating Temperature	0–45 °C	

LED-tungsten light source GTL1000

Features

- Combined output from 395nmLED, 430nmLED light source and tungsten light source
- 0–100% adjustable output light intensity
- Easily integrated with spectrometers and other devices
- Compact, versatile and cost effective



Applications

- Instrument lighting
- Spectral analysis
- Material inspections
- Online inspections
- R & D in science and technology

LED-tungsten light source GTL1000

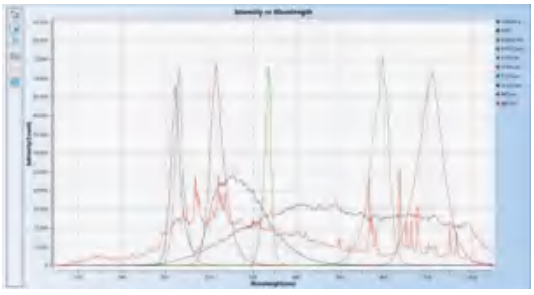
Specifications

Items	Specifications	Units
Wavelength Range	395–700	nm
Light Source	395 LED、430 LED、tungsten light	
Adjustable Range	0–100%	
Fiber Connector	SMA905	
Power Supply	5/2	V/A
Dimensions	104x83x29	mm
Weight	300	g

Multi-wavelength combined light source MTL1000

Features

- Combined output of RGB LED, white light LED, 850nm LED, 940nm LED light source, tungsten light source and xenon lamp
- The light sources are integrated and output through a fiber connector
- Different light sources were manually selected and matched with the spectrometer for spectral analysis
- Especially suitable for scientific research, teaching, experimental use



Applications

- Teaching experiment
- R & D in science and technology

Multi-wavelength combined light source MTL1000

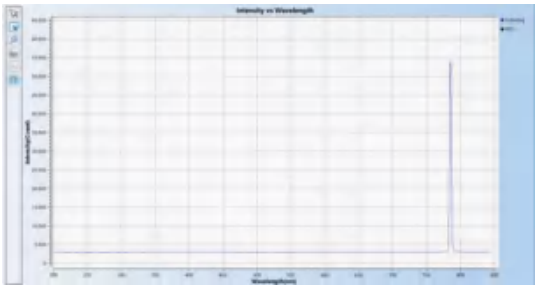
Specifications

Items	Specifications	Remark
Wavelength Range	395–700nm	Multi–light source combination
Light Source	RGB LED、white light LED、850nm LED、940nm LED light source、tungsten light source and xenon lamp etc	
Total Power of Light Source	40W	
Operation Temperature	0℃–45℃	
Power Supply	220V@50Hz	
Dimensions	250x250x125mm	
Weight	~4KG	

785nm laser GL-785LD-500

Features

- High power 785nm laser with fiber coupling output
- Three operating modes: CW, pulse and external trigger
- Easily integrated with spectrometers and other devices
- Excellent stability
- Compact, versatile and cost effective
- Default fiber interface is SMA905, other fiber interfaces such as FC etc. are optional



Applications

- Instrument lighting
- Raman spectroscopy
- Spectral analysis
- Material inspections
- Online inspections
- R & D in science and technology

785nm laser GL-785LD-500

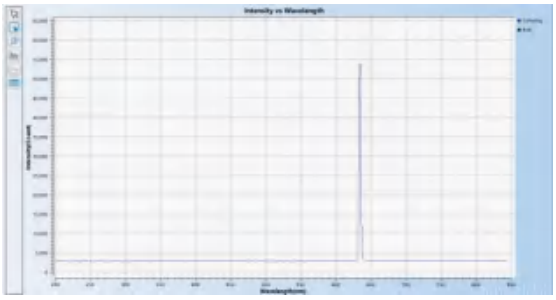
Specifications

Items	Specifications	Units
Fiber Connector	SMA905 or FC	Upon request
Center Wavelength	785	nm
Wavelength FWHM	0.1nm	
Output Power	0–500	mW
Output Stability	0.5	%
Threshold Current	300 to 350	mA
Power Supply	DC5/1.5	V/A
Communication	USB	
Cooling Mode	Built–in TEC, with an outside heat sink	
Dimensions	135x75x35	mm
Weight	300	g
Expected Lifetime	>10,000	hrs
Laser Operating Temperature	20–30	°C
Storage Temperature	–20–70	°C

635nm laser GL-635LD-003

Features

- 635nm laser with fiber coupling output
- Three operating modes: CW, pulse and external trigger
- Easily integrated with spectrometers and other devices
- Excellent stability
- Default fiber interface is SMA905, other fiber interfaces such as FC etc. are optional



Applications

- Instrument lighting
- Spectral analysis
- Material inspections
- Online inspections
- R & D in science and technology

635nm laser GL-635LD-003

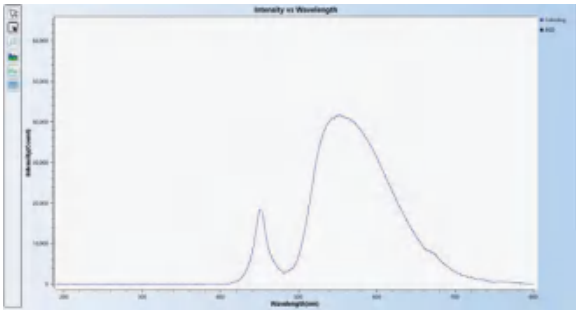
Specifications

Items	Specifications	Units
Fiber Connector	SMA905 or FC	Upon request
Center Wavelength	635	nm
Output Power	0–6	mW
Output Stability	0.5	%
Threshold Current	20 to 40	mA
Power Supply	DC5/0.5	V/A
Communication	USB	
Cooling Mode	Built–in TEC, with an outside heat sink	
Dimensions	135x75x35	mm
Weight	300	g
Expected Lifetime	>10,000	hrs
Laser Operating Temperature	20–30	°C
Storage Temperature	–20–70	°C

White LED light source GL-LEDW-3W

Features

- White light with fiber–coupled output
- Three operating modes: continuous, pulse and external trigger
- Easily integrated with spectrometers and other devices
- Excellent stability
- Default fiber interface is SMA905, other fiber interfaces such as FC etc. are optional



Applications

- Instrument lighting
- Spectral analysis
- Material inspection
- Online inspections
- R & D in science and technology

White LED light source GL-LEDW-3W

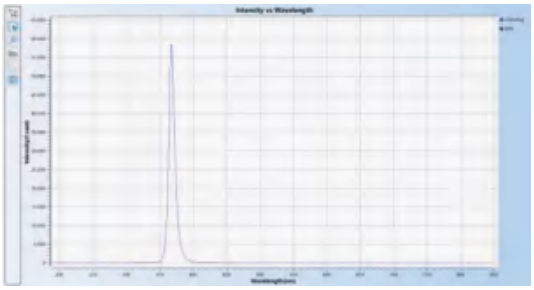
Specifications

Items	Specifications	Units
Wavelength Range	410–700	nm
Fiber Connector	SMA905	
Output Power	0–2 (Depending on the output optical coupling structure)	mW
Output Stability	0.31%	
Adjustable Light Intensity	0–100%	
Power Supply	DC5/0.6	V/A
Warm up Time	10	S
Control	PC	
Communication	USB	
Lifetime	20,000	hrs
Cooling	Built–in TEC, with an outside heat sink	
Dimensions	150x97x40	mm
Weight	470	g
Storage Temperature	–20–70	℃

UV-LED curing lamp GL-UVLA-3W

Features

- Torch–shaped UV LED light curing lamp
- Nichia UV LED employed
- 0–100% adjustable UV light intensity
- UV light output with efficient coupling and stable output
- Convenient hand–held operation
- Efficient thermal design
- Three different switching modes
- Can be used as a universal UV light source



Applications

- UV curing
- Instrument lighting
- Spectral analysis
- Material inspection
- Online inspections
- R & D in science and technology

UV-LED curing lamp GL-UVLA-3W

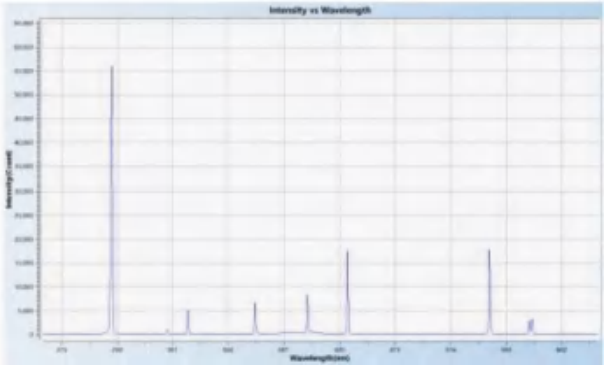
Specifications

Items	Specifications	Units
Wavelength	365 ± 5	nm
Working Distance	20	mm
Focusing Spot	Ø5	mm
Power Supply	AC220/0.1	V/A
Switching Mode	1) By a button switch assembled on the UV LED body; 2) By a timing switch on the power supply panel ; 3) Or by a foot controlled pedal.	
Timer	1)1–30s，2) 1–30min, 3) CW	
Expected Lifetime	20,000	hrs
Cooling	Radial heat sinks on the UV LED light source’s body	
Dimensions of the UV LED Light Source’s Body	Ø28x140	mm
Weight of the UV LED Light Source’s Body	~155	g
Power Supply Dimensions	144x165x67	mm
Power Supply Weight	~1050	g

Wavelength calibrates light source HYM 3000

Features

- Produce a specific wavelength that can be used for the calibration of various spectrometers or monochromators
- Excellent wavelength stability ensure the reliability of the calibration
- High light intensity and brightness to be easily detected by the detector ensures effective calibration in different environments
- Stray light or noise is very small, which can effectively avoid interference caused by wavelength calibration



Applications

- Spectrometer wavelength calibration

Wavelength calibrates light source HYM 3000

Specifications

Items	Specifications	Remark
Wavelength Range	190–920nm	
Calibrated wavelength	253.652nm、313.155nm、 365.015nm、404.656nm、 435.833nm、546.074nm、 576.960nm、579.066nm	
Output Connector	SMA905	
Total Power of Light Source	3W	
Power Supply	DC12V	
Weight	460g	

Gas analyzer GA2000

Features

- Consists of a ultraviolet spectrometer, an optical gas measuring cell, a ultraviolet light source and an algorithm, which have been independently designed and produced by Glit
- High resolution
- Excellent thermal and vibrating stability
- Optional spectral range
- Optional absorption length
- Easy to upgrade through modular design
- Easy to do assembly due to compact

structure

Applications

- Analyzing the gas absorbed using ultraviolet spectrum (such as SO2, NO and NO2 etc.), which is used for monitoring flue gas, automobile exhaust, ship exhaust and odour gas etc.

Gas analyzer GA2000

Specifications

Items	Specifications	Remarks
Measurement Gas	SO2 and NO	
Measurement Principle	DOAS: SO_2, NO	
Measurement Range	0 ~ 200ppm(SO2,NO)	
Density Resolution	SO2/NO:0.01ppm	
Linearity Error	≤ ± 1.5%F.S.	
Repeatability	≤ ± 0.5%F.S.	
Zero Drift	≤ ± 1.5%F.S./7d	
Measurement Range Drift	≤ ± 1.5%F.S./7d	
Response Time	＜30s(T90)	
Optimum Flow	1.0L/min	
Digital Output	2 source contacts and 3 dry contacts	
Digital Output Type	Maximum/minimum, programmable	
Modbus Digital Output	Modbus	
Modbus Digital Output Type	RS48（Default)/RS232（Optional）	
Software Upgrade	Using USB	
Display	7–inch capacitive touch screen	
LCD Type	RGB colour	
Operation System	Linux	

Specifications

Items	Specifications	Remarks
Power Supplier	220VAC，50Hz	
Peak Current	<2A@220V	
Average Power Consumption	<60W	
Atmospheric Pressure	(86~108)kPa	
Power Consumption	200mA/12V	
Operation Temperature	0℃ ~ +40℃	
Operation Humidity	0 ~ 95%RH	

Ultra-low density gas analyzer GA3000

Features

- Consists of a ultraviolet spectrometer, an optical gas measuring cell, a ultraviolet light source and an algorithm, which have been independently designed and produced by Glit
- High resolution
- Excellent thermal and vibrating stability
- Optional spectral range
- Optional absorption length
- Easy to upgrade through modular design
- Easy to do assembly due to compact structure

Applications

- Analyzing the gas absorbed using ultraviolet spectrum (such as SO2, NO and NO2 etc.), which is used for monitoring flue gas, automobile exhaust, ship exhaust and odour gas etc.

Ultra-low density gas analyzer GA3000

Specifications

Items	Specifications	Remarks
Measurement Gas	SO2, NO and NO2	
Measurement Principle	DOAS: SO_2, NO, NO2	
Measurement Range	0 ~ 100mg/m3(SO2, NO and NO2)	
Density Resolution	SO2/NO/NO2:0.1mg/m3	
Linearity Error	≤ ± 1.5%F.S.	
Repeatability	≤ ± 0.5%F.S.	
Zero Drift	≤ ± 1.5%F.S./7d	
Measurement Range Drift	≤ ± 1.5%F.S./7d	
Response Time	< 30s(T90)	
Optimum Flow	1.0L/min	
Digital Output	2 source contacts and 3 dry contacts	
Digital Output Type	Maximum/minimum, programmable	
Modbus Digital Output	Modbus	
Modbus Digital Output Type	RS48（Default)/RS232（Optional）	
Software Upgrade	Using USB	

Ultra-low density gas analyzer GA3000

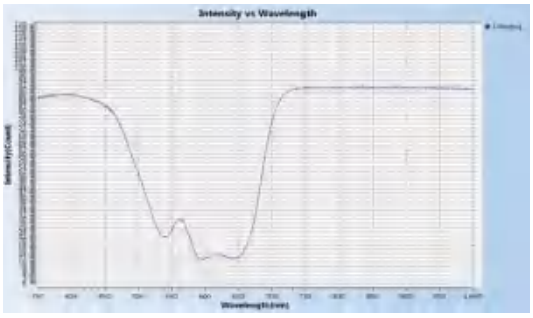
Specifications

Items	Specifications	Remarks
Display	7–inch capacitive touch screen	
LCD Type	RGB colour	
Operation System	Linux	
Power Supplier	220VAC，50Hz	
Peak Current	<2A@220V	
Average Power Consumption	<60W	
Atmospheric Pressure	(86~108)kPa	
Power Consumption	200mA/12V	
Operation Temperature	0℃ ~ +40℃	
Operation Humidity	0 ~ 95%RH	

Optical transmittance/reflectivity inspector GL-SPM-D2T

Features

- Excellent thermal and vibrating stability
- Excellent structure design
- Precision dual–optical–path system
- Unique design of reflective collimation optics avoiding chromatic error
- Measurements of transmittance and reflectance of samples
- Powerful data processing makes full use of the measurement results and edition more simply and quickly
- Excellent wavelength accuracy and repeatability
- Operate conveniently and maintenance easily



Applications

- Optical coating inspection
- Auto dimming film inspection
- Glass inspection
- R&D in science and technology

Optical transmittance/reflectivity inspector GL-SPM-D2T

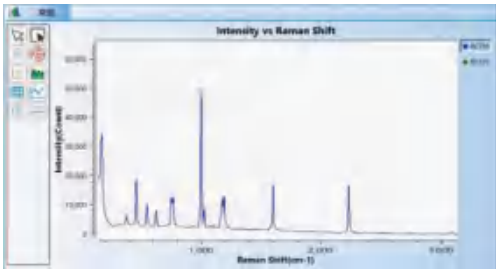
Specifications

Items	Specifications
Wavelength Range	190–800nm
Spectral Resolution	FWHM0.84nm @577nm@25 μ m
Stray Light	0.06%@532nm/0.045%@785nm
Integration Time	8ms–15min
Power Supply	220V/0.7A
Communication	USB
Spectrometer Configuration	Auto configurating, including reading of calibration coefficients and products' information etc.
Data Output	Count vs. wavelength or pixel
Operating Software	SPEC–GLA600 (by Glit)
Dimensions	450mmx300mmx207mm
Weight	~6.5Kg
Operating Temperature	0–45° C

785nm Portable raman spectrometer GL-PRS-785

Features

- 785nm excitation laser, high end light detector and grating spectroscopy
- Optical probe emits laser with a high output coupling efficiency
- Software has the functions of laser control, Raman spectroscopy, database management, background substance and log (recording the experiment content) etc.
- Non–contact Raman spectral measurement and analysis
- Excellent thermal and vibrating stability
- Easy to carry and use



Applications

- Security: poisons, dangerous goods, illicit drugs, biochemical analysis
- Civil life: food, drug identification
- Identification of jewelry/heritage: jewelry identification, artifacts or nature, place of origin and age
- Medical applications: DNA, human metabolites (blood, urine etc.) and cancer cells identification
- Geology: field prospecting, mineral composition qualitative analysis and inclusion studies
- R & D in science and technology

785nm Portable raman spectrometer GL-PRS-785

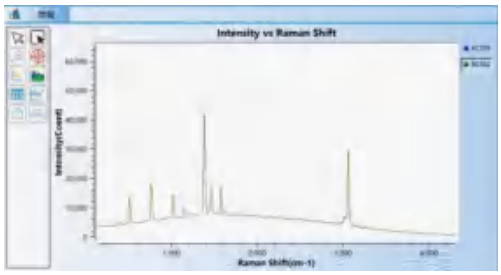
Specifications

Items	Specifications	Remarks
Excitation Wavelength	785nm	
Wavelength FWHM	0.1nm	
Raman Probe Laser Power	0–300mW	
Working Distance of Raman Probe	~4mm (Default)	Optional upon request
Raman Spectrum	200–2800cm–1	
Spectral Resolution	8cm–1@Hg912nm	
Stray Light	0.31% @785nm	
Light Detector	High end detector	Cooled CMOS optional upon request
Pixel Number	2048	
Pixel Size	14 μ mx200 μ m	
SNR	440:1@1000.7cm–1 Benzonitrile	Cooled light detector
ADC Resolution	16 bits	
Integration Time	1ms–15min	Dependingon the detector used
Power Supply	DC12V/5A	
Probe Fiber	1M armed	
Dimensions	508mmx373mmx147mm	
Weight	6Kg	
Operating Temperature	0–45℃	
Storage Temperature	–10–55℃	

532nm Portable raman spectrometer GL-PRS-532

Features

- 532nm excitation light, high end light detector, grating spectroscopy
- Optical probe acquires the Raman light of the substance with high coupling efficiency of the excitation laser
- Software has functions of laser control, Raman spectroscopy, database management, analyzing the substance and log (recording the experiment content etc.)
- Non–contact Raman spectroscopy measurement and analysis
- Excellent thermal and vibrating stability



Applications

- Security: poisons, dangerous goods, illicit drugs, biochemical analysis
- Civil life: food, drug identification
- Identification of jewelry/heritage: jewelry identification, artifacts or nature , place of origin and age
- Medical applications: DNA, human metabolites (blood, urine, etc.) and cancer cells identification
- Geology: field prospecting, mineral composition qualitative analysis and inclusion studies
- R & D in science and technology

532nm Portable raman spectrometer GL-PRS-532

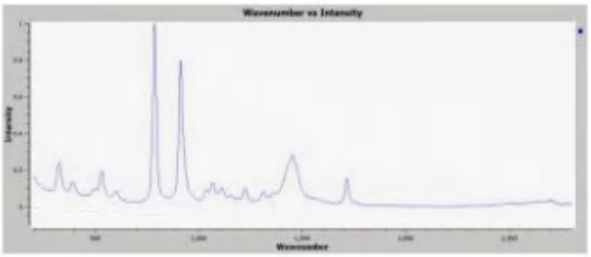
Specifications

Items	Specifications	Remarks
Excitation Wavelength	532nm	
Raman Probe Laser Power	0–50mW	
Working Distance of Raman Probe	~4mm (Default)	Optional upon request
Raman Spectrum	200–4000cm–1	
Spectral Resolution	15cm–1@1000.7cm–1 Benzonitrile	
Stray Light	0.29% @532nm	
Light Detector	High end detector	Cooled CMOS optional upon request
Pixel Number	2048	
Pixel Size	14 μ mx200 μ m	
SNR	300:1@1000.7cm–1 Benzonitrile	Cooled light detector
ADC Resolution	16 bits	
Integration Time	1ms–15min	Dependingon the detector used
Power Supply	DC12V/5A	
Probe Fiber	1M armed	
Dimensions	508mmx373mmx147mm	
Weight	6Kg	
Operating Temperature	0–45℃	
Storage Temperature	–10–55℃	

Integrated raman spectrometer YHU 785

Features

- 785nm excitation laser, high end light detector, grating spectroscopy
- Optical probe emits laser with a high output coupling efficiency
- Software has the functions of laser control, Raman spectroscopy, database management, background substance and log (recording the experiment content) etc.
- Built–in rechargeable lithium battery, can satisfy more than 5 hours of field measurement work
- Non–contact Raman spectral measurement and analysis
- Excellent thermal and vibrating stability
- Easy to carry and use



Applications

- Security: poisons, dangerous goods, illicit drugs, biochemical analysis
- Civil life: food, drug identification
- Identification of jewelry/heritage: jewelry identification, artifacts or nature, place of origin and age
- Medical applications: DNA, human metabolites (blood, urine etc.) and cancer cells identification
- Geology: field prospecting, mineral composition qualitative analysis and inclusion studies
- R & D in science and technology

Integrated raman spectrometer YHU 785

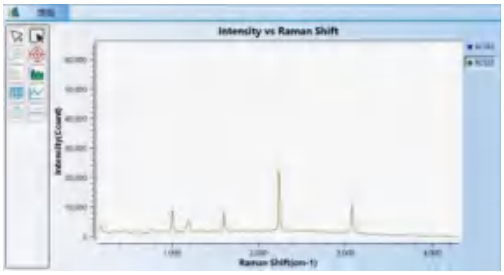
Specifications

Items	Specifications	Remarks
Excitation Wavelength	785nm	
Wavelength FWHM	0.1nm	
Raman Probe Laser Power	0–300mW	
Working Distance of Raman Probe	~4mm (Default)	Optional upon request
Raman Spectrum	200–3100cm–1	
Spectral Resolution	8cm–1@Hg912nm	
Stray Light	0.31% @785nm	
Light Detector	High end detector	Cooled CMOS optional upon request
Pixel Number	2048	
Pixel Size	14 μ mx200 μ m	
SNR	440:1@1000.7cm–1 Benzonitrile	Cooled light detector
ADC Resolution	16 bits	
Integration Time	1ms–15min	Depending on the detector used
Power Supply	DC12V/5A	
Probe Fiber	1M armed	
Dimensions	422mmx350mmx153mm	
Weight	5Kg	
Operating Temperature	0–45℃	
Storage Temperature	–10–55℃	

Raman microscope MHU 532

Features

- 532nm excitation light, high end light detector, grating spectroscopy, focus using an objective lens
- Optical probe acquires the Raman light of the substance with high coupling efficiency of the excitation laser
- Software has functions of laser control, Raman spectroscopy, database management, analyzing substance and log (recording the experiment content)
- Non–contact Raman spectroscopy measurement and analysis
- Excellent thermal and vibrating stability
- Easy to carry and easy to use



Applications

- Security: explosive, poisons, dangerous goods, illicit drugs, biochemical analysis
- Civil life: food, drug identification
- Identification of jewelry/heritage: jewelry identification, artifacts or nature , place of origin and age
- Medical applications: DNA, human metabolites (blood, urine etc.) and cancer cells identification
- Geology: field prospecting, mineral composition qualitative analysis and inclusion studies
- R & D in science and technology

Raman microscope MHU 532

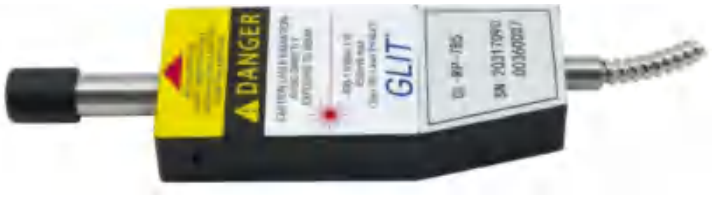
Specifications

Items	Specifications	Remarks
Excitation Wavelength	532nm	
Wavelength FWHM	<0.1nm	
Raman Probe Laser Power	0–50mW/0–40mW (after microscope objective lens)	
Working Distance of Raman Focus	Focal length of the objective lens	Optional upon request
Raman Spectrum	200–4000cm–1	
Spectral Resolution	15cm–1@1000.7cm–1 Benzonitrile	
Stray Light	0.29% @532nm	
Light Detector	High end detector	Cooled CMOS optional upon request
Pixel Number	2048	
Pixel Size	14 μ mx200 μ m	
SNR	300:1@1000.7cm–1 Benzonitrile	Cooled light detector
ADC Resolution	16 bits	
Integration Time	1ms–15min	
Power Supply	DC12V/5A (Raman spectrometer)	
Probe Fiber	1M armed	
Dimensions	508mmx373mmx147mm	
Weight	6Kg(Raman spectrometer), 5Kg(Microscope)	
Operating Temperature	0–45℃	
Storage Temperature	–10–55℃	

Raman probe GL-RP-785

Features

- Raman probe GL–RP–785, can accommodate the different lasers (532nm, 785nm, 830nm and 1064nm) and their corresponding fiber spectrometers for fulfilling Raman spectroscopy measurement and analysis. The Raman probe can be used for solid，liquid and powder materials, featuring direct，non–contact，fast and accurate materials’ analysis. We are able to pro–vide customization upon request.



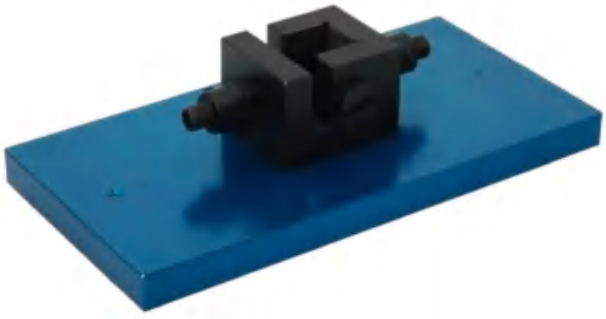
Applications

Items	Specifications	Remarks
Excitation Wavelength	532nm, 785nm, 830nm,1064nm	Optional upon request
Working Distance of Raman Focus	~4mm (default)	Optional upon request
Raman Spectrum	Depending on the filters	Optional upon request
Laser Input Connector	FC/PC	
Raman Signal Output Connector	SMA905	
Filter for Rayleigh’s Scattering	>OD6(depending on the filters)	
Probe Fiber	1M armed	
Operating Temperature	0–45℃	
Storage Temperature	–10–55℃	

Cuvette holder GL-CHL-02C

Features

- Includes a base plate, a cuvette holder, and two fiber collimators
- Fiber collimator lens material is JGS1 UV quartz with wavelength range of about 200nm–1500nm, for broadband spectral measurement
- Four slip–proof rubber feet at bottom of the base plate
- Compact, versatile and cost effective
- Default fiber interface is SMA905, other fiber interfaces such as FC etc. are optional



Applications

- White light with fiber–coupled output
- Spectral analysis
- Material inspections
- Online inspections
- R & D in science and technology

Accessories

Cuvette holder GL-CHL-02C

Specifications

Items	Specifications	Units
Fiber Connector	SMA905	
Wavelength Range	200–2000	nm
Cuvette Size	10x10	mm
Cuvette Positioning	Two vertical directions' ball plungers	
Filter Groove	25x6	mm
Dimensions	140x70x35.5	mm
Weight	295	g
Mounting	2xM3 screw holes on the bottom	
Rubber Feet	4	

Plate sample holder GL-CHS-02C

Features

- Includes a base plate, a U shape frame, two fiber collimators and L shape sample holder
- Fiber collimator lens material is JGS1 UV quartz with wavelength range of about 200nm–1500nm, for broadband spectral measurement
- There are slip–proof rubber feet at bottom of the base plate
- Compact, versatile and cost–effective
- Default fiber interface is SMA905, other fiber interfaces such as FC etc. are optional

Applications

- Spectral analysis
- Material inspections
- Online inspections
- R & D in science and technology

Accessories

Plate sample holder GL-CHS-02C

Specifications

Items	Specifications	Units
Fiber Connector	SMA905	
Wavelength Range	200–2000	nm
Sample Thickness	Max5	mm
Sample Positioning	Using three set screws	
Dimensions	140x70x45	mm
Weight	315	g
Mounting	2xM3 screw holes on the bottom	
Rubber Feet	4	

Collimator GL-FC-12SA-UVN

Features

- SMA905 connector
- Focal length of the collimator lens is F = 12mm
- Wavelength range is 200nm–1500nm
- Can be used independently for collimation of fiber or in combination with various sample holders for spectral measurement

Applications

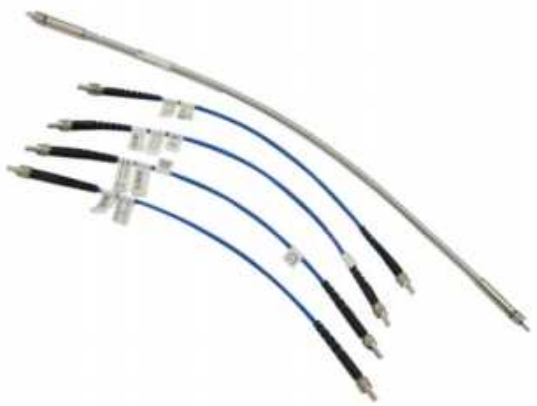
- Spectral analysis
- Material inspections
- Online inspections
- R & D in science and technology

Accessories

Optical fiber

Features

- Multimode fiber or single mode fiber
- Stainless steel armed or PVC sleeve
- Low optical loss to ensure stable transmission of light
- Fiber cores of 50–800 μm (optional)
- Length of 0.2 to 2 meters (optional)



Applications

- Spectral analysis
- Material inspections
- Online inspections
- R & D in science and technology

Diffuse standard white plate DWR1000

Features

- High reflectivity featuring more than 98% reflectivity in the wide spectrum range of UV–VIS–NIR (200–2500nm)
- Excellent Lambert–type reflector with a flat spectral in the range of UV–VIS–NIR
- Using PTFE material with good chemical stability, not easy to release powder and become yellow

Applications

- Spectrometer reflectance calibration
- Color detection and matching, image calibration
- Coating and color reflectivity measurement
- Aerospace remote sensing, ground mapping
- Chromatometer and spectrophotometer calibration

Accessories

Diffuse standard white plate DWR1000

Specifications

Items	Specifications	Remark
Material	PTFE	
Wavelength Range	250–2500nm	
Dimensions	Φ30mm	
Case Dimensions	Φ40mm	
Case Material	Aluminum with black electrode oxidation	
Weight	72g	

Light attenuator CC1000

Features

- SMA905 fiber connector can be directly connected to the optical fiber, small size and light weight
- The fixed light attenuator can attenuate the optical signal power by a certain extent and can be used in series

Applications

- Mainly used for optical power meter, spectrometer and other optical measurement instruments, attenuate the optical signal, to prevent the optical signal is too strong to saturation phenomenon.

Accessories

Cosine corrector CCR1000

Features

- The good angular response characteristics can ensure the consistency and accuracy of the measurement results when the detector accepts the optical fiber at all angles
- The light intensity accepted by each part of the detector is more uniform
- Work in a wide spectrum, such as UV to NIR band
- Excellent optical performance under different environmental conditions to ensure the reliability and repeatability of measurement
- Small size, compact structure, easy to install

Applications

- Optical materials (reflectivity, transmittance) measurement
- lamps and lanterns performance measurement
- Environmental testing
- Remote sensing field

Optical measurement stand

Features

- Universal holder for optical measurements which is detachable
- Base and connecting rod are made of alloy material with high stability and precision.
- A collimator is fixed with the connecting rod
- Working distance can be adjusted up and down through a roller.
- Customization is accommodated based on this model

Applications

- Reflectivity measurement
- Transmittance measurement
- Holding optical elements and light sources

Accessories

Optical measurement stand

Specifications

Items	Specifications	Unit
Chassis Dimensions	76mm*147mm	
Height	190mm	
Caliber	34mm	
Connection Rod Length	120mm	
Collimator	1	
Holder Material	Alloy	
Focus Range	130mm	

Customizations

Features

Based on our products, we are able to supply customized products according to your requirements.

Accessories