Understanding the world using Glit's spectrometers

PRODUCT CATALOG (2021)

Glit Technologies (Shenzhen) Pte. Ltd.

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About Us

Glit Technologies (Shenzhen) Pte. Ltd., a joint venture of professionals from Singapore, USA and China, is a high-tech company producing optical instruments established in Shenzhen, China in 2014. As a leading spectrometer company in China's market, our world-class and professional technical team includes designers in optics, mechanics, electronics and software etc. Our main line of products covers optical fiber spectrometers, DOAS module for gas detection, analysis light sources, portable Raman spectrometers, spectral applied systems and accessories etc. The optical fiber spectrometers can be used as both analysis instruments and detection modules integrated into equipment for various applications, such as environment inspection (air and water pollution), on line inspection (semiconductor and phone components) and bio-medical inspection equipment (blood and protein) etc., which are our main markets.

Our core technical members have decades of experience in optical engineering, working with both China and foreign companies. We own a series of proprietary intellectual property rights, technologies and know-how, including optics, mechanics, electronics, software development and production etc. Due to our strong technical capabilities, we are able to develop and fabricate a variety of products related to the spectral analysis at a world-class level, based on our main products line.

Professionally Designed Spectral Products for Industrial Applications

Fiber Spectrometers

Fiber spectrometer GLA600-UVN

Features

● Czerny-Turner optical structure with a grating, CCD detector and a SMA905 fiber connector.

● Connects to a computer through USB, controlled and powered by the computer.

● Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement, logging and color bar display.

● Spectral measurements including radiation, transmittance, absorbance and reflectivity.

● Two output data formats, conventional Excel two-column format and square format, the latter can be used to check spectral data easily which is a unique design developed by us.

● The selected spectral data on the spectral curve are marked using different colors, including the cursors and the area boundary lines, allowing users to easily find data in a big amount of the spectral data.

● Cursors are used to find the wavelengths. The spectral width is found by moving the two boundary lines.

● Software logging allows the user to record experiment's content such as the material analyzed, operator and time etc.

● Color bars help users understand the corresponding wavelengths of the spectrum.

● Mass production for industrial applications with excellent thermal stability and vibration resistance.

● Compact size and sleek appearance.

● GLA600-UVN fiber spectrometer includes UV bands spectrometer, VIS band spectrometer and NIR band spectrometer.

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Applications

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

- Chemical industry

- Optical coating inspection

- Glass and transparent materials inspection

- Measuring light sources

- R&D in science and technology

- Customization

Specifications of UV fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA 905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190-380nm/190-480nm	Depends on the grating used
Spectral Resolution	FWHM 0.3nm@Hg 253nm @25μm slit/ FWHM 0.47nm@Hg 253nm @25μm slit	Depends on wavelengths and slits used
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.08%@253nm	Depends on wavelengths
Light Detector	Toshiba TCD1304DG (UV enhanced)	
Pixel Number	3648	
Pixel Size	8μmx200μm	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	

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Integration Time	8 ms-15min	Depends 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 users to develop software
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	-10-50℃	
Storage Temperature	-20-70℃	

Specifications of UV/VIS fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190-750nm	Depends on the grating used
Spectral Resolution	FWHM 0.96nm@Hg 253nm @25μm slit	Depends on wavelengths and slits used
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.1%@253nm	Depends on wavelengths
Light Detector	Toshiba TCD1304DG (UV enhanced)	
Pixel Number	3648	
Pixel Size	8μmx200μm	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms-15min	Depends 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 users to develop software
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	-10-50℃	
Storage Temperature	-20-70℃	

Specifications of VIS fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	350-1000nm	Depends on the grating used
Spectral Resolution	FWHM 0.76nm@576nm@25μm slit	Depends on wavelengths and slits used
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.05%@546nm	Depends on wavelengths
Light Detector	Toshiba TCD1304DG	
Pixel Number	3648	
Pixel Size	8μmx200μm	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms-15min	Depends on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/250mA	
Communication	USB	
Operation Software	SPEC-GLA600	

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Application Programming Interface	glaDevSys	For users to develop software
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	Depends on the grating used
Spectral Resolution	FWHM 0.83nm@785nm@25μm slit	Depends on wavelengths
Stray Light	0.03%@785nm	Depends on wavelengths
Light Detector	Toshiba TCD1304DG	
Pixel Number	3648	
Pixel Size	8μmx200μm	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms-15min	Depends 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 users to develop software
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	

Operating Temperature	-10-50℃	
Storage Temperature	-20-70℃	

Fiber spectrometer for industrial control GLA600-UVN-IC

Features

- Czerny-Turner optical structure with a grating, CCD light detector and SMA905 fiber connector.

- Connects to a computer through USB, RS232 or other connector for industrial control, controlled and powered by the computer.

- Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement.

- Spectral measurements including radiation, transmittance, absorbance and reflectivity.

- Two output data formats, conventional Excel two-column format and square format, the latter can be used to check spectral data easily which is a unique design developed by us.

- The selected spectral data on the spectral curve are marked using different colors, including the cursors and the area boundary lines, allowing users to easily find data in a large number of spectral data.

- Cursors are used to find the wavelengths. The spectral width is found by moving the two boundary lines.

- Software logging allows the user to record experiment's content such as the material analyzed, the operator and time etc.

- Color bars help users understand the corresponding wavelengths of the spectrum.

- Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.

- Compact size and sleek appearance.

- Mass production for industrial applications with excellent thermal stability and vibration resistance.

Professionally Designed Spectral Products for Industrial Applications

- GLA600-UVN fiber spectrometer includes UV bands 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
- R&D in science and technology
- Customization

Specifications of UV fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190-400nm/190-480nm	Depends on the grating used
Spectral Resolution	FWHM 0.3nm@Hg253nm @25μm slit/ FWHM0.47nm@Hg253nm @25μm slit	Depends on wavelengths and slits used
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.08%@253nm	Depends on wavelengths
Light Detector	Toshiba TCD1304DG (UV enhanced)	
Pixel Number	3648	
Pixel Size	8μmx200μm	
Detector Collecting	Yes	

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Lens		
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms-15min	Depends on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/250mA	
Communication	USB or RS232	
Operation Software	SPEC-GLA600	
Application Programming Interface	glaDevSys	For users to develop software
Dimensions	100mmx65mmx36mm	
Weight	300g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	-10-50℃	
Storage Temperature	-20-70℃	

Specifications of UV/VIS fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190-750nm	Depends on the grating used
Spectral Resolution	FWHM 0.96nm@Hg253nm @25μm slit	Depends on wavelengths and slits used
Data Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.1%@253nm	Depends on wavelengths
Light Detector	Toshiba TCD1304DG (UV enhanced)	
Pixel Number	3648	
Pixel Size	8μm-200μm	
Detector Collecting Lens	Yes	Optional upon request
SNR	800:1	Room temperature

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ADC Resolution	16 bits	
Integration Time	8 ms-15min	Depends on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/250mA	
Communication	USB or RS 232	
Operation Software	SPEC-GLA600	
Application Programming Interface	glaDevSys	For users to develop software
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	-10-50℃	
Storage Temperature	-20-70℃	

Specifications of VIS fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	350-1000nm	Depends on the grating used
Spectral Resolution	FWHM 0.76nm@576nm@25μm slit	Depends on wavelengths and slits used
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.05%@546nm	Depends on wavelengths
Light Detector	Toshiba TCD1304DG	
Pixel Number	3648	
Pixel Size	8μm-200μm	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms-15min	Depends on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/250mA	

Communication	USB or RS232	
Operation Software	SPEC-GLA600	
Application Programming Interface	glaDevSys	For users to develop software
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	-10-50℃	
Storage Temperature	-20-70℃	

Specifications of NIR fiber spectrometer

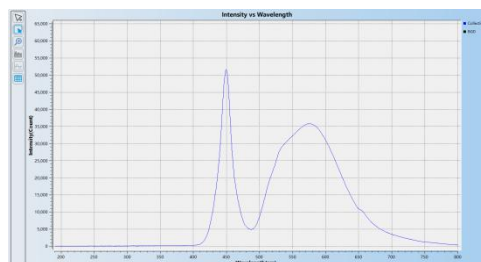| Items	Specifications	Remarks
Fiber Connector	SMA 905	
Slit	10, 25, 50, 100μm	
Wavelength Range	750-960nm	Depends on the grating used
Spectral Resolution	FWHM 0.83nm@785nm@25μm slit	Depends on wavelengths
Stray Light	0.03%@785nm	Depends on wavelengths
Light Detector	Toshiba TCD1304DG	
Pixel Number	3648	
Pixel Size	8μx200μm	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms-15min	Depends on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/250mA	
Communication	USB or RS 232	
Operation Software	SPEC-GLA600	
Application Programming Interface	glaDevSys	For users to develop software
Dimensions	100mmx65mmx36mm	

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Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	-10-50℃	
Storage Temperature	-20-70℃	

Fiber spectrometer for industrial control GLA639

Features

● Czerny-Turner optical structure with a grating, high end light detector and SMA905 fiber connector.

● Connects to a computer through USB, RS232 or other connector for industrial control, controlled and powered by the computer.

● Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement.

● Spectral measurements including radiation, transmittance, absorbance and reflectivity.

● Two output data formats, conventional Excel two-column format and square format, the latter can be used to check spectral data easily which is a unique design developed by us.

● The selected spectral data on the spectral curve are marked using different colors, including the cursors and the area boundary lines, allowing users to easily find data in a large number of spectral data.

● Cursors are used to find the wavelengths. The spectral width is found by moving the two boundary lines.

● Software logging allows the user to record experiment's content such as the material analyzed, the operator and time etc.

● Color bars help users understand the corresponding wavelengths of the spectrum.

● Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.

● Compact size and sleek appearance.

- Mass production for industrial applications with excellent thermal stability and vibration resistance.

- GLA639 fiber spectrometer includes UV bands 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

- R&D in science and technology

- Customization

Specifications of UV fiber spectrometers

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100µm	
Wavelength Range	190-380nm/190-480nm	Depends on the grating used
Spectral Resolution	FWHM 0.27nm@Hg 253nm@25µm slit/ FWHM 0.4nm@Hg 253nm @25µm slit	Depends on wavelengths
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.1%@ 253nm	Depends on wavelengths
Light Detector	High end detector	

Pixel Number	2048	
Pixel Size	14μmx200μm	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms-15min	Depends on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/380mA	
Trigger Mode	Trigger in or out with TTL	
Communication	USB o RS 232	
Operation Software	SPEC-GLA600	
Application Programming Interface	glaDevSys	For users to develop software
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	-10-50℃	
Storage Temperature	-20-70℃	

Specifications of UV/VIS fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190-800nm	Depends on the grating used
Spectral Resolution	FWHM 0.94nm@Hg 576nm@25μm slit	Depends on wavelengths
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.18%@436nm	Depends on wavelengths
Light Detector	High end detector	
Pixel Number	2048	
Pixel Size	14μmx200μm	

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Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms-15min	Depends on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	D5V/380mA	
Trigger Mode	Trigger in or out with TTL	
Communication	USB or RS 232	
Operation Software	SPEC-GLA600	
Application Programming Interface	glaDevSys	For users to develop software
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	-10-50℃	
Storage Temperature	-20-70℃	

Specifications of VIS fiber spectrometer

Items	Specifications	Remarks
Fiber Connector	SMA905	
Entrance Slit	10, 25, 50, 100μm	
Wavelength Range	350-1000nm	Depends on the grating used
Spectral Resolution	FWHM 1.1nm@576nm@25μm slit	Depends on wavelengths and slits used
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.06%@436nm	Depends on wavelengths
Light Detector	High end detector	
Pixel Number	2048	
Pixel Size	14μmx200μm	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	

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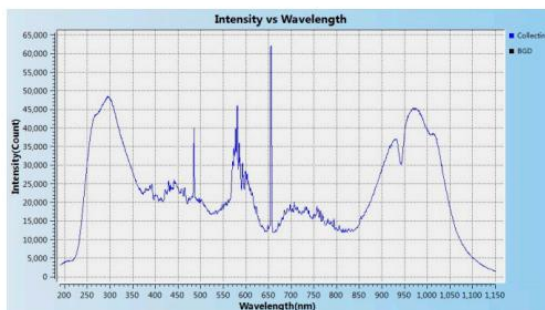| Integration Time	8 ms-15min	Depends on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/380mA	
Trigger Mode	Trigger in or out with TTL	
Communication	USB or RS232	
Operation Software	SPEC-GLA600	
Application Programming Interface	glaDevSys	For users to develop software
Dimensions	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	Depends on the grating used
Spectral Resolution	FWHM 0.5nm@912nm@25μm	Depends on wavelengths
Stray Light	0.3%@785nm	Depends on wavelengths
Light Detector	High end detector	
Pixel Number	2048	
Pixel Size	14μmx200μm	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	8 ms-15min	Depends on the detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/380mA	

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Trigger Mode	Trigger in or out with TTL	Optional upon request
Communication	USB or RS232	
Operation Software	SPEC-GLA600	
Application Programming Interface	glaDevSys	For users to develop software
Dimensions	100mmx65mmx36mm	
Weight	285g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	-10-50℃	
Storage Temperature	-20-70℃	

Broadband fiber spectrometer MESP

Features

● M shape optical structure with a grating, high end light detector and SMA905 fiber connector.

● Connects to a computer through USB, RS232 or other connector for industrial control, controlled and powered by the computer.

● Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement.

● Spectral measurements including radiation, transmittance, absorbance and reflectivity.

● Two output data formats, conventional Excel two-column format and square format, the latter can be used to check spectral data easily which is a unique design developed by us.

● The selected spectral data on the spectral curve are marked using different colors, including the cursors and the area boundary lines, allowing users to easily find data in a large number of spectral data.

● Cursors are used to find the wavelengths. The spectral width is found by moving the two boundary lines.

- Software logging allows the user to record experiment's content such as the material analyzed, the operator and time etc.

- Color bars help users understand the corresponding wavelengths of the spectrum.

- Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.

- Mass production for industrial applications with excellent thermal stability and vibration resistance.

- MESP fiber spectrometer includes UV bands spectrometer, VIS band spectrometer and NIR band spectrometer.

Applications

- Environmental inspection: inspection of water quality etc.

- Chemical industry

- Optical coating inspection

- Glass and transparent materials inspection

- Measuring light sources

- R&D in science and technology

- Customization

Specifications

Items	Specifications	Remarks
Fiber Connector	SMA 905	
Slit	10, 25, 50, 100μm	

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Wavelength Range	190-1100nm	Depends on the grating used
Spectral Resolution	FWHM 1.3nm@Hg 546nm @25μm slit	Depends on wavelengths and slit
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.2%@253nm	Depends on wavelengths
Light Detector	High end detector	
Pixel Number	2048	
Pixel Size	14μmx200μm	
Detector Collecting Lens	Yes	
SNR	1500:1	Room temperature
ADC Resolution	16 bits	
Integration Time	1ms-15min	Depends on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/500mA	
Trigger Mode	Trigger in or out with TTL	
Communication	USB or RS 232	
Operation Software	SPEC-GLA600	
Application Programming Interface	glaDevSys	For users to develop software
Dimensions	135mmx116mmx47mm	
Weight	775g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	-10-50℃	
Storage Temperature	-20-70℃	

Mini fiber spectrometer NSP01H

Features

● Czerny-Turner optical structure with a grating, CMOS light detector and SMA905 fiber connector.

● Connects to a computer through USB, RS232 or other connector for industrial control, controlled and powered by the computer.

Professionally Designed Spectral Products for Industrial Applications

- Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement.

- Spectral measurements including radiation, transmittance, absorbance and reflectivity.

- Two output data formats, conventional Excel two-column format and square format, the latter can be used to check spectral data easily which is a unique design developed by us.

- The selected spectral data on the spectral curve are marked using different colors, including the cursors and the area boundary lines, allowing users to easily find data in a large number of spectral data.

- Cursors are used to find the wavelengths. The spectral width is found by moving the two boundary lines.

- Software logging allows the user to record experiment's content such as the material analyzed, the operator and time etc.

- Color bars help users understand the corresponding wavelengths of the spectrum.

- Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.

- Compact size and sleek appearance.

- Mass production for industrial applications with excellent thermal stability and vibration resistance.

- NSP01H fiber spectrometer includes UV bands spectrometer, VIS band spectrometer and NIR band spectrometer.

Professionally Designed Spectral Products for Industrial Applications

Applications

- Environmental inspection: inspection of water quality etc.

- Chemical industry

- Optical coating inspection

- Glass and transparent materials inspection

- Measuring light sources

- R&D in science and technology

- Customization

Specifications

Items	Specifications	Remarks
Fiber Connector	SMA 905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190-380nm	Depends on the grating used
Spectral Resolution	FWHM 0.6nm@Hg253nm@10μm slit	Depends on wavelengths and slit
Stray Light	0.3%@253nm	Depends on wavelengths
Light Detector	High end detector	
Pixel Number	1024	
Pixel Size	14μmx200μm	
Detector Collecting Lens	Yes	
SNR	700:1	Room temperature
ADC Resolution	16 bits	
Integration Time	1ms-15min	Depends on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/500mA	
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℃	

Mini M fiber spectrometer N3SP

Features

● M shape optical structure with a grating, CMOS light detector and SMA905 fiber connector.

● Connects to a computer through USB, RS232 or other connector for industrial control, controlled and powered by the computer.

● Unique software features, automatic configuration of spectrometer, automatic reading of calibration coefficients, spectral acquisition and measurement.

● Spectral measurements including radiation, transmittance, absorbance and reflectivity.

● Two output data formats, conventional Excel two-column format and square format, the latter can be used to check spectral data easily which is a unique design developed by us.

● The selected spectral data on the spectral curve are marked using different colors, including the cursors and the area boundary lines, allowing users to easily find data in a large number of spectral data.

● Cursors are used to find the wavelengths. The spectral width is found by moving the two boundary lines.

● Software logging allows the user to record experiment's content such as the material analyzed, the operator and time etc.

● Color bars help users understand the corresponding wavelengths of the spectrum.

● Interfaces and data formats for industrial control, such as Linux, ARM and PLC etc.

● Compact size and sleek appearance.

Professionally Designed Spectral Products for Industrial Applications

- Mass production for industrial applications with excellent thermal stability and vibration resistance.

- NSP01H fiber spectrometer includes UV bands spectrometer, VIS band spectrometer and NIR band spectrometer.

Applications

- Environmental inspection: inspection of water quality etc.

- Chemical industry

- Optical coating inspection

- Glass and transparent materials inspection

- Measuring light sources

- R&D in science and technology

- Customization

Specifications

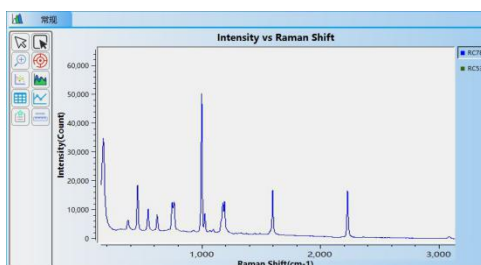| Items	Specifications	Remarks
Fiber Connector	SMA905	
Slit	10, 25, 50, 100μm	
Wavelength Range	190-840nm	Depends on the grating used
Spectral Resolution	FWHM 1.6nm@Hg 253nm@10μm slit	Depends on wavelengths and slit
Order Sorting Filter	To eliminate higher order spectrum	
Stray Light	0.2%@253nm	Depends on wavelengths
Light Detector	High end detector	

Pixel Number	1024	
Pixel Size	14μmx200μm	
Detector Collecting Lens	Yes	
SNR	800:1	Room temperature
ADC Resolution	16 bits	
Integration Time	1ms-15min	Depends on detector used
Data Output	Count vs. wavelength or pixel	
Power Supply	DC5V/500mA	
Trigger Mode	Trigger in or out with TTL	
Communication	USB or RS232	
Operation Software	SPEC-GLA600	
Application Programming Interface	glaDevSys	For users to develop software
Dimensions	60mmx55mmx26mm	
Weight	120g	
Mounting	4xM3 screw holes on the bottom	
Operating Temperature	-10-50C°	
Storage Temperature	-20-70℃	

Professionally Designed Spectral Products for Industrial Applications

Raman Spectrometers

785nm portable Raman spectrometer GL-PRS-785

Features

- 785nm excitation laser, high end light detector, grating spectroscopy.

- 0.1nm FWHM.

- 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 of experiment's content) etc.

- Non-contact Raman spectral measurement and analysis.

- Mass production for industrial applications with excellent thermal stability and vibration resistance.

- 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

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- Geology: field prospecting, mineral composition qualitative analysis and inclusion studies

- R & D in science and technology
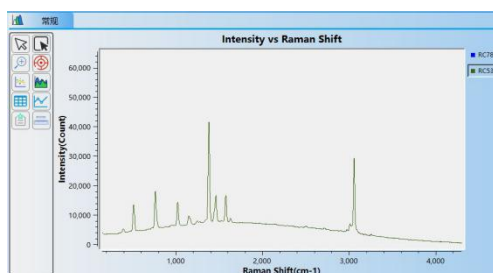
- Customization

Specifications

Items	Specifications	Remarks
Excitation Wavelength	785nm	\
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	14μmx200μm	
SNR	440:1@1000.7cm-1 Benzonitrile	Cooled light detector
ADC Resolution	16 bits	
Integration Time	1ms-15min	Depends on the detector used
Power Supply	DC12V/5A	
Probe Fiber	1M armed	
Dimensions	508mmx373mmx147mm	
Weight	6Kg	
Operating Temperature	0-45C°	
Storage Temperature	-10-55C°	

532nm portable Raman spectrometer GL-PRS-532

Features

- 532nm excitation light, high end light detector, grating spectroscopy.

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- <0.1nm FWHM.

- 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 of experiment's content etc.)

- Non-contact Raman spectroscopy measurement and analysis.

- Mass production for industrial applications with excellent thermal stability and vibration resistance.

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

- Customization

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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	14μmx200μm	
SNR	300:1@1000.7cm-1 Benzonitrile	Cooled light detector
ADC Resolution	16 bits	
Integration Time	1ms-15min	Depends on the detector used
Power Supply	DC12V/5A	
Probe Fiber	1M armed	
Dimensions	508mmx373mmx147mm	
Weight	6Kg	
Operating Temperature	0-45C°	
Storage Temperature	-10-55C°	

Raman microscope MHU 532

Features

● 532nm excitation light, high end light detector, grating spectroscopy, focus using an objective lens.

● <0.1nm FWHM.

● Optical probe acquires Raman light of the substance with high coupling efficiency of the excitation laser.

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- Software has functions of laser control, Raman spectroscopy, database management, analyzing substance and log (recording of experiment's content).

- Non-contact Raman spectroscopy measurement and analysis.

- Easy to carry and easy to use.

- Camera for video recording.

- Mass production for industrial applications with excellent thermal stability and vibration resistance.
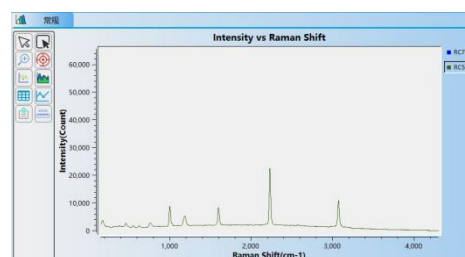
Applications

- 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

- Customization

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Specifications

Items	Specifications	Remarks
Excitation Wavelength	532nm	
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	14μmx200μm	
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	0-45C°	
Storage Temperature	-10-55C°	

Raman spectrometer for DIY GL-PRS-785/532-M

Features

● 785/532nm excitation laser, high end light detector, grating spectroscopy.

● <0.1nm FWHM.

● Optical probe acquires Raman light of the substance with high coupling efficiency of the excitation laser.

● Non-contact Raman spectral measurement and analysis.

● Software has the functions of laser control, Raman spectroscopy, database

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management, background substance and log (recording of experiment's content in time) etc.

- User friendly mechanical interface, electronic interface and software interface.
- Easy to carry and to use.
- Mass production for industrial applications with excellent thermal stability and vibration resistance.
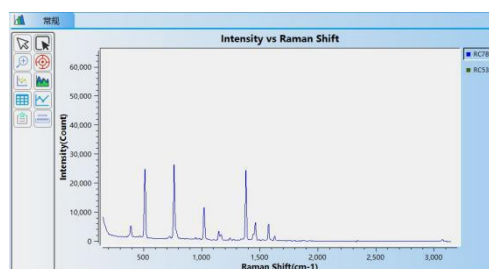
Applications

- Easy to carry and use.
- Security: poisons, dangerous/explosive 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
- Customization

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Specifications

Items	Specifications	Remarks
Excitation Wavelength	785nm/532nm	
Raman Probe Laser Power	0-300 mw/0-80mW	
Working Distance of Raman Probe	~4mm (Default)	Optional upon request
Raman Spectrum	200-2800cm-1/200-4000cm-1	Depending on filters
Spectral Resolution	8cm-1@Hg 912nm/15cm-1@1000.7cm-1 Benzonitrile	
Stray Light	0.31% @785nm/0.002% @850nm	
Light Detector	High end detector	Cooled CCD or CMOS optional upon request
Pixel Number	2048	
Pixel Size	14μmx200μm	
SNR	300:1@1000.7cm-1Benzonitrile/ 400:1@1000.7cm-1 Benzonitrile	Cooled light detector
ADC Resolution	16 bits	
Integration Time	1ms-15min	
Power Supply	DC12V/5A	
Probe Fiber	1M armed	
Dimensions	508mmx373mmx147mm	
Weight	~ 3Kg	
Operating Temperature	0-45C°	
Storage Temperature	-10-55C°	

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 provide customization upon request.
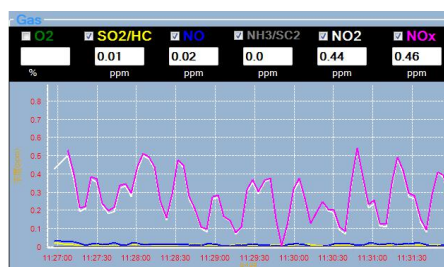

Specifications

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	0-45C°	
Storage Temperature	-10-55C°	

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Spectral Application Systems

Portable environmental gas monitoring module DOAS-4010UV

Features

● The module includes a fiber spectrometer, an optical gas cell, a light source (xenon lamp or deuterium lamp) etc., DOAS algorithm and PC etc.

● High resolution.

● Optional spectral range.

● Optional light source.

● Optional absorption length.

● Mass production for industrial applications with excellent thermal stability and vibration resistance.

● Easy to upgrade due to modular design.

● Easy to assemble due to compact structure.

Applications

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

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	Aluminum with coating	
Power Supply	DC12V/3A (spectrometer and xenon lamp), DC12V/5A（industrial computer）, Average power 1 2 W	
Lamp Cooling	Heatsink with a fan	For deuterium lamp
Weight	~3Kg	
Dimension	222mmx10mmx55mm	

Online environmental gas monitoring module DOAS-6010UV

Features

● The module includes a fiber spectrometer, an optical gas cell, a light source (xenon lamp or deuterium lamp) etc., DOAS algorithm and PC etc.

● High resolution.

● Optional spectral range.

● Optional light source.

● Optional absorption length.

● Mass production for industrial applications with excellent thermal stability and vibration resistance.

● Easy to upgrade due to modular design.

● Easy to assemble due to compact structure.

Applications

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

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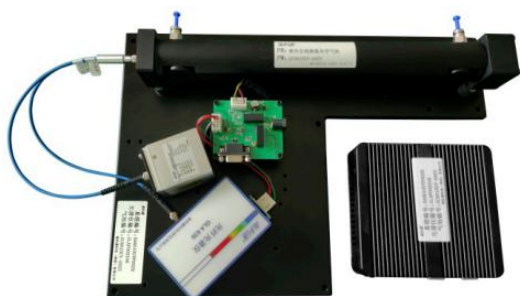
Specifications

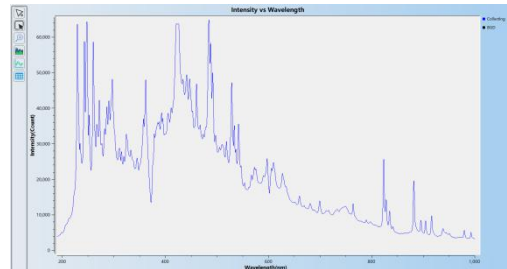| Items	Specifications	Remarks
Light Path	0.6m	Optional upon request
Light Source	Xenon lamp or deuterium lamp	Optional upon request
Wavelength Range	190-380/190-480nm	Optional upon request
Communication	USB or RS232	
Gas Connector	Ø6mm	
Material of Main Part	Aluminium with coating	
Power Supply	DC12V/3A (spectrometer and xenon lamp)，DC12V/5A（industrial computer），Average power 1 2 W	
Lamp Cooling	Heatsink with a fan	For deuterium lamp
Weight	~3Kg	
Dimension	222mmx10mmx55mm	

Environmental water monitoring module WQD1000

Features

● Optional wavelength range: 190-380nm/200-1000nm.

● Unique spectral balance between 220nm and 275nm for inspecting total nitrogen in the water.

● Compact design and easy to assemble.

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- Mass production for industrial applications with excellent thermal stability and vibration resistance.

Applications

- For measuring and analyzing ammonia nitrogen, ammonium nitrate, total nitrogen, total phosphor, chlorine ion, phosphate, TOC, COD and turbidness in water etc. A spectrum taken using the environmental water inspection module WQD1000 is shown in figure.

Specifications

Items	Specifications	Remarks
Wavelength Range	190-380nm/200-1000nm	Optional upon request
Spectral Resolution	<2.5nm	
Light Source	Xenon lamp	
Power of Light Source	2W/10W	
Communication	RS232/USB	
Power Supplier	DC12V/3A	
Weight	~650g	
Dimension	200mmx150mmx55mm	

Optical gas cell

Features

- The optical gas cells produced by Glit has two types: single reflection and

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multiple reflection, featuring stable optics, good anti-contamination, long lifetime and cost effective etc.

● Mass production for industrial applications with excellent thermal stability and vibration resistance.

Applications

● The products are mainly applied in air pollution research, environmental gas monitoring, industrial production process monitoring and CEMS etc.

UV conventional optical gas cell GC1011UV

Specifications

Items	Specifications
Wavelength Range	190-900nm
Optical Path Length	600mm
Fiber Interface	SMA905
Maintenance of Optics	Cleaning windows
External Dimensions	330mmxØ65mm
Volume	450ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminum alloy with anti-corrosion treatment

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UV small optical gas cell GC3010UV

Specifications

Items	Specifications
Wavelength Range	190-900nm
Optical Path Length	640-3200mm
Fiber Interface	SMA905
Maintenance of Optics	Cleaning windows
External Dimensions	230mmx88mmx52mm
Volume	450ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminum alloy with anti-corrosion treatment

UV medium optical gas cell GC2000UV

Specifications

Items	Specifications
Wavelength Range	190-900nm
Optical Path Length	1400, 2800, 4200mm

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Fiber Interface	SMA905
External Dimensions	386.5mmx88mmx52mm
Volume	762ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminum 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	Aluminum alloy with anti-corrosion treatment

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UV online optical gas cell GC6010UV

Specifications

Items	Specifications
Wavelength Range	190-900nm
Optical Path Length	650mm
Fiber Interface	SMA905
Maintenance of Optics	Cleaning windows
External Dimensions	378mmxØ44mm
Volume	93ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminum alloy with anti-corrosion treatment

UV long path optical gas cell GC5000UV

Specifications

Items	Specifications

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Wavelength Range	190-900nm
Optical Path Length	4000, 6000, 8000, 10000, 12000mm
Fiber Interface	SMA905
External Dimensions	540mmx75mmx50mm
Volume	682ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminum alloy with anti-corrosion treatment

Infrared conventional optical gas cell GC2010NR

Specifications

Items	Specifications
Wavelength Range	0.8-14μm
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	Aluminum alloy with anti-corrosion treatment

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Infrared miniature optical gas cell GC3010NR

Specifications

Items	Specifications
Wavelength Range	0.8-14μm
Optical Path Length	640-2400mm
Fiber Interface	SMA905
Maintenance of Optics	Cleaning window
External Dimensions	230mmx88mmx52mm
Volume	430ml
Air Inlet and Outlet	Ø6mm
Cavity Material	Aluminum alloy with anti-corrosion treatment

Infrared long optical gas cell GC5010NR

Specifications

Items	Specifications

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Wavelength Range	0.8-14μm
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	Aluminum alloy with anti-corrosion treatment

Optical coating inspector GL-SPM-D2T

Features

- Excellent thermal stability and vibration resistance.

- Excellent structural design.

- Precise 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 allows easy and quick editing.

- Easy to operate and maintain.
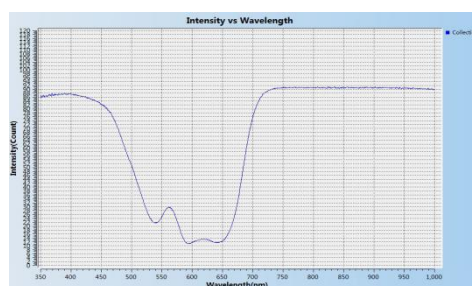
Applications

- Optical coating inspection

- Auto dimming film inspection

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- Glass inspection

- R&D in science and technology

- Customization

Specifications
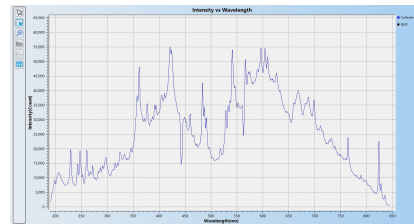
Items	Specifications
Wavelength Range	190-800nm
Spectral Resolution	FWHM0.84nm @577nm@25μm
Stray Light	0.06%@532nm/0.045%@785nm
Integration Time	8ms-15min
Power Supply	220V/0.7A
Communication	USB
Spectrometer Configuration	Auto configurating, including reading of calibration coefficients and products' 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

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Light Sources

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.

● Mass production for industrial applications with excellent thermal stability and vibration resistance.

● 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

● Customization

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Specifications

Items	Specifications	Units
Wavelength Range	185-2500	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 XYM2010

Features

● Xenon light source with fiber coupling output.

● Work in pulse mode with adjustable repetition.

● Easily integrated with spectrometers and other devices.

● Mass production for industrial applications with excellent thermal stability and vibration resistance.

● Compact and cost effective.

● Default fiber interface is SMA905, other fiber interfaces such as FC etc. are optional.

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Applications

- Environmental inspection: inspection of water quality and air pollution

- Spectral analysis

- Instrument lighting

- Online inspections

- R & D in science and technology
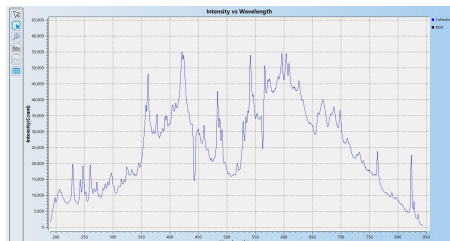
- Customization

Specifications

Items	Specifications	Units
Wavelength Range	185-2500	nm
Fiber Connector	SMA905	
Power Supply	DC12/1	V/A
Lamp Power	2	W
Pulse Repetition	Max 79	Hz
Trigger Input Resistance	330	Ω
Stability	1.5%	
Life Time	10^9	times
Dimensions	42x42x53	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.

- Mass production for industrial applications with excellent thermal stability and vibration resistance.

- Compact and cost effective.

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- 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
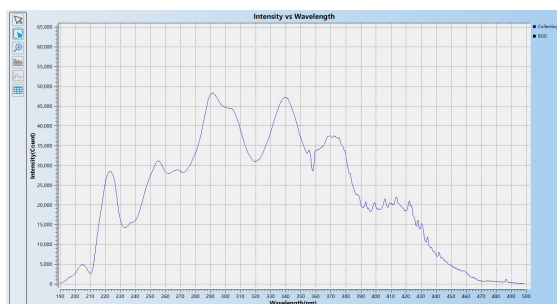
- R & D in science and technology

- Customization

Specifications

Items	Specifications	Units
Wavelength Range	185-2500	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	times
Dimensions	42x46x53	mm
Operating Temperature	0-45	°C

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Deuterium lamp DYM 1000

Features

- High power deuterium light source with fiber coupling output.

- Easily integrated with spectrometers and other devices.

- Mass production for industrial applications with excellent thermal stability and vibration resistance.

- 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

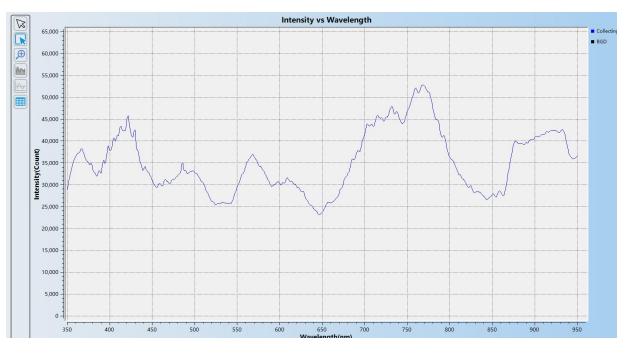- Customization

Specifications

Items	Specifications	Units
Wavelength Range	185-400	nm
Fiber Connector	SMA905	

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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.

- The output intensity of two tungsten lamps can be adjusted using knobs. The output intensity of the deuterium lamp can be adjusted using filters.

Applications

- Instrument lighting
- Chemical industry
- Jewelry inspection

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- Optical coating inspection

- Glass inspection

- Auto dimming film inspection

- Mobile phone mask inspection

- R & D in science and technology

- Customization

Specifications

Items	Deuterium Lamp	Tungsten Lamp1	Tungsten Lamp2
Wavelength Range	300-500nm depends on the filter used	400-2500nm depends on the filter used	850-2500nm depends 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		

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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.

- The output intensity of two tungsten lamps can be adjusted using knobs. The output intensity of the deuterium lamp can be adjusted using filters.

Applications

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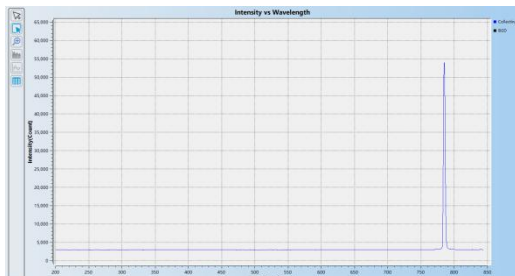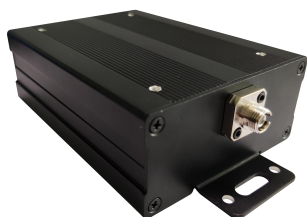- R & D in science and technology
- Customization

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Specifications

Items	Deuterium Lamp	Tungsten Lamp
Wavelength Range	300-500nm depends on the filter used	400-2500nm, depends 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	

785nm laser GL-785LD-500

Features

● High power 785nm laser with fiber coupling output.

● 0.1nm FWHM.

● Three operating modes: CW, pulse and external trigger.

● Easily integrated with spectrometers and other devices.

● Mass production for industrial applications with excellent thermal stability and vibration resistance.

Professionally Designed Spectral Products for Industrial Applications

- 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
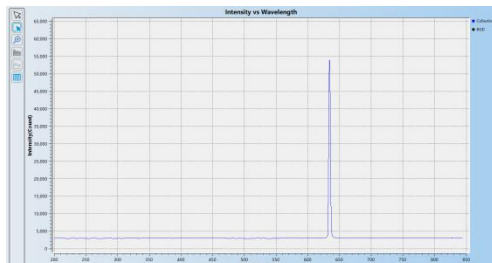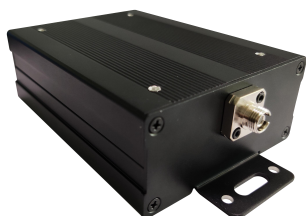
- Customization

Specifications

Items	Specifications	Units
Fiber Connector	SMA905 or FC	Upon request
Center Wavelength	785	nm
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

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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.

● Mass production for industrial applications with excellent thermal stability and vibration resistance.

● Compact, versatile and cost effective.

● Default fiber interface is SMA905, other fiber interfaces such as FC etc. are optional.
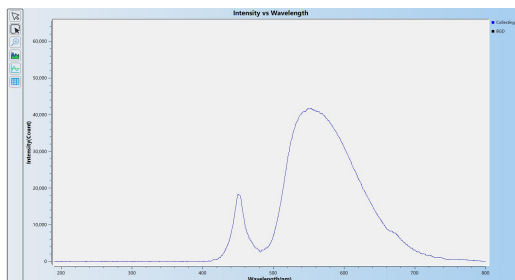
Applications

● Instrument lighting

● Spectral analysis

● Material inspections

● Online inspections

● R & D in science and technology

● Customization

Professionally Designed Spectral Products for Industrial Applications

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.

- Mass production for industrial applications with excellent thermal stability and vibration resistance.

- Compact, versatile and cost effective.

- 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
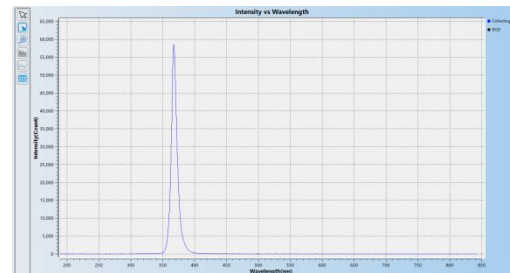
- Customization

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

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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

- Customization

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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 operated 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

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<div align="center">

Accessories

</div>

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
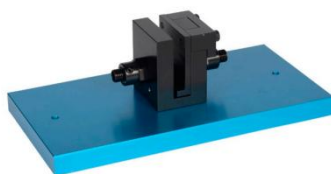
● Customization

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

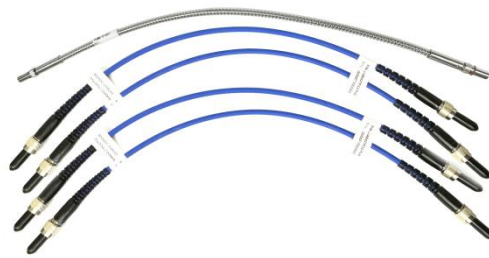- R & D in science and technology

- Customization

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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	

Optical fiber GL-FIXXX

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

- Customization

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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

- Customization

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Customizations

We are able to supply customized solutions based on our products, according to your requirements.

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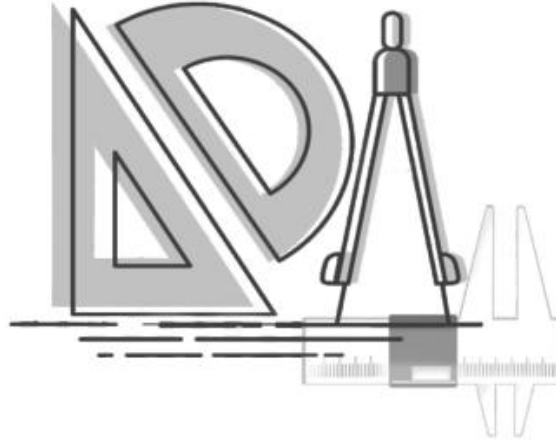
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