BA1024Ga USB 1920*1200 Optical Beam Profiler 280nm ~1100nm Lightweight

Basic Information

- Place of Origin: CHINA
- Brand Name: JINSP
- Certification: CE ISO9001 IP30 IP40
- Model Number: BA1024Ga
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: 1PC/BOX
- Delivery Time: 30 Working Days
- Payment Terms: T/T
- Supply Ability: 20PCS Per Month

Product Specification

- Wavelength Range: 280nm-1100nm
- Dimension: 78 *45 *38.5mm (without Base)
- Power Supply: USB Powered Or 12V DC Externally Powered
- Effective Sensing Area: 11mm*7mm
- Sensor: 2.3MP, 1/1.2" CMOS
- SNR: 40 DB
- Cell Size: 5.86μm*5.86μm
- Minimum Detection Area: 30μm (5 Pixls)
- Maximum Frame Rate: 41 Fps@1920*1200
- Data Interface: USB3 Vision, GenlCam
- Highlight: **Optical Beam Profiler 280nm, Optical Beam Profiler 1100nm**

More Images

BA1024Ga USB 1920*1200 CMOS 280nm ~1100nm Laser Beam Profiler

JINSP

Product Description:

JINSP Beam Profilers are mainly designed for:

●Measuring: The size of the light spot
utilization of recycled metal resources and enhance the value of recycled metals.
●Marking: The position of the light spot
quality of incoming raw materials and outgoing metal products.
●Comparing: The change in the light spot.
●Real-time monitoring.

Product Selection Table & Parameters:

Product Code	BA1023	BA1024Ga	BA1024Gb	BA1024Ua	BA1024Ub
Probe wavelength range	280nm ~ 1100nm				
Effective sensing area	11mm*7mm		13mm*8.7mm	7mm*5.5mm	4.9mm*3.7mm
Sensor	2.3MP, 1/1.2" CMOS		20MP, 1" CMOS	2MP, 1/1.7" CMOS	0.4MP, 1/2.9" CMOS
SNR	40 dB	44.9 dB	41.5 dB	43.7 dB	42.9 dB
Gain control	0~20dB	0~24dB			
Cell size	5.86µm*5.86µm		2.4µm*2.4µm	4.5µm*4.5µm	6.9µm*6.9µm
Minimum detection area	30µm (5 pixls)		12 µm (5 pixls)	22.5 µm (5 pixls)	
Maximum frame rate	41 fps@1920*1200		5.9 fps @5472*3648	90 fps @1624*1240	526.5 fps @ 720*540 Mono 8
Ingress protection	IP30	IP40			
Data interface	USB	GigE		USB	
File storage	*.jpg,*.mat,*.csv,*.xml				
Light attenuation component	Insertable and barrel-type options are available, compatible with 1-inch unframed filters				

| Storage temperature	-30 ~ +70

Main Functions:
- Support Windows 10(64bit)and Linux(Ubuntu X86)operating systems
- Support exposure, gain, and resolution control of the camera
- Real-time pseudo-color 2D &3D display of spots, Gaussian & Supper-Gaussian curve display of long and short axes
- Measure parameters such as the long and short axes, ellipticity, and rotation angle of the spot
- Supports special functions such as real-time comparison of dual light spots, background cropping, and light intensity camera.
- Record and export parameters
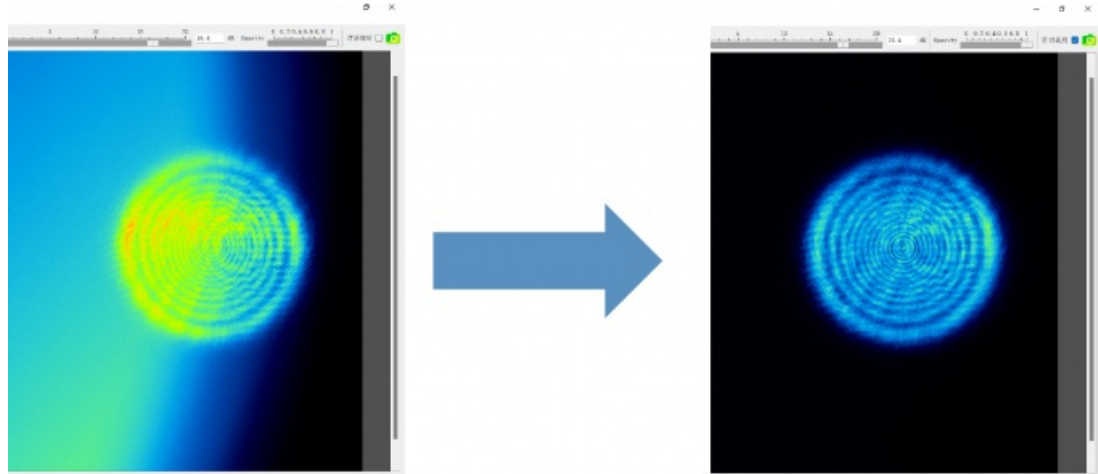
2D & 3D Spot Reconstruction
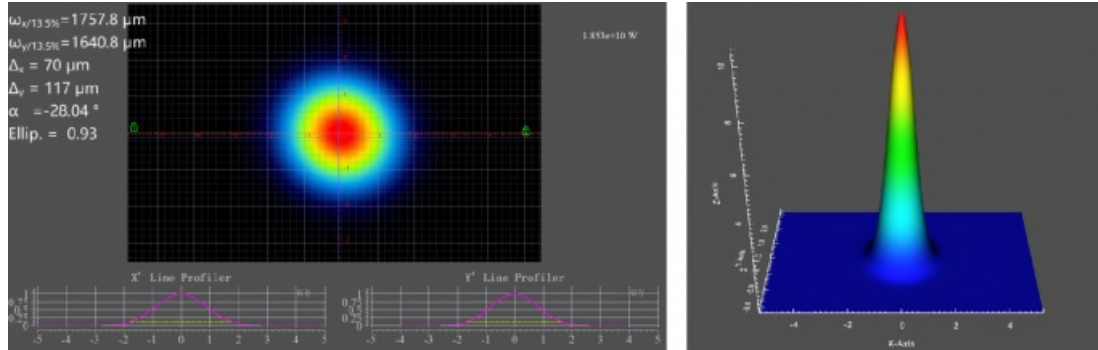
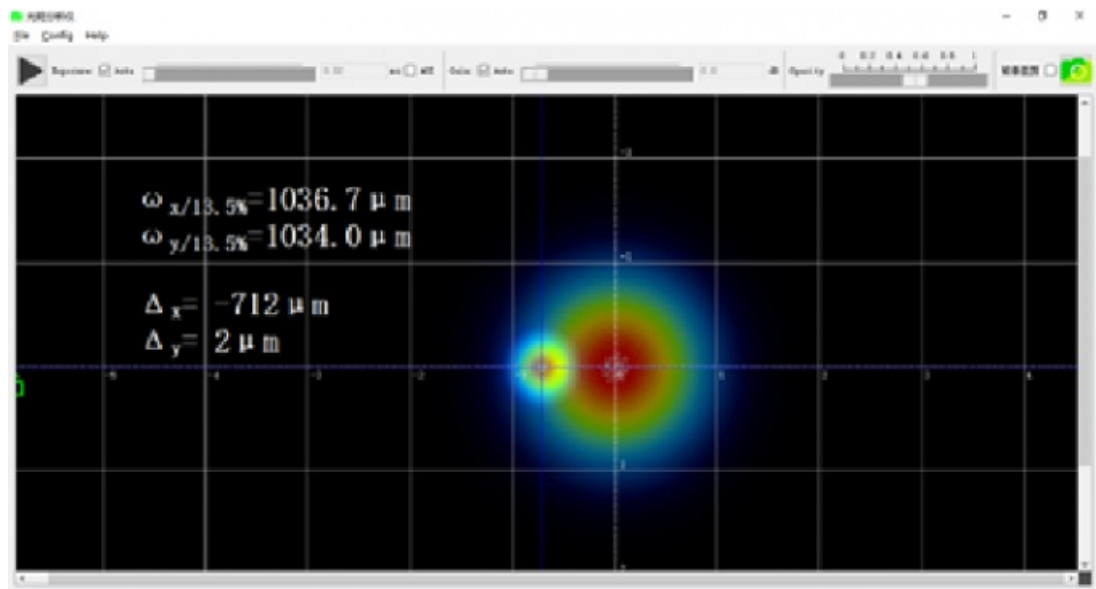**Gaussian & Super-Gaussian fitting**
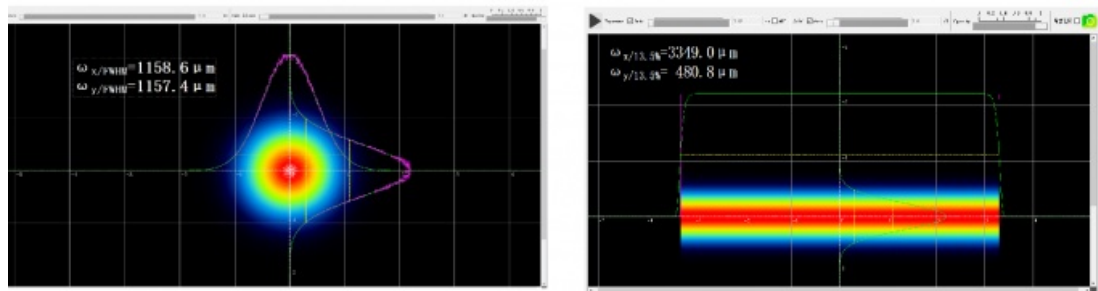
Gaussian Fitting

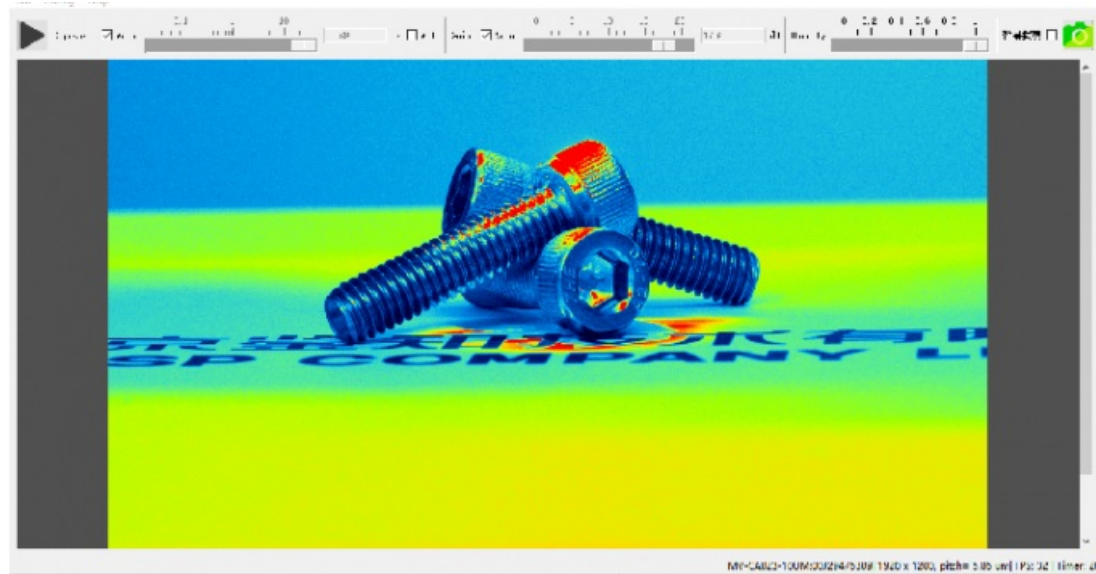**Gaussian & Super-Gaussian fitting**

Background Shear

Background Shear

Dual-beam real-time comparison (Location, light intensity distribution)

Light intensity camera (optional)

Applications:

●Beam quality measurement (a critical parameter of lasers, essential in various optical fields including scientific research and industry).

●Used for optical research, laser system research, laser detection research, and other scientific research areas for light energy distribution detection (for researchers in research institutions).

●Real-time monitoring of light spots during the processing process (for laser equipment manufacturers).

●Light intensity distribution monitoring (with imaging lenses), equivalent to a light intensity camera (used in scientific research and industrial fields).

●Other specific applications (corresponding to instrument manufacturing enterprises, detailed introduction in the following text).
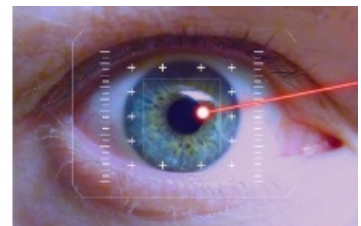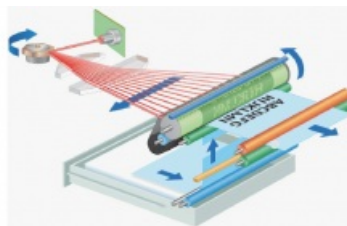
For example: In the process of optical manufacturing, the beam profiler can be used to evaluate the manufacturing quality of lenses or mirrors, as well as to detect deviations and errors in optical systems. By analyzing the shape and intensity distribution of the light spot, it is possible to measure the surface smoothness and eccentricity of optical elements, thereby improving manufacturing efficiency and optical quality.

FAQ:

Q1: This is the first time I use it, is it easy to operate?
A1:We will send you a manual and guide video in English, it can teach you how to operate the spectrometer. Also, our technicians will offer professional technical operation meetings.

Q2: Can you offer an operation training?
A2: Your technicians can come to our factory for training. Jinsp engineers can go to your place for local support (installation, training, debugging, maintenance).

Q3: How to receive the best price in the shortest time?
A3: When you send us an inquiry, please kindly offer details with wavelength,detector, effective pixels, focal length, and so on. We will send you a quotation with details soon to your email.

Q4:If the spectrometer has a problem in my place, what could I do?
A4: The spectrometer has a one-year warranty. If it breaks down, our technician will figure out what the problem may be, according to the client's feedback. We can repair for free within one year warranty.

Q5: What about quality assurance?
A5:We have a quality inspection team. All goods will go through quality inspection before shipment. We can send you pictures for inspection.