CIOE 2020
Visitor Guide

Smartphones & CE

September 9-11, 2020
Shenzhen World Exhibition and Convention Center
Optoelectronic technologies & applications in **smartphones and consumer electronics**

The upgrade of electronic products has brought tremendous emerging demands on intelligent hardware. CIOE will provide the core component technologies and manufacturing equipment for enterprises regarding 3C electronics, home appliances, wearable devices, consumer intelligent robots, etc.

**Exhibit Profile**

Optical lens & camera module, machine vision system and applications, VCSEL, 3D sensing, LIDAR, vision sensing, optical fiber & cables / optical fiber sensors, lasers, laser equipment, high-end intelligent equipment, optical materials and components like filters, infrared thermal imaging devices, optical imaging measurement & optical instruments, optical communication system equipment, wireless communications, data center, AR/VR, etc.

**Visitor Profile**

Mobile phone OEM, ODM, IDH solution providers, mobile phone brands, tablet and computer / audio-video / digital electronics, 3C manufacturers, home appliance manufacturers, wearable device companies, AR/VR, robotics, drones, etc.

**Key Exhibitors**

* Exhibitors listed in no particular order

**6 Concurrent Sub-Expos at CIOE 2020**
**ZHEJIANG SUNNY OPTICAL INTELLIGENCE TECHNOLOGY CO., LTD.**  
**7B56**

**Depth Sensing Series ToF Module - Mars04**

Mars04 is an integrated module developed by SUNNY OIT, with built-in TOF, RGB and IMU modules. High-precision depth information output via TOF technology for real-time 3D dynamic capture data processing at high frame rates, the error rate of 3D point cloud output within 1%. Meanwhile, supporting automatic exposure and wide dynamic plays key role in the applications of object tracking, object recognition, navigation, detection and etc.

**ZHEJIANG SUNNY OPTICAL INTELLIGENCE TECHNOLOGY CO., LTD.**  
**7B56**

**Sweeping Robot Linear ToF Module - Cleaner 01**

The Cleaner 01 is the industry’s first TOF 3D sensing module for sweeping robots self developed by SUNNY OIT, providing the depth and image data required for SLAM and obstacle avoidance functions. Its distinct feature is to avoid the obstacles and recognize the objects at the same time.

**ZHEJIANG SUNNY OPTICAL INTELLIGENCE TECHNOLOGY CO., LTD.**  
**7B56**

**Depth Sensing Series Remote Application Module - Mars F1**

Mars F1 is a long-distance ToF module independently developed by SUNNY OIT, which can be applied in 3D measurement, scene reconstruction, security, robot navigation and obstacle avoidance. The module is small in size, low in power consumption, and the detection range is up to 30M. It can control the error of high-precision 3D point cloud information of 200k resolution within 1%.

**Jiangxi Lianyi Optics Co., Ltd**  
**7A45**

**Cellphone accessory**

Our cellphone accessory products includes lens & module of cellphone, 3D collimating, in-screen fingerprint, TOF and external panoramic cam. Lenses of various structure (3P, 4P, 5P, 6P, G+P) from 5M to 64M can be developed with 15+ years relevant experience. Widely cooperation keeps with end customers such as Samsung and Huawei, as well as solution companies such as Huaqin, Wingtech and Longcheer.
### NINGBO SUNNY OPOTECH CO., LTD 7B56

#### Triple-camera Module

To realize better image quality (larger pixel size, larger aperture, optical image stabilization) and more image features (optical zoom, background bokeh, macro applications, wide angle applications).

### Phenix Optics Corporation Limited 7B36

#### Module Products

Based on the development and creation of various types of optical lenses, Phenix Optics has extended its optoelectronic products to the entire ecosystem of modules that they develop and manufacture in the applications of digital, security, automotive, industrial production, medical and other fields.

### Shenzhen Lochn Optics Technology Co., Ltd 7B71

#### AR Optical Module

Lochn Optics provides various AR optical solutions including Array waveguides, diffractive waveguides, prism and free form, which prevail both in quality and price.
### Shenzhen Lochn Optics Technology Co., Ltd. 7B71

**Waveguide module**

The array waveguide module of Lochn Optics has large field of view, high quality imaging effect and provides strong immersion, which is the best optical choice for AR products. While the effect is comparable to that of international competitors, the price also has an absolute competitive advantage.

### Shenzhen Desay Industry Research Institute Co., LTD 7B51

**Service Robots**

Service robots as a young member of the robot family, can be divided into professional service robots and personal/home service robots, applied in a wide range of applications, mainly in maintenance, repair, transportation, cleaning, security, rescue, supervision and etc.

### Xiamen Leading Optics Co., Ltd. 7B11

**Recognition Lenses**

1. Image format from 1/4” to 1.1”
2. High resolution up to 12 Megapixel
3. Flexible customization for various request of distortion and DOF
4. Integrated solutions with liquid lens or VCM for auto focusing on different object distance

### Zhongshan Uvata Optics Co., Ltd. 7B61

**Interferometer Lens**

The replacement of the original interferometer lens has a great impact on the inspection of the factory products due to the high cost and long cycle time. It manufactures various specifications of spherical interferometer lenses with their excellent optical capabilities, which are high-precision and compatible with the original lenses so as to provide fast and cost effective service to customers.
DONGGUAN JIUZOU OPTICAL CO., LTD 7B75

Main product applications: security monitoring, APP Wifi camera, IP camera, intelligent electronic cat eye, visual doorbell, sweeping robot, refrigerator, air conditioner, and digital products: sports DV, aerial photography, panoramic camera, AR/VR, etc.

Shanghai Yanding Co., Ltd 7A84

The LS-S0505 with combining Xenon lamp and Halogen lamp can simulate the sunlight spectrum power distribution perfectly, including the accurate matching areas: 400-750nm, 825-875nm and 915-965nm. This light source has been used to calibrate camera's white balance function and the image quality under high light and IR light conditions. It can be used for laser radar testing as well.

Foctek Photonics, Inc. 7A47

1. Special optical design, long optical after-focus 2. Good color difference control 3. Split into two channels to achieve single lens dual sensor imaging via spectroscopic prism 4. Dual sensor high-precision fine-tuning technology to achieve dual optical fusion.

Teledyne Photometrics 7D40

The brand new Kinetix family of back-illuminated sCMOS cameras delivers a framerate and field of view unmatched by any other sCMOS camera.
Shenzhen Anhua Optoelectronics Technology Co., Ltd  

Falco rusticulus (F10)

Product specs: TI 0.47” 1080P DMD

STAR OPTICAL (SZ) CO., LTD  

Fixed-focus Lens

The company mainly produces fixed-focus lenses used in network surveillance cameras, facial recognition, sports DV, aerial cameras, hunting cameras, law enforcement recorders, video doorbells, robots and other customization.

SHENZHEN CHUANG XIN SHI XUN TECHNOLOGY., LTD  

8 megapixel USB camera module supports USB3.0

Autofocus (AF) with an 8MP COMS sensor IMX179. 1. USB 3.0 interface to speed up, and high resolution can be operated at high speed with the YUY2 method. Usually adopts MJPEG to achieve the best transmission speed; 2. Compatible with USB2.0 interface; 3. Stability for ultra-speed auto-focus for 0.1s; 4. Special features: adjustable focal length (F) from 0-1023 values. Has a particularly close proximity while guaranteeing the operation of the distance vision.

Beijing NED Ltd  

NED+GLASS X2

NED+ GLASS X2 is the first intelligent AR glasses developed by NED’AR, monocular angle of 45°, up to 1080 P resolution, in the industry, medical, education, tourism and other applications, which is committed to improve enterprise productivity, save labor costs.
### Shenzhen Zhongshun Photoelectric Technology Co., Ltd. 7D80

Offering standard size and customized biometric cameras of various pixels or sizes for facial recognition, iris recognition, palm print recognition that applied in high-security environment. Monocular and binocular with fill light products.

### KEYENCE (CHINA) CO., LTD. 7D41

The new "confocal principle" has solved previous problems. 1. Ultra-compact and lightweight, can be installed in narrow locations or aligned on sensing detectors or built in a robot. 2. The straight-up and straight-down measurement method enables high-precision measurement of objects in various shapes such as curved surfaces, pits, and height differences. 3. Regardless of the high-precision materials such as transparent, mirror, rough metal surfaces, ceramics, adhesives and else, the reflected and submerged targets can also all be accurately measured.

### IDTE(TIANJIN)CO., LTD. 7C11

Self design and processing, small size and large transmission ratio, avoid blocking, reduce space, while using the laser light source to improve picture brightness, improve clarity and reduce the impact of living light sources on picture quality.

### Grand Unified Optics (Beijing) Co., LTD. 7A55

SWIR lens series from GAOPTICS optimize the NIR wavelengths with high resolution, high transmittance, compact and easy to use. The GA 25.6mm SWIR short-wave NIR lens is featured by 25.6mm image size and operates at wavelengths of up to 800-1800nm; GA 1” SWIR short-wave NIR lens is featured by 16.4mm image size, at the wavelength of 700-1700nm.
SCHOTT AG  5A35  SCHOTT RealView™

Highly refractive glass wafers for augmented reality technology - More than 130 years of dedication and expertise in the field of super optical glass. Glass solutions perfectly matched to customer specifications. Optical glass with high homogeneity and transparency for beautiful photographic effects and light guiding properties, while minimizing the light loss. High refractive index magnifies the field of view (FoV), greatly enhancing the visual experience.

CASTECH  5B33  Precision Optical Components

Precision optical components including: spherical mirrors, cylindrical mirrors, prisms, wave plates, protective windows, mirrors, polarizers, PBS and others, mainly used in laser manufacturing, laser equipment, laser cosmetic apparatus, precision lenses, micro-measurement systems, surveying and mapping instruments, military laser systems and etc.

CDGM GLASS CO.,LTD  5C51  Infrared cut-off filter

Blue glass is key components of low-pass filter (OLPF) which consists of blue glass and crystal which is widely used in CCD and CMOS front, or used alone, cutting off infrared light over 650nm and reducing the red light that influencing the CCD or CMOS imaging. Infrared cut-off filter (IRCF) can be used in mobile phone shooting, car, security monitoring and other products, blocking infrared through the visible light to ensure normal shooting without color cast and ghosting due to infrared interference.

Giai Photonics Co., Ltd.  3B41, 7B80  Laser Rangefinder 903nm Narrow Band Filter

Laser rangefinder 903nm narrow band filter (narrow band pass filter) is an optical component with relatively narrow bandwidth, of which the short and long wavelengths have a clear cutoff, allowing light of a specific wavelength to pass while light of other wavelengths to reflect (or attenuate). Main applications: for instrumentation measurement, laser rangefinder, various test systems, low light night vision and other products.
HIKARI GLASS (CHANGZHOU) OPTICS CO., LTD 5A55

i-Linear glass

Nikon is committed to the development of high quality materials used in the company’s optical products and can provide them various high-precision optical materials and components indispensably applied in cutting-edge technologies. Nikon i-linear glass is a material developed to apply in i-linear lithography units (365 nm), even the large-diameter product has an extremely high transmittance and excellent homogeneity.

ZEMAX Optical Technology Consulting (Shanghai) Co., Ltd. 7A35

LensMechanix

LensMechanix is for mechanical engineers who design the industrial design of optical products in CAD software, to obtain the full design package for optical systems in OpticStudio. They can begin immediately after loading the design package of the optical design. It ensures that the mechanical structure does not compromise optical performance before prototyping.

ZHONGSHAN ZHONGYING OPTICAL CO., LTD 7D31

Mobile phone lenses: All kinds of mobile phone lenses from 2M to 16M, including ultra-thin, wide angle, large aperture and cost-effective solutions, and low-cost solutions.

OPTRONTEC INC. 3C31

Optical Lens Products

Main applications: automotive OEMs, optical materials and components, AR/VR, mobile phones, automotive electronics, consumer electronics/entertainment, lenses and camera modules in the advanced manufacturing.
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<thead>
<tr>
<th>Company Name</th>
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<tbody>
<tr>
<td>MantisVision Technologies Co., Ltd</td>
<td>2D11</td>
<td>Develops 3D scanning devices with powerful built-in algorithms, affordable prices and tiny dimensions. Its mobile solution allows OEMs to build in more 3D vision, greatly increasing flexibility. Front/rear lens scanning with high resolution and advanced algorithms makes many scenarios a reality. Using its technology for facial recognition and timely tracking, you can capture all aspects of your children, pets, works of art and in-house decoration, and share these high-resolution 3D images and videos in real time to the MR/VR platform!</td>
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<tr>
<td>Wuxi Microvision Sensor Technology Co., Ltd</td>
<td>2E31</td>
<td>Produces structured light projection modules using advanced one-dimensional MEMS micro-mirrors as the scanning mechanism and built-in optical respond system, which can realize high-precision one-dimensional structured light projection in various modes.</td>
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<tr>
<td>Shanghai JuYou Smart Intelligence Technology Co., Ltd</td>
<td>2D41</td>
<td>Dolphin 3D ToF camera provides an easy-to-integrate ToF 3D vision solution for 3D applications within 5-meter range, such as facial recognition, machine vision, SLAM, 3D reconstruction, AR/VR, etc.</td>
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<td>LorenTech (Beijing) Co., Ltd</td>
<td>2E23, 2E24</td>
<td>LorenTech all-solid-state lidar offers the advantages of all-solid-state high reliability, resistance to bright light interference, and long measuring range, combined with 3D point cloud and RGB fusion, with intelligent detection and positioning function. Widely used in various levels of autonomous vehicles, unmanned delivery vehicles, robots and AGVs; perimeter protection, area monitoring, personnel monitoring and behavior monitoring and pre-warning; port automation, storage automation; and intelligent transportation, smart city, etc.</td>
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Pico Technology Co., Ltd.  
2E40

Pico Neo brings head and hand position tracking to the all-in-one VR glasses for the first time, and on the Neo2, we used the Technological innovations that once again bring leaps and bounds to mobile VR gaming. The Neo2 has more precise spatial positioning than before, better system software, and richer 6DoF gaming and application resources. inside-out spatial positioning method can achieve full angle tracking around the house.

Hangzhou LuminWave Technology Co., Ltd  
2E49

The FS8864 series is the smallest multi-point 3D TOF sensor at present, among which the SPA model is a 3D TOF chip using system-level package (SiP), SMA and SMB are spa-centric micromodules embedded with deep learning AI algorithms to provide turnkey solutions for gesture recognition and 3D point cloud. The product focuses on the balance between the complexity of hardware and algorithm, and optimizes the size, power consumption and cost to meeting the target application, making it easy to mass produce and elevating the versatility and economy of 3D lidar perception to a new height.

Neuvition Technology (xiamen) Co., Ltd  
2E33, 2E34

Neuvition's high definition LiDAR that supports up to 480 vertical lines and 3550 pixels per line. Titan M1-Plus generates a point cloud of up to 2,000,000 points per second in a field of view of horizontal 80° by vertical 25°, with a range of up to 200 meters. The frame rate can be dynamically adjusted from 1fps to 20fps through API. The system can work well from -20°C to +65°C.
Xian Chishine Optoelectronics Technology Co., Ltd. 3E41 Consumer 3D cameras

The 3D Smart Scanner Fingo S1, a 7.0” large screen slim and flat body with embedded computing ability and a "cloud" computing storage technology, free from PC connection and field limitations, able to scan and output the clear, colorful 3D models anytime and anywhere. Built-in powerful 3D fun creative app, which makes 3D design more intelligent through algorithm-driven models.

Shenzhen Litra technology co.,ltd 2E39 Single-line LiDAR LTME-01

The new LTME-01C LIDAR uses the TOF to reach a breakthrough ranging semidiameter of 30m, sampling rate up to 30kHz and angular resolution up to 0.18°. The excellent structural design makes the LTME-01C perfectly suitable for indoor and outdoor applications. The low pricing can meet the user's demand for cost effective LIDAR products. This LIDAR is very suitable for use in service robots, industrial AGV, intelligent transportation and other industries.

Hypersen Technologies Co., Ltd. 2D01 Nano-level Laser displacement sensor

HPS-LC010 is a high-precision non-contact sensor based on laser triangulation principle, with direct/inclined compatible structure, it can detect both diffuse and specular reflective surfaces, the controller adds humanized touch screen operation interface and rich communication interface, which can be used by users and later integrated development.

Xi an Zhisensor Technologies Co., Ltd. 2D40 MEMS microscope single-axis scanning module

Low cost and high reliability solid-state LIDAR has become the focus of many manufacturers. Insight Microsensing provides MEMS solid-state LIDAR core scanning module, which replaces the traditional mechanical rotation device and has advantages of large scanning angle and high scanning resolution, small size, low cost and low power consumption.
### Trumpf (China) Co., LTD

**2B32**

3D sensing VCSEL

Trumpf’s 3D Sensing VCSEL for consumer electronics has stable product quality and abundant shipment capacity. Used by the most mainstream mobile phone manufacturers, with over 5 years of high shipment volumes to date. VCSEL, originated from Europe, serving the world! 4mm, perfect for R&D labs and production lines.

### Shenzhen Raybow Optoelectronics Co., Ltd.

**2826**

905nm high power semiconductor laser single tube chip

LIDAR technology is rapidly improving in the fields of ranging, mapping, and exploration, as well as in the fields of drones and service robots, and every year the traditional optical ranging market needs to ship 6 million new 25W chip model RB-905A-74-25-0.75-SE, with 3-layer luminescence node, the size of the electron injection zone 74μm x 10μm, photoelectric conversion efficiency of 49%. Fast axis divergence angle of 30 degrees, slow axis divergence angle of 14 degrees.

### Jingxi Diffraction Optics Technology Co., Ltd.

**2D115**

Diffractive Optical Elements (Grating)

Diffractive optical elements (DOE) products are widely used in intelligent sensing identification, viewfinder, focus light, intelligent security monitoring, medical laser, robot vision, 3D computer vision, stage lighting and other fields.

### JIANGXI DERAY PHOTOELECTRIC TECHNOLOGY CO., LTD.

**2C05**

940nm VCSEL chip

Excellent optoelectronic performance, characterized by extremely low threshold current, small beam quality, small far-field divergence angle, high reliability and stable wavelength, narrow wire width; mainly used for 3D face recognition.
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<tr>
<td>GLOBAL SENSOR TECHNOLOGY., LTD</td>
<td>1A32</td>
<td>WLP Uncooled IR Detector</td>
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<td>Wafer-level-package Uncooled IR Detector Resolution and pixel pitch: 640<em>512/12μm, 400</em>300/12μm, 256<em>192/12μm, 400</em>300/17μm, 120*90/17μm</td>
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<td>IRay Technology Co., Ltd</td>
<td>1B11</td>
<td>T3S thermal imaging camera for mobile phones</td>
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<td>Consumer-grade infrared thermal imager with 2.76 million temperature measurements data, allows excellent imaging, convenient experience for far infrared temperature measurement, fast home-used temperature screening, so that high-end infrared thermal imager step into a more colorful life.</td>
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<tr>
<td>FUJIAN FORECAM OPTICS CO., LTD</td>
<td>1C25</td>
<td>VCSEL</td>
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<td>Infrared products are mainly used to detect and identify the infrared radiation of objects, and are widely used for military, IR tracking and guidance technology, IR night vision technology, and IR remote sensing technology. As the technology matures and costs go down, IR applications range from night vision and thermal imaging systems for military and defense, penetrate into urban Security monitoring, automotive and consumer products, forest fire alerts, building energy thermal detection, high-speed railway safety monitoring products. Mainly used in temperature and humidity measurement, detection alarm, IR remote sensing, IR anti-counterfeiting and else.</td>
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<tr>
<td>SHANGHAI MAGNITY ELECTRONICS CO., LTD</td>
<td>1D14</td>
<td>Mobile thermal imaging cameras</td>
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<td>Adopt innovative 160*120 pixel IR detector array technology, high resolution germanium lens and high image frame rate. Smooth and clear image, no need for external power supply, low power consumption, and long-lasting battery life.</td>
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Shenzhen Sunell Technology Co., Ltd. 1A05

**8K Quad Panoramic Network Camera**

8MP monocular pixels, quad-camera panoramic stitching pixels 32MP(8K), single IP output 7680(H) × 4320 (V) 360° horizontal × 360° vertical 2.2mm fisheye lens front end splicing, lens distortion correction 360° tiling. Preview modes such as crystal ball support alarm, audio interface.

ICLEGEND MICRO 1D42-03

**Smart millimeter wave sensors**

High-precision sensors; RF-to-Bit single-chip solutions; Intelligent multi-application scenarios; Flexible ultra-low-power configurations.

Guangzhou Keii Electro Optics Technology Co., Ltd. 2D94

**Unmanned infrared payload**

Designed for light UAV, using domestic high sensitivity 1024x768 detector weight ≤ 300g, temperature measuring type HD thermal imaging camera, higher pixel, higher sensitivity.

CEC Photoelectric Technology Co. 1A01

**Photovoltaic Turret SCB450**

Multiple optical sensor combinations – High precision fiber optic gyro-stabilized stage - Integrated auto-tracking - Three-proof sealed design. Used in harsh environment like military reconnaissance, targeting, search and rescue, anti-smuggling, evidence collecting, environmental monitoring, navigation assistant and other fields. The product can be equipped with shore-based surveillance and various types of law enforcement vessels.
Sunny Optical Technology (Group) Ltd. 7B56

ACF conductive particle detection machine

For indentation detection of ACF conductive particles in LCD module sections after COG and FOG bonding before dispensing, including the particles' volume, distribution, compression strength and displacement. To determine the OK / NG of a panel bases on a certain criteria. It is an image acquisition of the Bump area on the LCD panel COG and FOG using a line array camera, and is finally obtained by algorithm analysis on the qualification of the detected target.

Aview Image Technology Suzhou Limited 7C71

On-board camera automatic active alignment equipment

Newly launched automatic modular on-board camera active alignment equipment, consisting of automatic loading and unloading module, plasma cleaning and activation, dispensing, active alignment and UV curing parts, compatible with all kinds of on-board camera active alignment assembly needs, each unit has a self-test function, one key to start and change the product configuration, more flexible layout in the production line, can be fully automatic operation as a whole, or stand-alone operation, to meet customer needs for more in-depth and more convenient on-board camera production.

Hexagon Metrology (Qingdao) Co., Ltd. 7B30

High-Performance Compound Image Measurement Equipment

The flexible, highly reliable compound image measurement equipment is equipped with a variety of sensors, it combines imaging, contact and 3D scanning in one system, allowing rapid measurement of a variety of features in one setup. It is designed to meet a wide range of measurement needs.

Agilebull Technology Co., Ltd 5C11

Zoom lens assembly line

This line is used for the assembly of zoom lens, including the assembly of parts and accessories such as front master cylinder, front cam, front group lens, rear master cylinder, rear cam, rear group lens, fan gear, fixed grating, reduction gear box, etc.
## Bruker (Beijing) Scientific Technology Co., Ltd.  
**Booth:** 5B18  
**Product:** Diffractive optical element

A measurement system with industry-leading measurement performance and flexibility, featuring patented white light interferometry, a large vertical metrology range of angstroms to millimeters in the field of view, and the industry’s highest vertical resolution and measurement repeatability. With its unique intuitive user interface and full-featured automated inspection and analysis capabilities, the system provides users with fast and efficient access to material roughness, 2D/3D surface analysis, and high-resolution imaging.

## Chotest Technology Inc.  
**Booth:** 7C85  
**Product:** VX3000 Series Flash Meters

The VX3000 Series Flash Meters feature dual telecentric, high-resolution optics, combined with high-precision image analysis algorithms and one-button, high-accuracy image analysis. In CNC mode, by simply pressing the start button, the instrument automatically locates the measuring object and matches it to the shape of the templates, measurement evaluation, report generation, truly one-click fast and accurate measurement.

## Hitachi High-Technologies Corporation  
**Booth:** 7D65  
**Product:** UV/Vis/NIR Spectrophotometers

The deuterium lamp is guaranteed for seven years and comes standard with a six-pool tower wheel, which can be operated by an Ipad.

## SHENZHEN 3NH TECHNOLOGY CO., LTD  
**Booth:** 7B07  
**Product:** Resolution Test Card ISO12233

The resolution card (resolution card) is a standard sample that provides auxiliary tests such as vertical resolution and horizontal resolution of actual shots. The resolution test adopts the international standard ISO12233 resolution card, which takes uniform shooting angle and shooting environment. Standard sizes are 1X 2X 4X 8X; custom sizes are also available, and transmissive reflections can be made.
Guangdong Huicheng Vacuum Technology Co., Ltd.  
Magnetron sputtering optical coating machine

Coating area Φ2100x H1200mm/Φ1800x H1000mm/Φ1300x H700mm, Wavelength 380nm~780nm, Be applied to AR, hard AR film, hard film, decorative film, HR film, etc.

Dongguan Huichi vacuum Manufacturing Co., Ltd.  
AR optical coating machine

Widely used in digital products, watches, hardware and other glass, metal, plastic, ceramic material panels, parts surface, and decorative and functional film plus AF, as coating, improve surface hardness, smoothness, wear resistance, chemical resistance and easy cleaning.

IKS PVD Technology (Shenyang) Co., Ltd  
IKS-OPT2700 Optical Coating Machine

IKS-OPT2700 is an Optical electron beam evaporation coating machine, coat visible color film, aluminum reflection film, AF fingerprint film, low melting point organic film, visible spectral film, visible anti-reflection film, etc.

Buhler Leybold Optics Equipment (Beijing) Co., Ltd.  
HELIOS series of magnetron sputtering coating equipment

The HELIOS range of magnetron sputtering systems is characterized by high and stable deposition rates, high process stability and high precision in ultra-thin films, thickness control. Available for over 200 layers and 20μm thick filters with optimal layer oxidation rates, high density, and low loss. Processable thin film devices include laser bandpass filters, stop filters, single/multi-cavity filters, chirped mirrors, polarizers, etc.
Double-plates polishing machine DS700

The DS700 machine is built with 2 rotating plates. To be polished, parts are moved between the plates with epicycloidal movement by carriers. Both sides are polished in same time without any sticking and highly parallel.

JF-5 high-power automatic peak-seeking X-ray oriented instrument

A high voltage, generated by a high-voltage transformer, is applied to the X-ray tube to produce X-rays. Diffraction is produced when the formula: \( n\lambda = 2dsin\theta \) is met, is received and amplified by the counting tube, and the intensity is indicated by the amplifier’s microamps. The goniometer reads out the accurate angle value. This equipment adopts PLC control technology, high automation, low failure rate, strong anti-interference ability and good system stability. Automatic measurement, just touch the touch screen or step on the foot switch. Automatic calibration is accurate and convenient, automatic scanning 10 times and take average value.

AspheroCheck UP

The TRIOPTICS is based on OptiCentric® detection technology and is ideal for measuring aspheric eccentric tilts in combination with a non-contact displacement sensor for measuring the symmetric axis of the aspheric surface relative to the optical axis of the lens.

Contact Scanning + Image Measurement MiSCAN Vision System

New development for high-precision 3D scanning of small parts in the ultra-fine field, based on a stylus with a minimum diameter of 125µm”. MPP-NANO® realizes 3D scanning measurement in the ultra-fine field. Equipped with an observation camera, you can easily approach the workpiece while checking its condition. The SP25M, a highly reliable scanning probe, is also available, making it universally applicable to small workpieces. High-performance image measurement functions are also available.
Han's Laser Technology Industry Group Co., Ltd

Application: IC lead frame, PCB board blind hole drilling, lithium battery diaphragm, electronic connectors, speaker accessories, Teflon PTFE material, motor accessories, LCD ARRAY (glass processing), LCD CF (glass processing), aluminum foil, silver film, fingerprint module, camera module, earphone diaphragm, mobile phone frame, ITO glass, sapphire substrate plasma cleaning modified to remove static electricity.

Wuhan ZhongGu Lianchuang Photoelectrics Technology Co., LTD.

Using the latest generation of fiber laser, equipped with self-developed laser welding head, to fill the blank of handheld welding in the laser equipment industry. With advantages of simple operation, beautiful weld seam, fast welding speed, no consuming, to welding the thin stainless steel, iron, galvanized plate and other metal materials, can perfectly replace the traditional TIG welding, electric welding and other processes. The handheld laser welding machine can be widely used in complex and irregular welding processes.

Shenzhen Vilaser Equipment Co., Ltd

Semiconductor laser welding system: using infrared semiconductor laser module, laser power optional; can fully control the welding effect and avoid damage to welded parts. The temperature controlled laser welding system can detect the temperature of a tiny area of 1mm with an accuracy of 10°C. Post-solder inspection, which can detect defects such as soldering, solder leakage and burns.

Sapphire Laser Technology Co., Ltd.

Fiber laser marking machine is a new technology product that integrates fiber laser technology, computer control, mechanical and automatic control technology. The system uses the fiber laser has a long service life, high reliability, maintenance-free host, can work for a long time, most of the Metal materials can be processed. We have installed a special software for Windows platform. The user can operate the machine directly from the user interface, or edit the graphics with AutoCAD and other software, then start marking via the software.
New Venue, New Venture

CIOE will start its new journey at Shenzhen World Exhibition and Convention Center with larger exhibition area and better facilities. Plan your visit with your traffic guide and check out where will be your closest spot to get on our shuttle bus.

During non-exhibition period

CIOE has launched its official English WeChat account for delivering more industry news and marketing analysis for you to get to know China’s market better. Scan the QR code on the right or search CIOE Shenzhen in WeChat to follow.

CIOE 2020 Floor Plan

FLOOR PLAN

China International Optoelectronic Exposition (CIOE 2020)
September 9-11, 2020    Shenzhen, China