

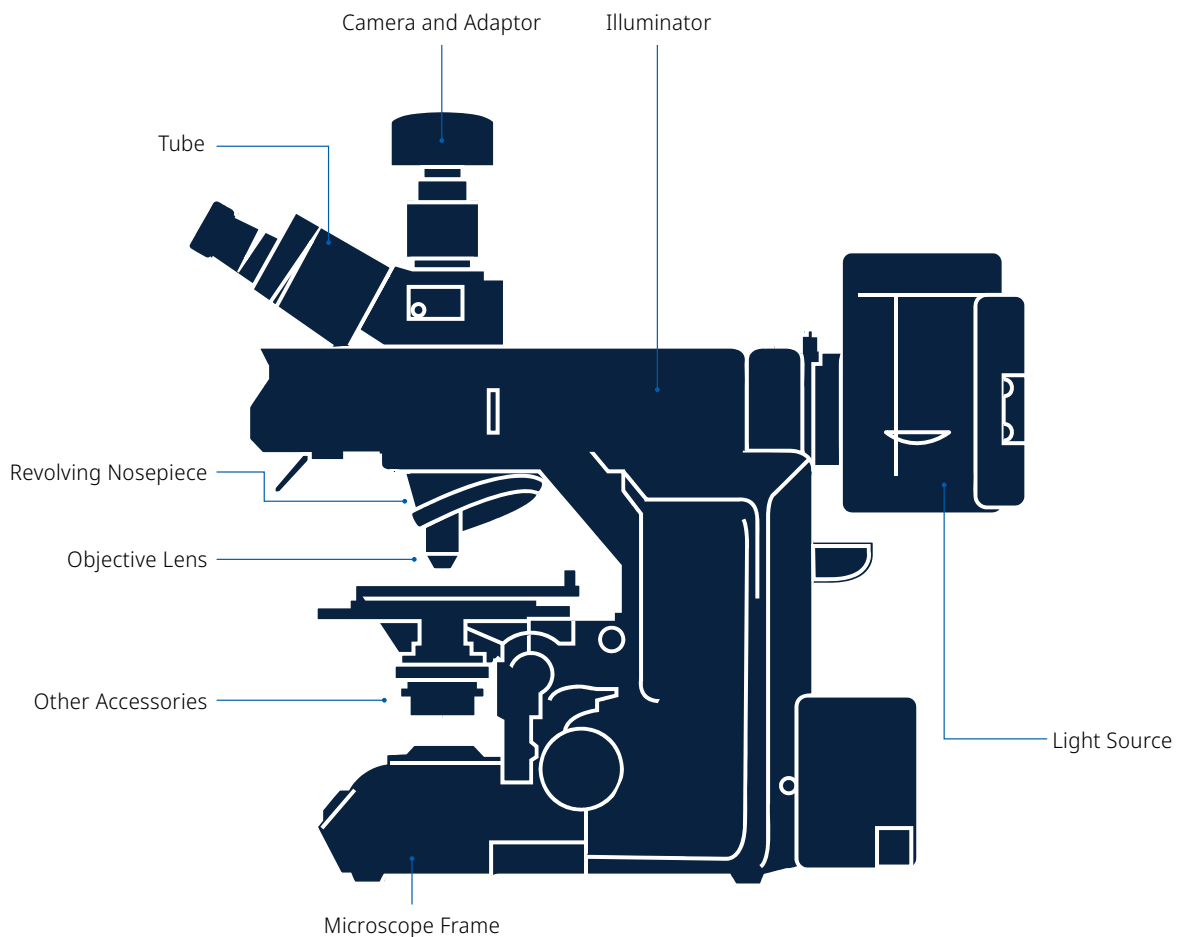
INDUSTRIAL

Microscope Components for Advanced Optical Instruments



Solutions for High-Performance Instruments

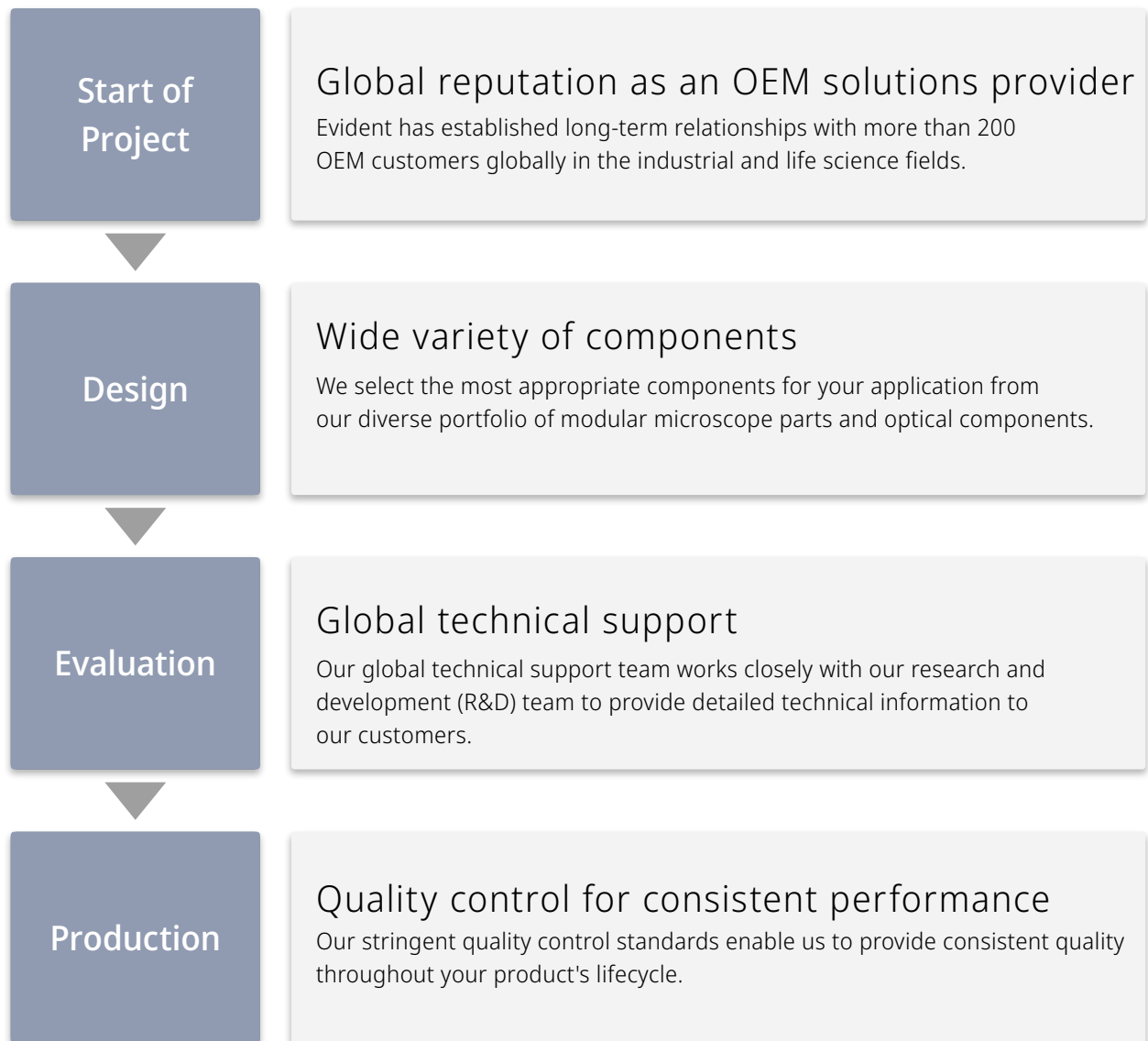
With a rich history, Evident has built a reputation for producing high-quality optics, mechanical systems, and electronics. We offer more than 1,000 components so our OEM customers can build the systems they need. Our components enable our customers to design high-quality precision equipment while reducing their development cost and time-to-market.



* For detailed information and specifications, refer to our Microscope Components Guide.

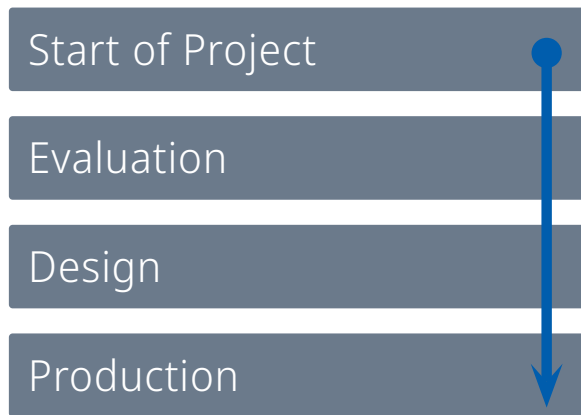
EVIDENT Makes Your Development Process Simple and Efficient

If you are looking to integrate optical components or microscope assemblies into your equipment, Evident supports you from design to production with advanced technologies and detailed technical information.



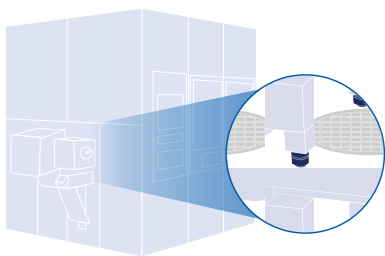
Start of Project

Collaborate with a proven OEM solutions provider

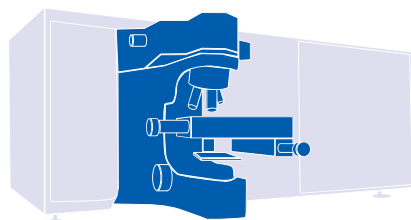


Product development can be challenging. Our large product portfolio and technical expertise enable us to choose the right components for your application and equipment design.

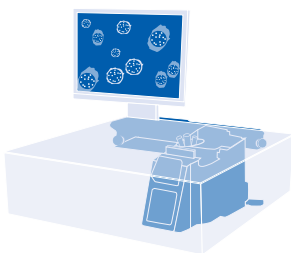
Evident supports you in each project phase using our broad experience working with equipment manufacturers.



Semiconductor equipment



Raman spectroscopy



Blood analyzer

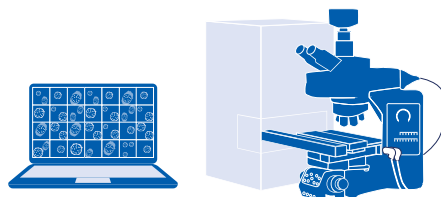


Image analysis system

Applications

Industrial

- Semiconductor front-end equipment
- Semiconductor back-end equipment
- Laser processing equipment
- Digital microscopes
- Contamination analysis systems
- Hardness testers
- Electronics inspection equipment
- White light interferometers
- Factory automation (FA)

Life science

- DNA sequencers
- Digital pathology
- Cell screening and analysis
- Super-resolution microscopy

Note: Our OEM customers are responsible for the required product evaluation and regulatory compliance in their final products.

Select the ideal optics for your equipment

Factors to consider:

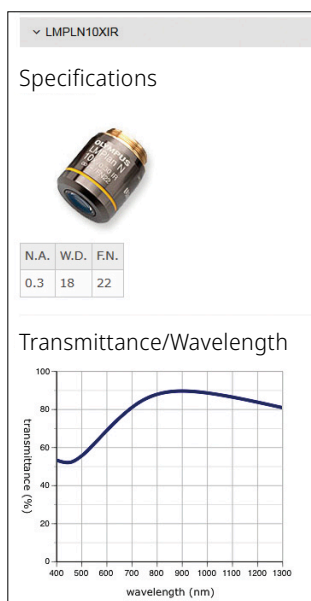
- Magnification
- Numerical aperture
- Field number
- Working distance
- Aberration correction
- Resolution
- Parfocal distance
- Depth of focus

The performance of microscope optics directly affects the final quality of your equipment. When considering which objectives to include in your product, many factors must be considered. This includes numerical aperture, aberration correction, cover glass thickness, working distance, and field of view.

Our support team helps you meet demanding requirements with a selection of over 200 types of compact and lightweight objectives.



UIS2 objectives for industry



Full specifications available online*

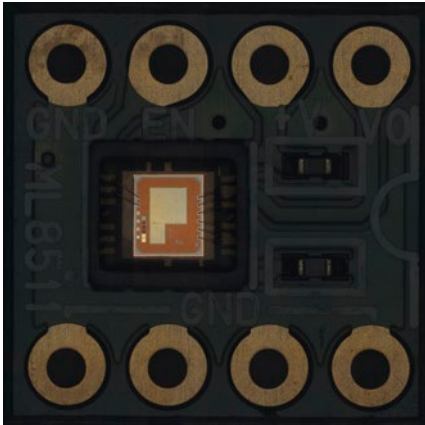
With a short 45 mm parfocal distance, UIS2 objectives are compact and lightweight. They are recommended for system integration thanks to their exceptional optical performance and excellent color reproduction.

In addition, UIS2 objectives are infinity corrected with full aberration correction. This enables you to integrate the objective of your choice without sacrificing correction performance.

All UIS2 objectives have ISO standard RMS threading, facilitating easy mounting during assembly.

*For information on all UIS2 objectives, visit [olympus-lifescience.com/oem-components/objectives](https://www.olympus-lifescience.com/oem-components/objectives)

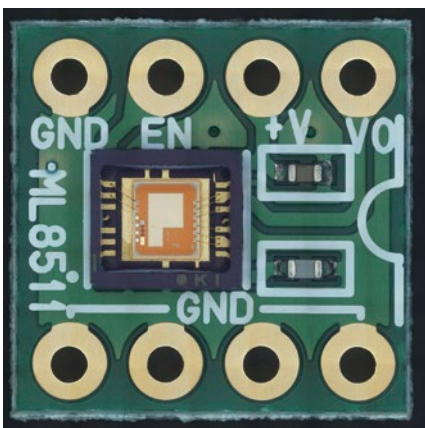
Add value using advanced technology



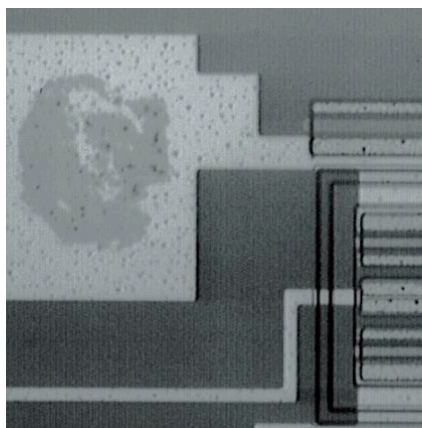
The integrated circuit (IC) chip is visible, but other areas are very dark.

In addition to objectives, it is important to choose the right accessories to optimize the optical performance of your product.

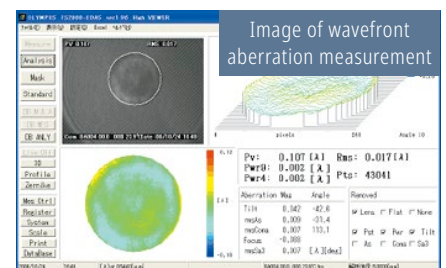
Evident provides high-quality accessories that add value to your equipment.



Our MIX illumination expands the capabilities of darkfield imaging and makes it possible to observe both the circuit board and IC chip clearly.



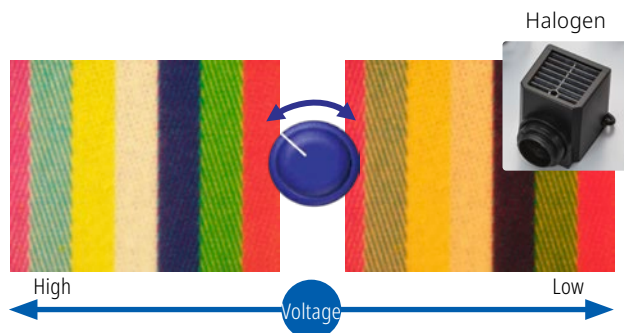
Infrared imaging is a common nondestructive testing technique used on silicon-based electronic devices and laser processing machines.



We introduced wavefront aberration control into UIS2 objectives to achieve constant quality. With this method, the difference between the ideal and actual image formation is minimized.

- The following products feature wavefront aberration control:
- TIRF objective lenses
- PLAPON60XOSC2
- MPLFLN (BD/BDP) and LMPLFLN (BD) 50/100/150X series objectives
- MPLAPON 50/100X objectives

Choose the right illumination unit



The color temperature of halogen light sources remains constant when adjusting the voltage.

Compact, light, and uniform illumination are the key factors OEM manufacturers consider when choosing the right light source.

Evident offers more than 40 types of illumination units, including advanced LED light sources.



The color temperature of LED light sources remains constant when adjusting the voltage.

When using LED illumination, additional color adjustment accessories, such as color correction filters and neutral density filters, are not required because the color temperature does not change when you change the voltage. This makes LED light sources easier to use. Further, the long life of LEDs also reduces the need for maintenance.

Our BX3M LEDR light source is compact, generates low heat, and has a flexible layout that integrates into a wide range of devices.

Conventional light sources, such as halogen, mercury, and infrared types, are also available. A fiber guided light source is ideal for mitigating the effects of heat generated by the light source.



Increased accuracy and throughput



Integrated systems may require remote control for settings adjustment

To acquire an ideal image for inspection and analysis, users typically must make several adjustments, including the focusing position, sample observation position, contrast methods, and magnification. When integrating microscope components into your equipment, remote control is often necessary. Users need to perform efficient inspections, so manually rotating objective lenses and focusing can add unwanted time to inspections.



Our expertise in microscope components helps increase the accuracy and throughput of your equipment.



A motorized revolving nosepiece

Evident offers various components, including microscope frames with a motorized Z-axis, revolving nosepieces, motorized illuminators, motorized analyzers, control boxes, and hand switches to enable remote control. Our high-speed C-type motorized nosepiece features increased accuracy and durability.

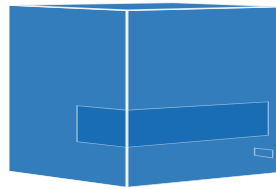
If motorized control is not required, cost-efficient coded components are available. Our unique multi-spot laser autofocus system detects minute differences in similar surfaces with high accuracy. This system is ideal for mirror/wafer and glass materials using brightfield, darkfield, and differential interference contrast observation methods at 5X to 150X magnification.

Evident can provide technical documentation to control the laser autofocus system.



Multi-spot laser autofocus

Customize equipment with dedicated integration units

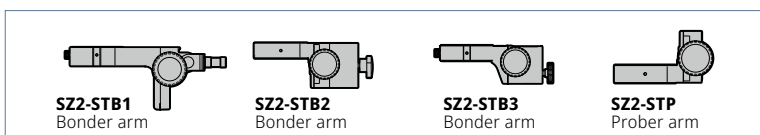
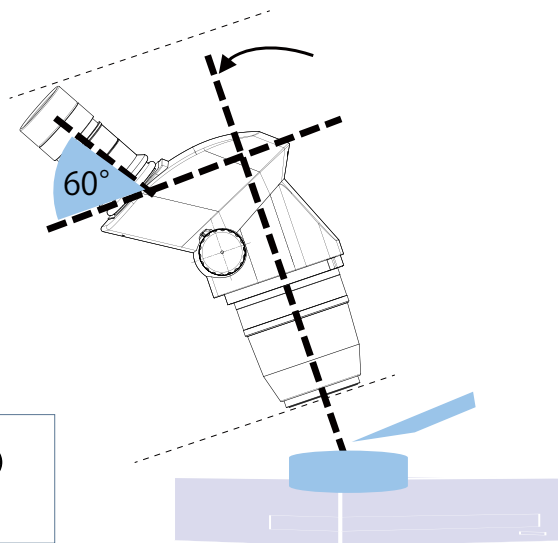


Conventional stereo microscopes are designed to be placed on a table and used by operators in a seated position. When stereo microscopes are integrated into larger systems, they sometimes require modification, such as tilting the microscope head or fixing the frame to something other than a regular stand. A non-standard layout is needed for these applications.

Evident offers stereo microscopes with integration in mind.

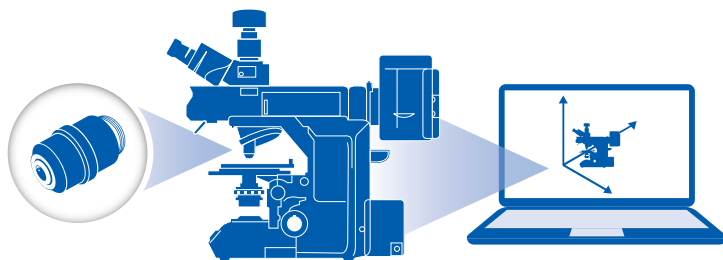


Models with a 60-degree inclination tube (SZ61-60/SZ51-60) are available for applications where the zoom body must be tilted to work with other equipment or mounted on a universal stand.



Evaluation

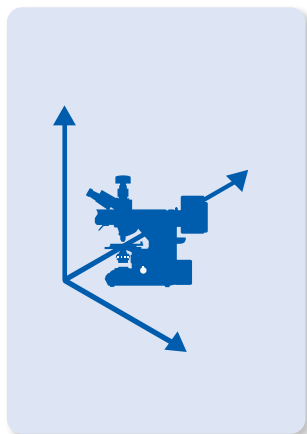
Get technical advice and information



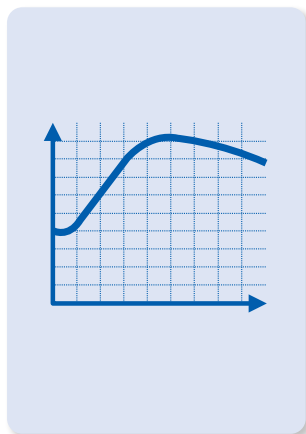
In each development phase, detailed technical information about the optical systems being integrated is often required. This information is also important to assess the quality of the final product.

Evident works closely with your team to provide technical advice and information.*

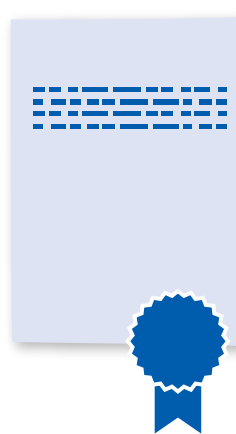
* There are cases where a nondisclosure agreement is required and some information cannot be disclosed.



Dimensional data are required for mechanical integration studies (e.g., CAD data)



Wavelength transmittance data are required for optical design studies



Several certificates (e.g., non-use of hazardous materials) are required for industrial standards



Command specifications are required for software development

Production

Maintain stable equipment production



During mass production, all the equipment's components must be available and meet quality standards. Poor quality in one component can impact the overall quality of the product. If one component is unavailable, the entire production line may have to shut down.

Evident gets you the components you need when you need them.



Evident's production facility in Nagano, Japan, is equipped with an ISO9001 quality management system. As a quality management activity, strict tests are completed during every production phase to enable optical performance, safety, and durability. Highly skilled technicians are professionally trained through our skills program and strive for consistent quality.

In addition to OEM components, Evident offers an extensive product line for parts and sample evaluation. Learn more about LEXT™ 3D laser scanning microscopes and DSX™ digital microscopes at olympus-ims.com.

LEXT

3D Measuring Laser Microscope



OLS5100

DSX

Digital Microscope



DSX1000

- **EVIDENT CORPORATION is ISO14001 certified.**
For details on certification registration, visit olympus-ims.com/iso.
- **EVIDENT CORPORATION is ISO9001 certified.**
- All company and product names are registered trademarks and/or trademarks of their respective owners.
- Images on the PC monitors are simulated.
- Specifications and appearances are subject to change without any notice or obligation on the part of the manufacturer.
- LEXT and DSX are trademarks of Evident Corporation or its subsidiaries.

EvidentScientific.com

EVIDENT

EVIDENT CORPORATION
Shinjuku Monolith, 2-3-1 Nishi-Shinjuku, Shinjuku-ku, Tokyo 163-0910, Japan

N8600757-022024