Supporting the evolution of a smarter society

Unraveling life mechanisms, advancing medical research, and delivering precision manufacturing. Nikon supports society in a wide range of fields — now and into the future.

At Nikon, we use opto-electronics and precision technologies cultivated during our 100-year history to provide a wide range of products and services globally. Our activities extend from exploring the possibilities of imaging, to advancing bioscience and smart devices, refining our...
Supporting the evolution of a smarter society, and providing imaging possibilities. Medical research, and delivering precision in a wide range of fields — now and into the future.

Businesses

- High-level manufacturing processes, and capturing views of stars that are billions of light years away. Nikon will continue to enrich lives, support cutting-edge industries that are shaping the future, and confront challenges around the world.

Equipment Business
- Biological microscopes
- Super-resolution microscopes
- Cell culture observation systems
- Ultra-wide field retinal imaging devices

Healthcare Business
- Industrial Metrology Business
- Customized Products Business
- Glass Business
- Encoders Business
- Ophthalmic Lenses Business
Offering rich and varied image creation.

Nikon brings expanded imaging enjoyment to people around the world. Our digital cameras capture crucial moments in high-quality images that can be shared easily using our exclusive application and online services.

Nikon cameras enable versatile image creation that meets users’ intentions. We provide a wide variety of models, including a full lineup of digital SLR cameras, ranging from those for family use to advanced professional equipment, and the KeyMission action camera series.

Image sharing and storage service NIKON IMAGE SPACE and the SnapBridge app, which seamlessly connects a Nikon camera and smart devices, expand pleasures that are unique to digital imaging. Meanwhile, Nikon Group Company, Mark Roberts Motion
Control Limited (MRMC) in the U.K., provides automated camera solutions to propose new imaging possibilities for the broadcasting and movie industries.

We also offer various binoculars including super-wide-field-of-view WX binoculars that make the most of Nikon’s accumulated optical technologies, as well as Fieldscopes, Loupes and Laser Rangefinders.


Establishes a constant connection between your Nikon camera and compatible smart device using Bluetooth® low energy (BLE) technology. Taken images are reduced in size to approximately 2 megapixels for automatic transfer to smart devices for easy uploading to social media platforms. With SnapBridge, you can share your passion with the world anytime, and anywhere.

* The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Nikon Corporation is under license.
Improved computer data processing, big data analytics and the evolution of AI have led to the birth of various new services that integrate objects and information. IC chips and flat panel displays are two crucial components for such IoT development. At Nikon, we create and market these essential systems through an integrated business structure, covering everything from development and design to manufacturing.

IC chips and high-resolution flat panel displays hold the key to further improvements in IoT, AI and smart devices. Through the development and production of these manufacturing systems, Nikon is supporting the creation of a super smart society.
Contributing to the evolution of electronic devices.

sales and after-sales services. From supplying innovative semiconductor lithography systems that satisfy the ever-changing demand for smaller and more intricate IC chips, to producing FPD lithography systems for large panels, as well as the high-definition small and medium-sized panels found in smart devices, Nikon is working to create a super smart society that benefits the whole world.
Nikon is playing a vital part in creating an ideal society where everyone can live well, by offering microscopes and other instruments necessary for research such as medical fields where iPS cells are expected to enter practical use for regenerative medicine in the near future. Following a strategic collaboration agreement with Lonza (Switzerland), Nikon has started a regenerative medicine contract manufacturing business via a new, wholly owned subsidiary, Nikon CeLL innovation Co., Ltd. We will continue
Nikon group’s Optos ultra-wide field retinal imaging device is inspection equipment that captures a digital image covering approx. 80% of the retinal area (with its wide field of view of 200°) within 0.4 second, and supports identification of many medical conditions. Non-mydriatic diagnosis greatly reduces the burden on patients. As well as detecting eye problems such as a retinal detachment, it is also used for diagnosis of diabetic retinopathy in diabetic patients, so is effective for use at ophthalmology medical facilities. 

In May 2015, we acquired Optos Plc, a leading company in the retinal diagnostic imaging equipment market, as a wholly owned subsidiary. In December 2016, Nikon and Verily Life Sciences LLC (U.S.A.) established a strategic alliance to develop machine learning-enabled solutions for diabetes-related eye disease.

We are contributing to improving the quality of life for people all over the world.
INDUSTRIAL METROLOGY BUSINESS

Highly precise “eyes” support uncompromising manufacturing.

With a wide and varied lineup including industrial microscopes, measuring equipment and non-destructive/non-contact diagnostic systems, Nikon provides the rigorous quality-control solutions required for high-level manufacturing of products such as electronic components, automobiles and airplanes. Nikon-Trimble Co., Ltd. [a joint venture with Trimble Navigation Ltd. (U.S.A.) (now Trimble Inc.)] delivers improved productivity and supplies high-accuracy surveying instruments for the fields of construction and surveying. Thus, we meet various surveying needs with the utmost precision.

INDUSTRIAL METROLOGY AND OTHERS

Nikon produces measuring technologies that are indispensable for industry development and develops cutting-edge technologies for space exploration, as well as making more familiar products, such as ophthalmic lenses. Through our varied business products and technologies, we are contributing to the evolution of science technology, industry and society.
X-ray/CT Inspection System XT H 450
(Industrial Metrology Business)

This system utilizes X-ray transmission to display the inner structure of electronic components, injection moldings and castings for nondestructive inspection. The XT H 450 employs a high-power X-ray to allow inspection of large castings and high-density metal products/objects, such as turbine blades. It has a powerful 450kV X-ray, and delivers the highest-resolution images in the world, meeting the increasing demand for more accurate industrial inspections.

CUSTOMIZED PRODUCTS BUSINESS
State-of-the-art technologies for space.

Nikon’s Customized Products Business capitalizes on the company’s state-of-the-art technologies to meet unique, advanced needs. Nikon reliably handles everything from design to manufacture, providing optical parts and products which require ultra-high precision such as those for the Venus Climate Orbiter Akatsuki and the observation systems for the Subaru large-scale infrared telescope.

We utilize our core technologies to the utmost to turn customers’ demands into reality.
GLASS BUSINESS
Optics based on a legacy of technological expertise.

Nikon started research into glass manufacturing in 1918, the year after the company was founded. Today, we continue to produce high-quality optical components and photomask substrates for FPD, in an integrated production process covering everything from dissolving optical materials to applying final processing. We also provide analyzing and measuring services for optical materials and components, supporting quality control in various sectors.

ENCODERS BUSINESS
Contributing to advances in robotic technology.

Nikon’s encoders are used as sensors in the joints of industrial robots and machine tools to measure the quantum or rotation angle. We support increased sophistication, automation and energy efficiency in a variety of industry fields, by harnessing all kinds of innovations — from our unique optical and ultra-high-precision technologies, to electronics, high-density packaging and accurate pattern-forming technologies — thus contributing greatly to the future development of industry.
OPHTHALMIC LENSES BUSINESS
Optical technology for comfortable vision.

Nikon has been researching optics and ophthalmic lenses for more than half a century, and developed innovative products by utilizing cutting-edge technologies. Our 3D custom-made single-vision lens SEEMAX offers optimally designed lenses according to the selected frame for each individual customer. Nikon-Essilor Co., Ltd. (a joint venture with Essilor International) is in charge of our ophthalmic lenses business.

4D free-form silica glass realized a “manufacturing revolution.” (Glass Business)

Created by liquefying glass materials at room temperature and forming lamination layers, 4D free-form silica glass has optical characteristics equivalent to silica glass, but can be produced at a tenth of the cost and formed freely in a single operation without grinding. It offers superior laser transmission, making it suitable when both transparency and heat-resistance are required.
Nikon technologies contribute to people’s live
Nikon technologies contribute to people’s lives, society, industries, science, and the future.

**INDUSTRIAL METROLOGY AND OTHERS**

**INDUSTRIAL METROLOGY BUSINESS**

**CNC Video Measuring System**
***NEXIV VMZ-R4540***
Automatically measures dimensions/shapes of diverse objects including precision parts and electronic components.

**Non-Contact Multi-Sensor 3D Metrology System**
***HN-C3030***
Offers high-precision measuring and quickly acquires various data of the target such as surface form/undulation.

**X-ray/CT Inspection System**
***XT H 450***
Enables inspection of large castings and high-density metal objects, such as turbine blades.

**Total Station**
***Nivo Series***
Surveying instruments used to measure distances and angles.

**CUSTOMIZED PRODUCTS BUSINESS**

**GLASS BUSINESS**

**ENCODERS BUSINESS**

**OPHTHALMIC LENSES BUSINESS**

**FPD LITHOGRAPHY BUSINESS**

**FPD Scanner**
***FX-68S***
 Supports the production of leading-edge, high-resolution, small- and medium-sized panels from Gen 6 plates.

**FPD Scanner**
***FX-101S***
 Facilitates mass production of Gen 10 large glass plates.

**ArF Immersion Scanner**
***NSR-S631E***
Delivers high accuracy and high throughput, for stable volume manufacturing at cutting-edge production lines.

**ArF Scanner**
***NSR-S322F***
Employs the proven Streamlign Platform, while overlay accuracy and high throughput are greatly improved.

**SEMICONDUCTOR LITHOGRAPHY BUSINESS**

**Precise Equipment Business**

**SEEMAX series**
A series of lenses utilizing shape and fitting parameter optimization to deliver maximum performance.

**Nikon designed the optical system for the IR1 infrared camera, ultraviolet imager (UVI) and lightning and airglow camera (LAC), and designed and manufactured a lens for the IR2 infrared camera.**

**Nikon’s optical materials feature high homogeneity and have excellent optical characteristics. Our advanced processing technologies enable us to create the highest performance optics.**

**Optical systems for Akatsuki**

**Optics**

**Multi-Turn Absolute Encoder MAR-M50A**
Achieves a height of only 12.74 mm. It is ideal for use in small AC servomotors for industrial robots and service robots.