

Nikon technologies contribute to people's lives and future dreams.

Nikon is contributing to technology in numerous fields, from manufacturing ICs with nanometer-rule circuit patterns and advancing bioscience, to furthering the possibilities of imaging and capturing views of stars that are billions of light years away. What makes this possible? Our opto-electronics and precision technologies that we have nurtured throughout our history and used to create an extensive range of products, services and even more new technologies. Nikon will continue to enrich lives around the world, support cutting-edge industries that are shaping the future, and confront the challenges facing societies around the world.

Precision Equipment Business

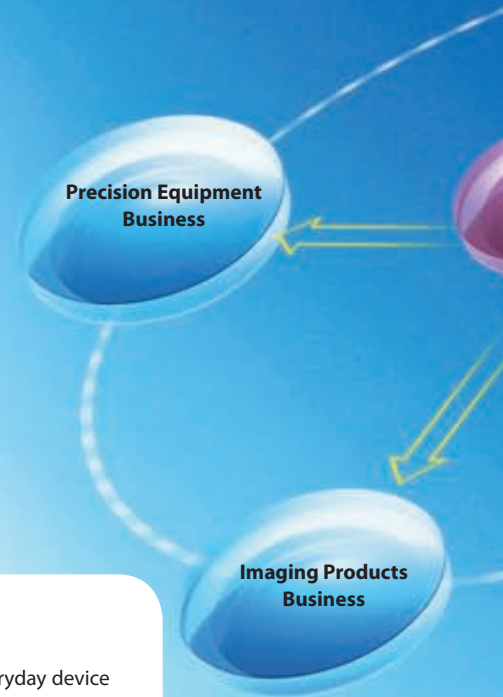
Modern society reaps great benefits from the electronics fabricated in industrial sectors, including areas such as home appliances, personal computers and automobiles. Nikon is continuously advancing the production of steppers and scanners that are used to manufacture ICs — the very core of electronics — as well as liquid crystal panels and organic electroluminescence panels that are indispensable to LCD TVs, computers, and smartphones. In these and many other ways, Nikon is fostering and innovating our electronics-based society.

•IC steppers and scanners •LCD steppers and scanners

Imaging Products Business

Thanks to advances in digital technology, the camera has evolved into an everyday device anybody can use to easily take high-quality pictures. For professional photographers, digital camera technologies have yielded remarkably advanced functions and performance that can significantly intensify creativity and expression. Nikon camera production acumen and technologies, both supported by our long history, will continue to expand imaging possibilities.

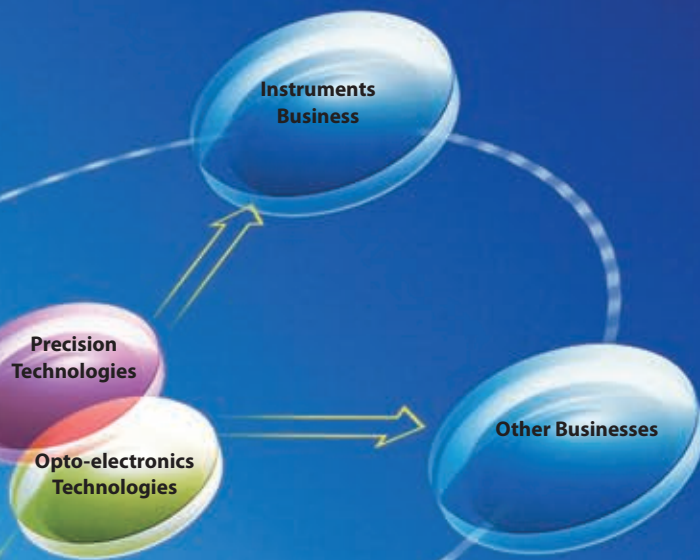
•Digital cameras •Film cameras •Interchangeable lenses •Speedlights
•Photographic accessories •Software •Sport optics



Instruments Business

Microscopes and measuring instruments from our Instruments Business are contributing to fields ranging from medical and bioscience research to industrial sectors such as components for electronics, automobiles and aircraft. We also offer sophisticated, high-caliber surveying instruments used in architectural design and urban planning. Nikon supports the development of society with precision technologies and eyes firmly focused on the micro level.

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- Biological microscopes •Industrial microscopes •Stereoscopic microscopes
 - Measuring instruments •Semiconductor inspection equipment •Surveying instruments



Other Businesses

The development of our business makes full use of the technologies that Nikon has accumulated over the years. Nikon businesses include — besides precision equipment, imaging products and instruments — familiar items like ophthalmic lenses, and more specialized goods such as industrial optical materials, encoders that are indispensable for factory automation, and cutting-edge technology utilized in space development. Through these businesses, we facilitate the evolution of science, technology, industry and society.

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- Customized Products Business •Glass Business •Encoders Business •Ophthalmic Lenses Business



Nikon ultra-precision technology — supporting the evolution of our information society.

The first Nikon IC stepper was released in 1980. IC steppers and scanners are finely tuned machines that miniaturize circuit patterns and print them on wafers. Regarded as the most precise machines ever developed, they require ultra-high-resolution projection lenses, exceptionally exact driving mechanisms, and elaborate control technology. Because circuit pattern miniaturization is vital for enhanced performance and increased integration of ICs, we are continuously developing groundbreaking technologies. These include immersion lithography, which enables ultra-high NAs (numerical aperture) by intensifying the projection lens' resolving power to the maximum level and filling the space between the lens and the wafer with purified water. We also created a streamlined platform that simultaneously delivers excellent overlay accuracy and ultra-high productivity.

Nikon also supplies LCD steppers and scanners for mid-sized and smaller high-definition panels, as well as organic electroluminescent panels for smartphones and tablet computers. For the production of large LCD panels, we employ unique multi-lens projection optical systems.



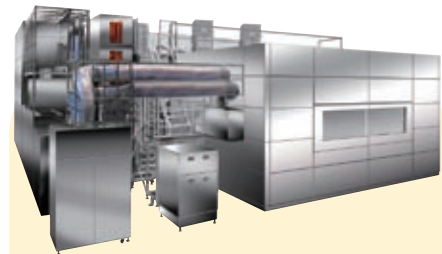
ArF Immersion Scanner NSR-S621D

Employing the advanced Streamline platform design, which debuted with the NSR-S620D, this cutting-edge scanner delivers ultra-high precision and productivity, and will satisfy 22 nm half-pitch requirements and beyond. This system couples immersion lithography with multiple-patterning technology, enhancing capabilities by printing one circuit pattern in multiple exposures.



LCD Scanner FX-66S

Designed for 5th- and 6th-generation large-plate applications (approx. 1.5 x 1.5m), the FX-66S enables manufacturing of mid-sized and smaller LCD panels from large glass plates. It provides enhanced productivity and stable exposure performance suitable for manufacturing the high-resolution panels used in smartphones and tablet computers.



LCD Scanner FX-101S

Using the multi-lens projection optical system, the FX-101S is capable of handling 10th-generation large glass plates, which measure about 3 x 3m. Single-scan printing produces six to eight large LCD panels for flat-screen TVs bigger than 60 inches, making it an excellent solution for mass production.



Greater joys of imaging for more people.

Digital cameras are further expanding imaging possibilities, including shooting, viewing, processing and sharing. Nikon has been developing high-performance products by combining the latest digital image-processing and network technologies with Nikon film camera technology, whose fame has long been established since the Nikon I small-sized camera launched in 1948. By doing this, we not only meet an ever-increasing array of demands with a broad lineup range from compact digital cameras to digital single-lens reflex (SLR) cameras, but also greatly enhance the world's photographic culture.

Other products offer pleasures unique to digital imaging: image-editing software, and *my Picturetown*, our internet service for storing and sharing images. We also extend the joy of viewing by offering binoculars, Fieldscopes and loupes, as well as portable laser rangefinders for use in golf and other sports.



Digital SLR Camera D4

Equipped with an array of advanced features and functions, Nikon's flagship D4 meets the exacting demands of professional photographers. It yields high-resolution, high-quality pictures thanks to its 16.2 effective megapixels. It also accommodates an extremely wide sensitivity range (from ISO 50 to 204800), and is capable of high-speed continuous shooting at approximately 11 frames/second and full-HD movie capture.



Advanced Camera with Interchangeable Lenses Nikon 1 J2

Take world-class Nikon performance anywhere with the Nikon 1 J2, the Nikon 1 J's latest sister model. It's fast and sharp, with continuous autofocus shooting at 10 frames per second and features the highest number of focus points of any camera in its class.* It's versatile, with an array of interchangeable lenses, Smart Photo Selector, Motion Snapshot, Slow-Motion Movie and other innovative functions. And it's stylish, available in six stunning colors to suit any taste.

*Among digital cameras with interchangeable lenses available as of August 9, 2012; refers to the number of phase-detection AF points selectable in Single-point AF mode; based on Nikon research



Compact Digital Camera COOLPIX S800c

The COOLPIX S800c is a new breed of digital camera that connects you to the world. It uses Android™ just like advanced smartphones, enabling wireless transmission of photos and HD movies directly to social networking sites, mobile phones and tablet computers. It can even connect over a home Wi-Fi network. You can also download applications, including my Picturetown app (Android), a convenient application that allows storage and offline photo viewing.



NIKKOR Interchangeable Lenses for SLR Cameras

Our wide lineup of interchangeable lenses — from super wide-angle lenses and super telephoto lenses to fisheye and micro lenses — meets the diverse needs of our customers, from entry-level users to professional photographers. NIKKOR lenses accurately and beautifully capture subjects with superb depiction thanks to our time-honored, unique knowhow and cutting-edge technology.



Photo-Editing Software Capture NX2

This digital photo-editing software allows users to retouch and finish their digital images quickly and with great flexibility. Its many features, such as Color Control Point and Auto Retouch Brush, make operation intuitive.



Binoculars EDG 8X42

Comprising our flagship models, the EDG series binoculars employ leading-edge optical technologies. For instance, EDG binoculars utilize Nikon's renowned extra-low dispersion (ED) glass, as well as a field-flattener lens system. Now, you can enjoy a sharp, contrast-rich and clear image throughout the entire field of view.



EDG Fieldscope 85-A VR

The EDG 85 VR Series is the world's first Fieldscope to incorporate Nikon's lens-shift type VR (Vibration Reduction) System. This system maximizes the EDG Fieldscope's performance, ensuring comfortable, stress-free viewing.



Laser Rangefinder COOLSHOT

The COOLSHOT's sleek, palm-sized body makes it easy to hold, allowing instant measurement during critical situations on the golf course. One-push continuous measurement with First Target Priority Mode enables you to easily assess distance.

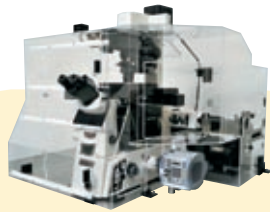




Technology that reveals the micro world.

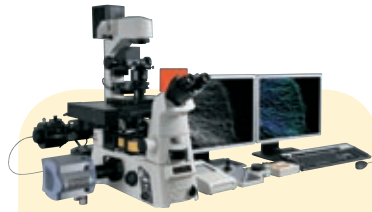
Nikon products that observe the micro world are hard at work in a variety of fields. In bioscience, we open up new possibilities in live cell imaging, where living cells are observed using our super resolution microscopes and Perfect Focus System (PFS), which prevents focus drift over long hours of observation. Other Nikon products, used for leading-edge research purposes, in clinical, educational usage and training applications, are also contributing to the advance of bioscience.

For applications in industrial sectors such as electronic components, automobiles and aircraft, we have developed industrial microscopes and measuring instruments that are highly regarded as crucial production quality-control tools. Furthermore, Nikon-Trimble Co., Ltd., a joint venture between Nikon and U.S.-based Trimble Navigation Ltd., manufactures a broad range of surveying instruments for high-precision surveying.



Super Resolution Microscope N-SIM

Nikon's Structured Illumination Microscopy (N-SIM), a combination of technology licensed by the University of California, San Francisco, and Nikon's optical technology, allows observation of the minute intracellular structures of live cells with a resolution of approximately 100nm — about double that of conventional optical microscopes.



Super Resolution Microscope N-STORM

N-STORM, which employs Stochastic Optical Reconstruction Microscopy technology licensed from Harvard University, has increased resolution to more than 10 times that of conventional optical microscopes. N-STORM allows researchers to obtain information that improves understanding right down to the molecular level.



Non-Contact Multi-Sensor 3D Metrology System HN-6060

The HN-6060 is a non-contact 3D metrology system. The world's most precise measuring instrument (According to Nikon's survey as of June 20, 2012), its laser scanning sensor extracts the surface form and waviness data in one scan.



Research Microscopes ECLIPSE Ni Series

Microscopes employed in advanced bioscience and medical research must be flexible to cope with the diverse methods of experiments. The ECLIPSE Ni series are research microscopes that respond to such demands with enhanced system expandability and operability, as well as acclaimed optical performance.



Cell Culture Observation System BioStation CT

The BioStation CT allows time-lapse observation of cells while they are being cultured in the stable environment of an incubator. This not only mitigates the burden placed on researchers, but simultaneously enables tracking observation of cells without inflicting stress on them.



Electronics X-Ray Inspection XT V 160

This is a system for nondestructive inspection, primarily for the inner structure of electronic components. X-ray technology is an indispensable solution for the inspection of ever-smaller electrical components, high-density PCB (printed circuit board) solder joints and ball grid arrays. The XT V 160 has an automatic inspection mode for the highest throughput and a manual mode to visualize and detect micro defects at a high resolution.



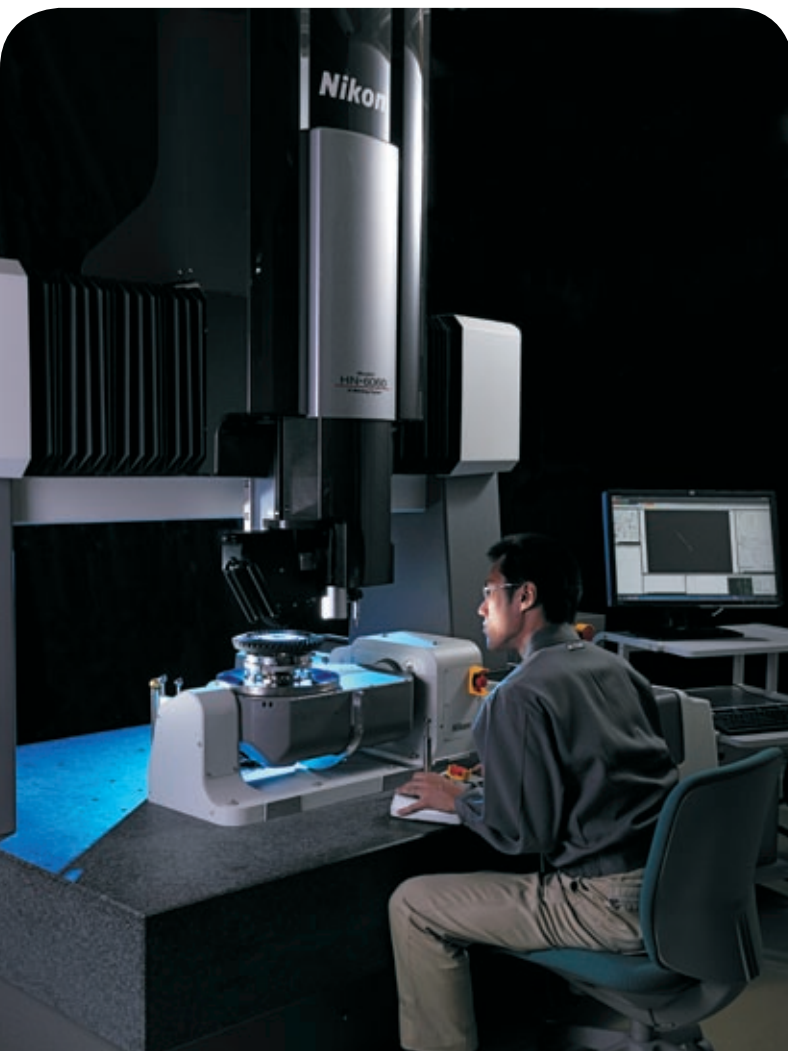
Digital Microscope ShuttlePix P-400R

Based on the new "shuttle" concept, the ShuttlePix P-400R makes remote inspections of samples easier. It can be used cordlessly to inspect objects not suited to conventional stand-mounted systems, or can be connected to a Motorized Focusing Stand with a touch-panel monitor. It is ideal for a variety of fields, including checking products on manufacturing lines, inspecting plant facilities and examining cultural assets.



Total Station NIVO Series

Total stations are surveying instruments used to measure distance and angle. The smallest and lightest in its class, the NIVO series is especially effective in dangerous places such as steep slopes and high-rise construction sites. The units' curved, ergonomic design is a dramatic departure from traditional surveying instruments.



Core technologies bear much fruit.

Since our founding, Nikon has applied our opto-electronics and precision technologies to meet many of society's needs. Our efforts have borne much fruit: cameras, IC steppers and scanners, microscopes, cutting-edge technologies involved in space development and many other products and systems vital for people's lives and industry. We have been able to achieve all this because we have always looked at the future of people's lives and society, developing new products and unique technologies that not only meet needs, but expand our business.

Customized Products Business

State-of-the-art Technologies for Space

Nikon's Customized Products Business addresses advanced customer needs by capitalizing on our state-of-the-art technologies. For example, our technologies are used in the exploration of the unknown domain of outer space. As a participant in the *Subaru* large-scale optical infrared telescope project in Hawaii, we delivered two large-scale observation systems to the *Subaru* Telescope on the summit of Mauna Kea, contributing to many results that will go down in history. We are also involved in the production of onboard observation devices for many satellites and probes, such as the Advanced Land Observing Satellite *Daichi* and *Akatsuki*, a Venus climate orbiter.

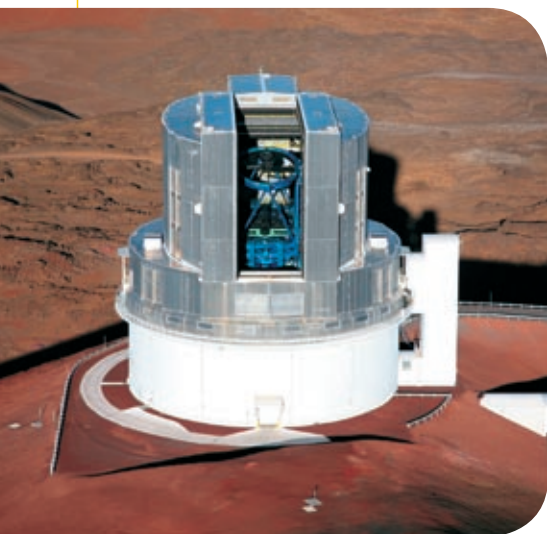


Photo: Courtesy of National Astronomical Observatory of Japan



Photo: Courtesy of National Astronomical Observatory of Japan

FOCAS (Faint Object Camera and Spectrograph)
FOCAS, an observation instrument installed at the *Subaru* Telescope, captures extremely faint visible light reaching the Earth from distant galaxies and analyzes it with imaging, spectroscopic and polarizing techniques.

Glass Business

Optics that Use Accumulated Technologies

Nikon started research on glass manufacturing in 1918, the year after our founding as Nippon Kogaku K.K. Today, we continue to produce high-quality optical glass and LCD photomask substrates using a comprehensive system — from melting raw materials to final processing. Technologies we have amassed by manufacturing synthetic silica glass and calcium fluoride (fluorite) used in IC steppers and scanners are employed in components for lasers and other optics. We also provide analyzing and measuring services for optical materials and optics, contributing to quality control in different sectors.



Optics

Nikon's optical materials feature high homogeneity and have excellent optical characteristics. Our advanced processing technologies enable us to manufacture high-performance optics.

Encoders Business

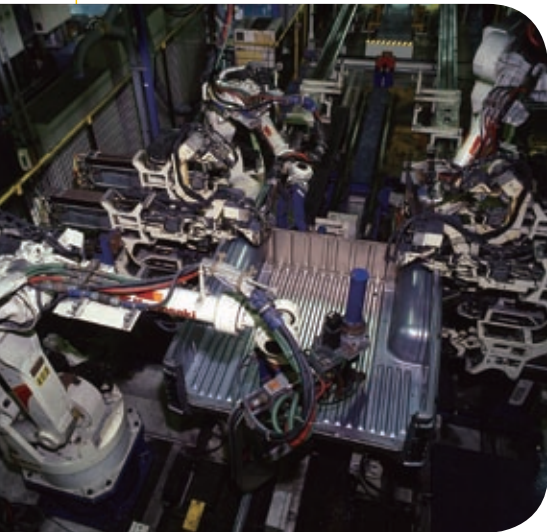
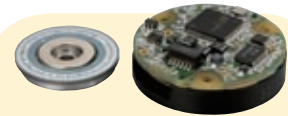


Photo: Courtesy of Kawasaki Heavy Industries, Ltd.

Contribution to Advancing Robotic Technology

Encoders are essential in the fields of industrial robots and machine tools, measuring the quantum or angles of rotation. Absolute Encoders, our flagship encoders, adopt Nikon's original M sequence pattern to achieve smaller size and higher reliability. They are indispensable in factory automation, such as the robots used on automobile assembly lines. Along with our linear encoders, Digimicro digital length measuring system and high-precision rotary encoders, Nikon's Absolute Encoders make significant contributions across many industrial sectors.

**MAR-M40A Multi-Turn Absolute Encoder**

Using a reflective optical system, the MAR-M40A achieves a height of 11.85mm, about half that of conventional encoders. Because it is so compact, it is suitable for use in small AC servomotors.

Ophthalmic Lenses Business



Optical Technology for Today's Environment

At Nikon, we have been researching the eye and ophthalmic lenses for more than half a century, developing many groundbreaking products by applying our cutting-edge technology to vision. Today, Nikon-Essilor Co., Ltd., a joint company with Essilor International — the worldwide leader in the field — is in charge of ophthalmic lenses. The latest generation of Presio progressive lenses has been designed for modern lifestyles. They provide a wide, comfortable viewing zone ideal for using personal computers and mobile phone screens. The newly developed SEE Clear Blue coating, exclusively for ophthalmic lenses, delivers comfortable vision by curbing flickering of screens (e.g., computers and TVs) inside and glare outside.

**SEE Clear Blue**

SEE Clear Blue is a coating designed exclusively for ophthalmic lenses. It cuts the short-wavelength visible light — blue light — that causes glare and flickering by 10 percent while maintaining the transparency of the lens.