

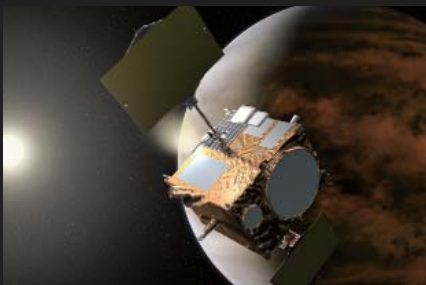
Nikon and the Aspirations of Humanity

The desire to know the distant universe, to make life more comfortable, to comprehend the mechanisms of life—boundless ambitions such as these have driven the progress of civilizations and technologies throughout history. The quest continues today, and Nikon technologies are utilized in many ways to support these pursuits.

Nikon Products That Gaze at the Universe

In May 2010, Japan launched "Akatsuki," its first probe vehicle to Venus. The mission of Akatsuki is to help unravel the mysteries of the Venusian atmosphere, and the information it provides will help us to understand the workings of Earth's environment, and give an indication as to our future. The observational systems carried by Akatsuki incorporate optical sensors that Nikon helped develop.

Nikon imaging products have been carried into space on numerous occasions alongside humanity's desire to approach



Venus Climate Orbiter "Akatsuki"
Image provided by Akihiro Ikeshita



Subaru Telescope on the summit of Mauna Kea in Hawaii
Photo provided by the National Astronomical Observatory of Japan

the unknown world, from the Nikon Photomic FTN*¹ (National Aeronautics and Space Administration (NASA) specifications) for use on Apollo 15 in 1971, to the newest D3S digital SLR camera released in November 2009. Nikon has for many years helped to support NASA's space research with high-quality, durable cameras, as well as through the development and manufacture of NIKKOR interchangeable lenses that incorporate Nikon's optical technologies. Nikon imaging products are employed in the Russian segment of the International Space Station (ISS).

Nikon optical technologies have also been essential for Earth-bound space observation. The large optical-infrared telescope "Subaru" incorporates observational systems developed by Nikon, including the Faint Object Camera and Spectrograph (FOCAS) to analyze faint light from distant objects, as well as the High Dispersion Spectrograph (HDS) to separate the light from objects into various wavelengths. These systems have helped astronomers to discover galaxies 12.88 billion light years away, and to analyze the composition of stars. Technologies to manipulate light bring us closer to discovering the secrets of the birth of the universe.

Note:

1. Nikon F equipped with Photomic FTN viewfinder that supports TTL center-weighted metering.

Nikon Products That Make Life Comfortable and Advance Medicine

Computers, cell phones, LCD televisions, automobiles, air conditioners—our modern lives would not be possible without products that incorporate the semiconductor devices that serve as the foundation for myriad technologies. The sophistication and functionality of these products is advancing at a breakneck pace, and this evolution is made possible by greater device shrinkage of semiconductors. Nikon, as one of the leading companies in IC steppers and scanners, is helping to further device shrinkage of semiconductors. Our cutting-edge equipment is able to handle semiconductor manufacturing for 32 nm and beyond. Our comfortable lives would not be possible without Nikon's nano-level technologies.

Keeping people healthy is just as central a desire as making lives more convenient and comfortable. To achieve this researchers strive night and day in pursuit of the mechanisms of life. Nikon technologies for observing cells and other samples using confocal microscopes, the Perfect Focus System (PFS) continuous auto-focus system or other products, help to support leading research being conducted by research institutions, joint-research facilities at universities and other centers studying such fields as biology, medicine, and medical treatments.