

Environmentally Friendly and Contributing Products

2022 2021 2020 2019 2018

Case Studies ↓

While contributing to global environmental conservation and reduction of environmental impact through our products and its applications, we have promoted development of new technologies and sales of products to reduce such impact from the products themselves based on our guidelines for "Environmentally Friendly and Contributing Products" as follows.

Environmentally Friendly Products

Products that are designed to have less impact on the environment, such as by reducing the amount of waste or designing products that are easy to recycle, and that have improved one or more of the following compared to conventional products.

- Smaller, thinner and lighter
- Power saving
- Longer service life
- Reusability (reuse)
- Recyclability (recycling)
- Ease of disposal (ease of disassembly in case of equipment)

Environmentally Contributing Products

The products themselves or the final products using them that contributes to and are used for applications such as the conservation of the global environment.

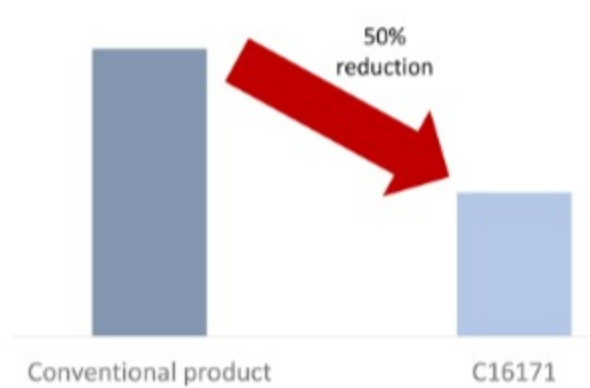
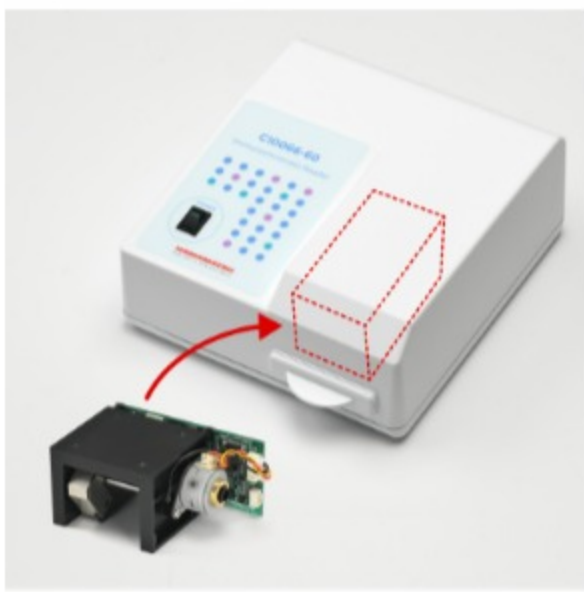
- Prevention of global warming, diffusion of new and renewable energy sources
- Prevention of ozone depletion, air pollution, water pollution, and soil contamination; analysis of pollutants
- Analysis of chemical substances contained in products, evaluation of toxicity of chemical substances
- Reduction, separation and disposal of waste

Case Studies

Every year, we develop new environmentally friendly and contributing products. Here are some typical examples from the current fiscal year.

● immunochromato reader engine

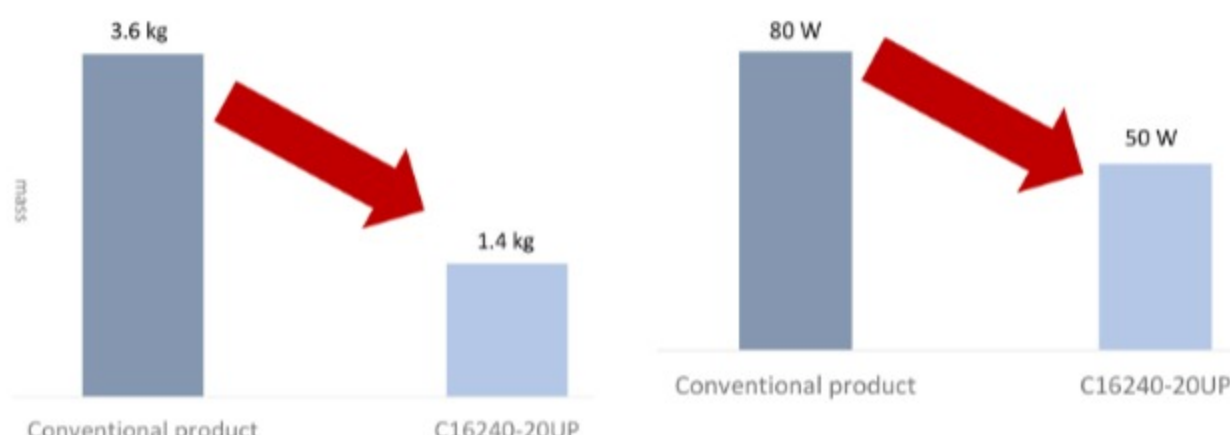
The C16171 series is an embedded immunochromatography reader engine for installation in medical equipment. The line-up includes products for coloring reagents such as gold colloid and blue latex, and for fluorescent reagents such as Eu and FITC. Compact size has made it possible to reduce the size of the device when embedded by approximately half compared to conventional systems.



● Digital CMOS camera

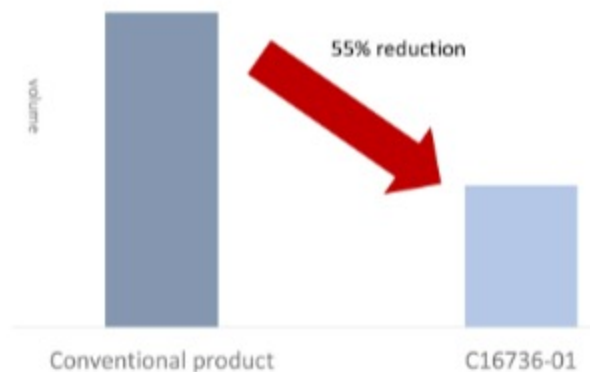
The C16240-20UP is a digital CMOS camera equipped with a CMOS image sensor using the latest technology to achieve low noise, high resolution, improved sensitivity in the near-infrared region and high-speed readout.

It has improved performance and added functions compared to the similar conventional product C14120-20P. The weight can be reduced from approximately 3.6 kg to 1.4 kg and the power consumption has been reduced from 80 W to 50 W.



● High dynamic range spectrometer

The C16736-01 is a high-sensitivity spectrophotometer integrating a spectrometer and a photodetector. By redesigning the optical arrangement, the spectrometer has a higher wavelength resolution and sensitivity than its conventional product, and a dynamic range advantage of more than two digits. The volume of the enclosure has been reduced by more than 50%.



● Pulsed Laser Diode

The L15326-01 is a 4-channel array surface-mount pulsed laser diode suitable for high-reliability LIDAR. It uses a new ceramic package that is smaller than conventional metal packages. The surface-mount type also reduces board mounting space. Due to their high functionality and compact size, LIDAR modules can be made smaller, saving space and materials.



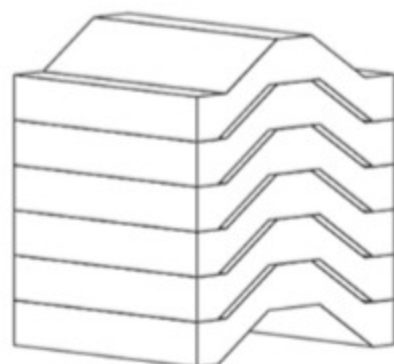
Conventional metal package and new ceramic package

● Terahertz Wave Plate

The A16394-02/04 is a Fresnel rhomb waveplate with controllable terahertz polarization, featuring coaxial input and output and a small, large aperture. It can be applied to terahertz polarization control, polarization imaging and THz-STM. To achieve a small size and a large aperture with an effective diameter of ϕ 20 mm, this product uses a structure of stacked Si prisms. As a result, the amount of Si used could be reduced to approximately 25% by volume, compared to the design of a single Si prism with a larger aperture.



Terahertz Wave Plate



Stacked waveplates

2021 >

2020 >

2019 >

2018 >

Environment >

Environmental management >

Management of pollution including waste >

Green procurement activities >

Environmental communication activities >

Reducing carbon emissions and climate change >

Environmentally Friendly and Contributing Products

Request for survey on chemical substances in products >

Environmental report back number >

Disclosure based on TCFD Recommendations >

Protecting our water resources >

Management of chemicals in products >

Inquiries concerning Environmental Initiatives >