

Device & Module Solutions Business (DMB)

VISION

With Our “Connecting” and “Switching” Technologies, Resolve Social Issues with Customers

Ideas and Insights Shaping the SF2030 Vision

The Device & Module Solutions Business will realize three transformations under SF2030.

Firstly, we will pursue business transformation. As one of OMRON’s core businesses, the Device & Module Solutions Business aims to address social issues, namely, “achievement of carbon neutrality” and “realization of a digital society.” With this intention, the name of the business company was changed from Electronic and Mechanical Components Company to Device & Module Solutions Company on April 1, 2022, 12 years since the business company’s establishment. By combining our core technologies and diverse functions, we will enhance the value of our products and provide customers with device- and module-based solutions that give them the functions they need while addressing societal challenges. Ever since our foundation, we have been a source of sophisticated, high-quality devices and modules, including relays, switches, connectors, and sensors. And our core “connecting” and “switching” technologies are indispensable for turning equipment on and off the flow of electricity in addition to our sensing technology. Leveraging our expertise, we will create new social value that contributes to the “spread of new energy* and high-speed communication.”

Secondly, we are resetting our focus domains. We will focus on four business fields where the strengths of the Device & Module Solutions Business centering on its core technologies can be brought into full play and where further growth opportunities are expected. Focus domains are DC(direct current) drive equipment, DC infrastructure equipment, high-frequency devices, and remote/VR devices. Regarding DC drive equipment and DC infrastructure equipment, the shift to DC and higher-capacity power supply and the electrification of infrastructure will progress as measures to minimize the environmental burden. In promoting widespread use of these products, the need for safety measures will increase to ensure electric shocks and combustion are prevented. Regarding high-frequency devices and remote/VR devices, the rapid digital shift requires technologies and devices that enable high-speed communication and large data capacity. With our “connecting” and “switching” technologies, we will deliver solutions for these issues.

Thirdly, we will evolve our value proposition model. In addition to the existing value, we will offer new value corresponding to “green, digital, and speed.” We will accelerate value proposition through the creation of devices that contribute to the realization of a decarbonized society, provision of digital value, and concurrent activities in which sales, development, and production work together to respond to changes in society in a flexible and timely manner.

In fiscal 2021, in addition to enhancement of added value through modularization and completion of structural reform, we established a system to respond to demand in a timely manner even when parts and materials are in short supply and logistics are disrupted. In the first medium-term management plan positioned as the phase for transformation, we will complete three transformations in order to offer added value in the form of solutions that go beyond the provision of devices and modules. In fiscal 2022, driven by social issues, we will create key devices necessary for society together with our customers through concurrent activities in which sales, production, and development work together, thereby achieving further growth.



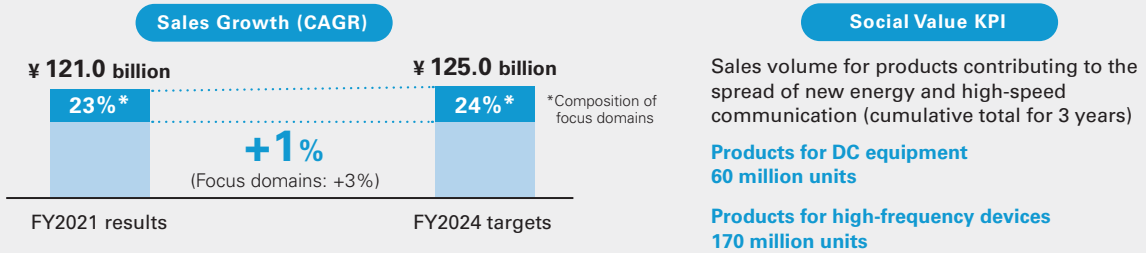
Managing Executive Officer
Company President, Device &
Module Solutions Company

Shizuto Yukumoto

* New energy: It refers to renewable energy and innovative energy sources such as hydrogen and fuel cells.

About SF 1st Stage

Targets



Focus Domains



DC equipment



High-frequency devices

Major Initiatives

Under SF 1st Stage, we aim to establish a growth trajectory through provision of devices and modules and solutions that contribute to the “spread of new energy and high-speed communication” by capturing the growing needs for more sophisticated and faster devices, which are driven by migration to DC to ease environmental burdens and spur digitalization of society.

To realize this goal, we have identified four focus domains. In recent years, growing environmental awareness has been propelling the use of new energy sources that contribute to reducing CO₂ emissions. The shift to DC power supply and higher-capacity products and infrastructure equipment is fueling needs for devices that safely shut and control the DC current flowing through products to ensure safety. We will create these devices by leveraging our long-cultivated “connecting” and “switching” technologies and promote wider use of OMRON products to help achieve a carbon-neutral society. Moreover, the evolution of semiconductors and products, which will lead to solutions alleviating social issues associated with population aging and disparities among people, will require devices that enable stable, high-speed communication and digitization of human perception and sensibility, which have eluded quantification until recently. OMRON will create devices and modules and solutions based on its core technologies to contribute to the realization of a digital society where everyone can live comfortably. We will take on the challenge of creating new social value through collaborative creation with leading companies, research institutions, technology ventures, and other partners.

Furthermore, the Device & Module Solutions Business will have a new value proposition based on “green, digital, and speed.” We will create further added value for our customers by providing solutions centering on devices and modules to achieve synergy through interaction among the various aspects of the value that we offer.

The Device & Module Solutions Business will work with customers to resolve social issues and promote the realization of a carbon-neutral society in which everyone on the Earth can ultimately live safely and securely and that is also a digital society in which all products are connected and continue to be operated stably, making life more convenient and comfortable. In fiscal 2022, we will focus on manufacturing that contributes to decarbonization and further enhance our ability to create new social value in the form of devices and modules and solutions, as well as the speed at which we accomplish this, through concurrent activities.

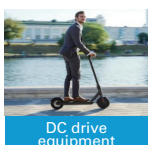
Three Transformations

With Our “Connecting” and “Switching” Technologies, Resolve Societal Issues with Customers

Device & Module Solutions Company

Focus Domains

Promote DC power supply and electrification

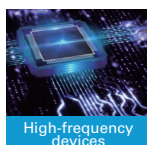


DC drive equipment

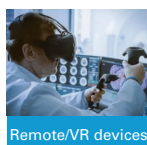
Realize society enabled by advanced semiconductor technology



DC infrastructure equipment



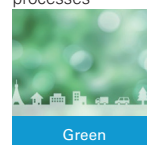
High-frequency devices



Remote/VR devices

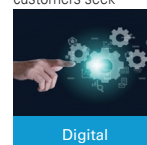
New Value Proposition

Offer earth-friendly and decarbonized products and processes



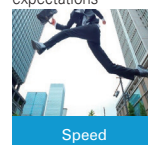
Green

Offer high-dimensional data for design, manufacturing, and products that customers seek



Digital

Offer value with speed and agility that exceed customer expectations



Speed

By Combining Strengths, Reducing the Risks Posed by Climate Change and Disasters, and Contributing to Creation of a Sustainable Society

In recent years, global warming and natural disasters have wreaked havoc on society increasingly. Since 2017, OMRON has been working with Weathernews Inc., one of the world's largest private weather information companies, to solve social issues. Weathernews achieves high accuracy weather forecast not only with observation data but also weather data and feeling data of weather reports received from Weathernews App users that are reflected in its proprietary forecast model. Based on this highly accurate and high-resolution forecast data, Weathernews provides information services that help businesses and individuals avert weather risks. OMRON provides weather sensors that can be installed in various locations to collect far more accurate weather observation data than in the past and helps Weathernews raise the bar on forecast accuracy.

Weather sensor is composed of various sensing devices, including temperature, humidity, and air pressure, combined with proprietary algorithms and communication technologies. Concurrent activities in which OMRON's sales, development, and production worked together with Weathernews realized greater efficiency and faster development. By integrating OMRON's hardware technology with Weathernews' expertise in software development and provision of software services as in the example of its weather forecasting system and countermeasure services, we will create services that help keep people safe and secure around the globe.

Working together, OMRON and Weathernews will continue providing solutions for highly efficient energy operation and enhanced resilience to natural disasters and create new value.



Product Development Division, Business Management Division HQ
Hideaki Kojima



Weather sensors to collect data at various locations such as building rooftops

The ability of Weathernews to continue providing highly accurate weather information services to electric power, retail, railway, road, and various other markets is dependent on fine-grained observation data. In order to collect as much weather data as possible, we have been working with OMRON, leveraging the strengths of the two companies, in the collaborative development of WxBeacon2, a simple portable weather observation device for Weathernews App users, and weather sensors, for which there is a great need in the construction industry and agriculture. Not only we empathize with OMRON's corporate philosophy emphasizing the importance of addressing social issues through business, we have confidence in OMRON's advanced onsite/technological capabilities and highly regard their agility in addressing possible social and environmental changes and their PDCA (Plan-Do-Check-Act) method for quality improvement. These are among the reasons we are collaborating with OMRON. To address climate change and environmental and other threats facing society today, it is necessary to create timely services that are more precise and provide definitive solutions. In resolving such issues and creating a better society, we would like to continue unleashing synergy to leverage the strengths of the two companies and expand the scope of our collaboration not only in Japan but worldwide.



Marketing and Sales Group, Mobile · Internet-Planning, Weathernews Inc. **Ryoji Ihara**

Manufacturing that Balances Environmental Protection and Economic Growth

As a consequence of economic growth, the amount of industrial waste generated by factories in the Pingshan District of Shenzhen, China, has been rising. OMRON Electronic Components (Shenzhen) Ltd. (OMZ), which is located in this area, is showing the way forward by pursuing various initiatives to reduce environmental impacts. One of these initiatives is to reduce the amount of plating sludge, which accounts for 20% of OMZ's industrial waste. OMZ began looking into ways of doing this in 2019 and developed a highly efficient sludge treatment system that has been patented by the Chinese plating industry. As a result, in 2020, OMZ succeeded in reducing plating sludge by nearly 10 tons (approximately 50% reduction from the previous year). Moreover, OMZ proposed its technology and know-how as a solution to other plating factories, thereby contributing to a reduction in plating sludge of approximately 225 tons in 2021 (roughly 40% reduction from the previous year) at total eight companies in Pingshan District. OMZ will work to resolve social issues through its business by expanding its sustainable manufacturing practices from Shenzhen to Guangdong Province and, ultimately, throughout China.

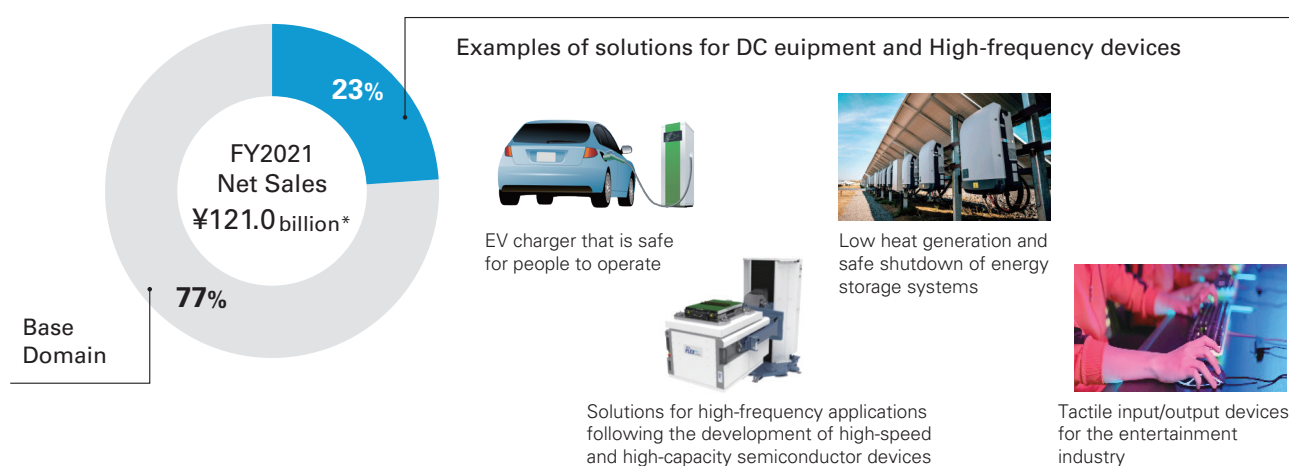


Employees of OMRON Electronic Components (Shenzhen) Ltd. working to reduce environmental impacts

Fiscal 2021 Business Highlights

In fiscal 2021, demand for components increased steadily in our focus industries, including home appliances, housing equipment, and power tools for the consumer industry. Demand for components for the automotive industry recovered moderately, despite the impact of the COVID-19 pandemic and production adjustments among our customers due to the shortage of semiconductors. We accurately captured this demand and responded quickly to secure product supplies in response to production increases and by engaging in other measures. As a result, net sales rose significantly year on year. Despite the impact of soaring raw material prices and logistics costs, operating income increased significantly year on year, mainly due to the significant increase in net sales, as well as value-added initiatives and restructuring. As a result, net sales for fiscal 2021 totaled ¥121.0 billion, an increase of 24.9% compared with the previous fiscal year, and operating income totaled ¥10.1 billion, an increase of 120.6%* compared with the previous fiscal year.

Sales Composition by Business Domains



Strengths of the Device & Module Solutions Business (DMB)

- Core technologies for “connecting” and “switching” electricity (Arc interrupters, etc.)
- Modularization of functions by using core technologies
- Global-scale resilient production and supply systems and quality control systems

INPUT

- R&D cost: Total ¥5.2 billion
- Capital expenditure: Total ¥6.1 billion (Results for FY2021)
- Establishment of resilient production systems to respond to changes in demand for products in a timely manner
- Strengthening of the digital platform
Renewal of DMS global website (Japanese, English, and Chinese) (December 2021)

OUTPUT

- Net sales: ¥121.0 billion (+24.9% YoY)
Operating income: ¥10.1 billion (+120.6% YoY)*
- Technology and product development for next-generation devices and modules
 - Developed new technologies and products, such as low-heat-generating relay that contribute to the realization of a decarbonized society
 - Our low-heat-generating, high-power PCB relay “G9KA” won an award in the category of Environment, Resources, and Energy Related Components of CHO MONOZUKURI Innovative Parts and Components Awards. (November 2021)
 - Created modules together with customers
- Enhancement of product quality control to ensure safety of customers’ products
 - OMRON Electronic Components (Shenzhen) Ltd. won the Clean Manufacturing Excellence Award. (February 2022)

OUTCOME

With our devices and modules, we contribute to the improvement of human life on the planet and the development of society



SDGs 9.4.1

*Some products in the Industrial Automation Business have been reclassified to the Device & Module Solutions Business.