

# Electronic and Mechanical Components Business (EMC)



Supporting OMRON  
Development  
Device and Modules

Corresponding  
SDGs



## Vision

## Provide Leading-Edge Electronic and Mechanical Components Globally Through Advanced Manufacturing Capabilities

Our Electronic and Mechanical Components Business leverages extensive success in core products (relays, switches, connectors, etc.) to offer a wide product lineup of devices and modules that meet diverse customer needs. Digital products have become an intimate part of our everyday lives, making society more convenient. These products include smartphones, home appliances (air-conditioners, refrigerators, and microwave ovens), and industrial equipment (from vehicles and machine tools to automotive fields). We provide advanced electronic and mechanical components which use cutting-edge technologies and manufacturing capabilities honed over many years. This support the society by connecting people and machines across a wide range of fields.



Managing Executive Officer  
Company President, Electronic and Mechanical Components Company

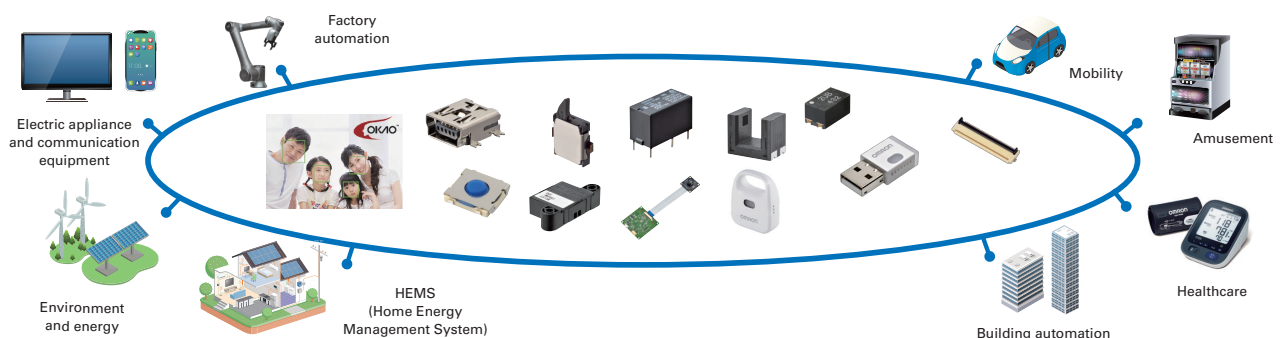
**Shizuto Yukumoto**

## The Electronic and Mechanical Components Business, Growing Together With OMRON

The relay technologies became the basis to establish the Tateishi Electronics Company by our founder Kazuma Tateishi. The relay technologies refined by our founder Kazuma Tateishi Inoue Electric Manufacturing Company became the basis upon which the Tateishi Electronics Company was later established. A relay is a part that receives an external electrical signal to turn an electrical circuit on and off. Relays are also used for switching. Relays that are incorporated in electronic devices receive an electrical signal, turning a switch on or off to transmit the signal to another device. For example, pressing a button on a remote sends a signal to a relay within the television, which turns the main power switch on. Relay has many types depends on the amount of electric current, and circuits, and application. This technology eventually led OMRON to the development of the world's first contactless switch, the driver behind our rapid advancements in this age of machine automation.

In these days, our relay technologies are used in high-capacity DC relays for hybrid and electric vehicles and supporting the high demand. In the same way, the range of technologies underpinning the Electronic and Mechanical Components Business have developed in step with changes in society and are used for many familiar products in our daily life. For example, the face detection technology, (the OKAO Vision) is used in digital cameras and other devices to detect human faces automatically. Ultra-compact, advanced MEMS microphone chips are used in compact microphones for mobile devices.

Sensor technologies were initially utilized in automated production floors, and now those have been adapted to detect human movements. These detectors provide notice of guest arrivals and are used as environmental sensors in agricultural applications. In fact, sensors are useful in various scenes as part of the social infrastructure.



Electronic Components That Support Society

## The Electronic and Mechanical Components Business in the Coming Smart Society

Our strength lies in our ability to develop products and in our reliable production capabilities. This has been developed since our very founding and to meet the changing needs of customer requirements for advanced, compact, and quickly delivered electronic and mechanical components.

As we look ahead to the society of the future and a rising number of smarter products, OMRON will use our strengths to provide a broad range of electronic components that meet customer needs.

An example of this is mouse and mechanical keyboard switches used in the rapidly growing esports market, which has competitive population over 100 million people. In esports, players are required to perform the quick and delicate movements. Accordingly, these players are very particular about the touch and click feeling of mouse and mechanical keyboard switches. OMRON measurestouch and click feeling of switches that players feel comfortable. Then we visualize and quantify that data to create switches customized to individual needs. This is possible precisely because OMRON has been working closely with customers for long years i which led to perfecting our technologies. Since our establishment, our electronic and mechanical components technologies have been developing throughout history These technologies remain as a foundation supporting a variety of OMRON businesses in these days



Young People Immersed in esports



Well-Regarded esports Mouse and Keyboard Switches

## Robust Restructuring for the New Step of Growth

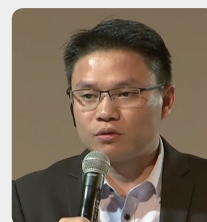
The smarter home appliances and factory automation will accelerate even more. This trend is supported by advanced and high quality electronic and mechanical components. To provide a stable supply of components, OMRON is engaged in structural reform of our production, focusing on optimizing production centers and increasing production capacity. We will continue to provide advanced electronic and mechanical components across the globe to support world-wide development in society.

### Restructuring Production: Relocation and Major Expansion of Our Shenzhen Factory

Electronic components are essential in creating innovation in new markets such as smart communities. To meet the various needs of our customers and provide large quantities of high-quality electronic components at low cost, we have carried out major reforms to the structure of our production system.

Details of this plan include relocating and expanding 36 production lines for products such as relays, switches, and connectors. At full capacity, these lines can produce products worth an additional ¥10 billion in sales.

This large relocation and expansion project required the use of 370 trucks. Reconfiguring our quality systems and facilities, as well as major changes in how we source and train industrial engineer , has resulted in our quality control receiving high praise from customers, leading to increased orders. Furthermore, our improved delivery times have contributed to increased value for customers.



OMRON ELECTRONIC COMPONENTS (SHENZHEN) LTD.

Dong-Hua Yuan