

TOKAI RIKA Develops New Steer-by-Wire Control Unit for Steer-by-Wire Systems*

TOKAI RIKA CO., LTD. (Head Office: Oguchi-cho, Niwa-gun, Aichi, Japan, President: Hiroyoshi Ninoyu) has developed a new Steer-by-Wire control unit for Steer-by-Wire systems* to enhance the performance of autonomous, battery electric, and other vehicles.

* Steer-by-Wire systems: Systems that steer the tires using electrical signals without any mechanical contact between the tires and the steering wheel. A Steer-by-Wire system enables sophisticated control and is regarded as a core technology for autonomous driving.

TOKAI RIKA is developing products in response to the dramatic changes occurring in our mobility society, including connected, autonomous, shared, and electric (CASE) technologies, as well as the provision of Mobility as a Service (MaaS).

Our newly developed Steer-by-Wire control unit has been designed for the Steer-by-Wire systems mounted in ultra-compact mobility and vehicles for MaaS, and we are aiming to realize practical adoption of this unit by 2024.

Main characteristics of the unit:

- (1) By adopting our unique structures by compact motor and gear, we have created a highly compact and lightweight unit that can be mounted in a wide range of mobility types.
- (2) The steering feel provided by the unit can be calibrated to fit the concept of the mobility.
- (3) The unit incorporates all the switches required for driving, such as the turn signal switch, wiper switch, and shift change switch, as well as all the necessary displays and sensors.
- (4) The unit can be mounted simply through a single connector.



TOKAI RIKA intends to continue developing products to help connect people with the mobility society of the future.