Attracting Tomorrow

TDK's communication message "Attracting Tomorrow" implies an attitude of making deliberate efforts ourselves to attract the future, rather than just waiting for the future to arrive. Turning this stance into inspiration aimed at the realization of a harmonious society, TDK has been pursuing global branding activities in seven applications by developing and introducing innovative technologies and products. Each of these in turn will be instrumental in achieving Sustainable Development Goals (SDGs).



Attractive Mobility

We created a compact biomagnetic sensor by integrating MR* element process knowhow gained in the magnetic head sector with magnetic circuit design technologies. Such sensors are ideal for devices that are more compact than existing products, making it feasible to perform diagnostic tasks with minimal stress for patients. *MR = Magneto-resistive



activity in three dimensions.

Biomagnetic Field Sensors Compact sensors that can measure even very weak biomagnetic fields enables the realization of biomagnetic field measurements without the insertion of a device into the body, something that was not possible in the past. This allows nonintrusive assessment of internal physiological



Motion and pressure sensors are also used in drones that carry out social missions such as transporting medical supplies to remote locations or islands. The sensors contribute to stable flight performance and provide accurate position information, thereby enabling drones to perform critical tasks in various places around the world.



7 - Axis MEMS Motion and Pressure Sensors

The world's smallest 7-axis sensor, which combines a 6-axis inertial sensor with a pressure sensor, incorporates reliable sensing technologies that are not adversely affected even under harsh environmental conditions. This makes it possible to control drones effectively to ensure stable flight.





Attractive IoT

Motion sensors together with dedicated software can provide the acceleration and direction data that are needed to guide a car to a given destination. They also support autonomous driving technologies that can safely divert cars to the side of the road in the rare event of a failure or emergency. This holds substantial potential for the creation of a safe society with no traffic congestion or accidents.



MEMS Motion Sensors

We have realized the industry's smallest 7-axis sensor module that combines gyroscope, accelerometer, and temperature sensing components on a single substrate. Highly accurate acceleration and direction measurement data are key to ensuring that a car will safely reach its destination.





Attractive Wellness



Attractive Connections

With 5G, musicians can enjoy live music while playing with each other in real time, despite being in different locations. TDK has integrated filtering functionality in antennas that receive and transmit radio waves. Minimizing losses and ensuring high efficiency in this area significantly contributes to high-volume data communication.



5G Chip Antennas / Multilayer Band Pass Filters RF (radio frequency) components with enhanced

filtering and maximized total performance will empower our customers to create superior products with less effort. We are developing products for all 5G applications such as infrastructure, autonomous driving, and tele-medicine.



Capacitors used in lightweight, compact, and high-reliability devices for power electronics facilitate high-efficiency generation and transmission of renewable energy and improve people's quality of life. TDK is looking to contribute to the creation of a sustainable society through clean energy.



Power Electronic Capacitors (PECs)

Proprietary flat-winding technology helps to achieve high capacities while keeping dimensions compact. With a view towards the future, we are designing low-inductance capacitors suitable for high switching frequencies that will contribute to increased efficiency both in power generation and power transmission.





Attractive Energy



Attractive Robotics

VR and AR applications have enriched experiences in education and brought about significant progress and quality enhancement in learning by children. TDK's ultrasonic sensors can detect a device's orientation, rotation, position, and other information with high precision and determine accurately the movement of a hand in a virtual space.



MEMS Ultrasonic Time - of - Flight Sensors Ultra-compact sensors can be integrated directly into headset displays to accurately assess spatial relationships. Systems using such sensors will bring interactive experiences to more and more people.





Robots equipped with MEMS microphones can detect voices and other sounds at relatively large distances, and the use of multiple microphones also enables the robot to identify the direction where the sound is coming from. Such applications will help hearing-impaired individuals and make it easier for persons with limited mobility to obtain help during an emergency.



MEMS Microphones

The application of silicon MEMS technology has enabled the development of MEMS microphones which operate on very low power while featuring a high clipping point. This makes it possible to design communication robots with superior sound perception capabilities.





Attractive Experience