

Corporate

TDK wins Silver IGUS Vector award for ADAS electromagnetic compatibility (EMC) vehicular test solutions

- The 9th annual Silver Vector award is internationally recognized and honors design engineers and project managers worldwide for the creative and innovative use of IGUS energy supply systems in unique engineering applications
- TDK RF Solutions Inc., a TDK group company, earned the IGUS Silver Vector award out of 328 submissions for developing a vehicle-in-the-loop (VIL) test to measure the electromagnetic compatibility (EMC) of vehicles implementing advanced driver assistance systems

May 21, 2024

TDK Corporation (TSE:6762) announces that TDK RF Solutions, Inc., a TDK group company and world leader in the design, development, and manufacturing of technical solutions for the electromagnetic compatibility testing and antenna measurement industries, has earned the IGUS Silver Vector award. The award was given for the novel use of energy chains and e-spools in a test rig for vehicle-in-the-loop (VIL) analysis to measure the electromagnetic compatibility (EMC) of vehicles with advanced driver assistance systems (ADAS). ADAS are technologies that assist drivers with the safe operations of a vehicle using automated technology, such as sensors and cameras, to detect nearby obstacles or driver errors and respond accordingly.

TDK solved the challenge of outdoor roadway testing by emulating a real-world scenario indoors, including equipping the vehicle-under-test with operational ADAS integrated onboard. The vehicle was operated as if it were on an actual roadway with a chassis dynamometer integrated into a turntable, a low-profile cooling system, and fiber optic video monitoring. The entire vehicle test bed was surrounded by a large array of test antennas located on the periphery and used to radiate the entire vehicle over a broad range of frequencies at very high electric field strengths.

Companies worldwide are raising the bar for innovative and sustainable engineering solutions. As a testament to this wave of innovation, this year's vector award competition consisted of 328 submissions from 37 countries. Aside from TDK RF Solutions' podium finish, other nominated applications included optical spectrographics for space technology, sustainable technologies for agriculture, and multiple solutions implementing AI and robotics.

"This award once again showcases TDK's overall commitment to leveraging the synergy between our different engineering groups and incorporating sustainability into our solutions, in this use case – power efficient EMC measurements coupled with automotive ADAS testing," said Robert Sutton, President, TDK RF Solutions. "Our global technical expertise and diverse engineering design teams have allowed us to become a preferred partner as well as a systems provider for EMC measurement solutions and anechoic materials, research & development, product design, standardization efforts, and test products for the worldwide RF community. We continue to attract tomorrow's vehicle technologies solutions, today."

For more details about the award program and submissions, **here** and see an overview of TDK RF Solutions' silver award winning project **here.**

For more information about TDK RF Solutions, visit https://www.tdkrfsolutions.tdk.com/ or contact TDK RF Solution sales at trs.sales@tdk.com/.



Glossary

EMC: Electromagnetic compatibility

VIL: Vehicle-in-the-loop

ADAS: Advanced driver assistance systems

Al: Artificial Intelligence

Main applications

Electric vehicles

ADAS

Sensor fusion testing

Vehicular antenna development

Vehicular systems coexistence

About TDK Corporation

TDK Corporation is a world leader in electronic solutions for the smart society based in Tokyo, Japan. Built on a foundation of material sciences mastery, TDK welcomes societal transformation by resolutely remaining at the forefront of technological evolution and deliberately "Attracting Tomorrow." It was established in 1935 to commercialize ferrite, a key material in electronic and magnetic products. TDK's comprehensive, innovation-driven portfolio features passive components such as ceramic, aluminum electrolytic and film capacitors, as well as magnetics, high-frequency, and piezo and protection devices. The product spectrum also includes sensors and sensor systems such as temperature and pressure, magnetic, and MEMS sensors. In addition, TDK provides power supplies and energy devices, magnetic heads and more. These products are marketed under the product brands TDK, EPCOS, InvenSense, Micronas, Tronics and TDK-Lambda. TDK focuses on demanding markets in automotive, industrial and consumer electronics, and information and communication technology. The company has a network of design and manufacturing locations and sales offices in Asia, Europe, and in North and South America. In fiscal 2024, TDK posted total sales of USD 14.6 billion and employed about 101,000 people worldwide.

About RF Solutions

TDK RF Solutions is a world leader in the design, development, and manufacture of technical solutions for the electromagnetic compatibility testing and antenna measurement industries. Offering a complete range of solutions including automated test systems, TDK anechoic chambers, RF absorbers, antennas, software, and a wide range of test products. RF Solutions mission is to utilize TDK's global technical expertise and resources to become the preferred provider of EMC solutions, research & development, product design, and test products for the worldwide RF community. TDK RF Solutions is headquartered in Cedar Park, Texas with affiliate offices in Asia, Europe, and the Americas.

You can download this text and associated images from https://www.tdk.com/en/news_center/press/20240521_01.html

Contacts for regional media

Region	Contact		Phone	Mail
Global	David ALMOSLINO	TDK USA Corporation. San Jose, CA, USA	+1 408-478-5799	David.Almoslino@tdk.com
North America	Sarah MACKENZIE	Publitek Portland, OR	+1 503-720-3743	TDK-global@publitek.com