

Europe Radiation Hardened Feedback Sensors Market Forecast to 2031 - Regional Analysis - by Sensor (Resolver, Encoder, Hall Effect Sensor, Potentiometer, and Others) and Application (Space, Aerospace and Defense, Nuclear Power Plant, and Others)

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Abstracts

The Europe radiation hardened feedback sensors market was valued at US\$ 40.77 million in 2023 and is anticipated to reach US\$ 59.10 million by 2031; it is estimated to register a CAGR of 4.8% from 2023 to 2031.

Development of Advanced Radiation Hardened Feedback Sensors Drives Europe Radiation Hardened Feedback Sensors Market

Advanced radiation hardened feedback sensors are designed to support users to continue their operations in the exposure of high levels of radiation. These sensors offer several benefits to the users or systems operating in harsh environments. The sensors ensure that the critical system receives the proper feedback required to function properly. This reliability is highly essential in spacecraft navigation or nuclear reactor control. Moreover, the development of advanced radiation hardened feedback sensors ensures the safety of critical systems by providing stable and precise feedback in challenging radiation environments.

Radiation hardened feedback sensors are used in numerous applications to ensure the reliability, safety, and longevity of systems operating in the harsh environment. The growing demand for advanced radiation hardened feedback sensors has encouraged manufacturers to develop new innovative sensors or upgrade existing sensors with additional features. For instance, in March 2022, Netzer Precision Position Sensors A.C.S. Ltd. developed and launched a new VLM-60 capacitive multi-turn absolute

encoder for harsh environments. The VLM-60 is an electric, non-contact capacitive multi-turn absolute encoder designed for a wide range of demanding tasks in the aerospace & defense, medical, automotive, and robotics industries. This capacitive encoder offers significant benefits to the users such as extremely durable and resistant to vibrations and shocks. The low profile, compact, high-density designs, and hollow shaft structure provide unparalleled accuracy and resolution encoders, further supporting users in generating precise position or motion feedback for controlling systems in the radioactive environment.

Europe Radiation Hardened Feedback Sensors Market Overview

Germany is one of the world's leading aviation and aerospace nations. According to the International Trade Administration, Germany has the third-largest aerospace & defense market in Europe. Most of the aircrafts in the world contains technology made in Germany. One in six-passenger aircraft assembled worldwide is equivalent to ~17% of global aircraft production coming from the country. World-class research networks and a highly integrated supply chain provide a platform for the development of the aircraft of the future.

The government of Germany is taking various initiatives in the aerospace sector. For instance, the German Federal Ministry for Economic Affairs and Climate Action established the Indo-German Aerospace Project 2020-2022 to enable Indo-German collaborations in this sector. With the increasing government initiative, the aerospace sector in Germany is growing, propelling the demand for radiation hardened feedback sensors. These sensors are highly crucial in aerospace and defense applications for the protection of humans and equipment against radiation. In addition, they provide reliable and accurate feedback to professionals in highly radiative environments.

Europe Radiation Hardened Feedback Sensors Market Revenue and Forecast to 2031 (US\$ Million)

Europe Radiation Hardened Feedback Sensors Market Segmentation

The Europe radiation hardened feedback sensors market is categorized into sensor, application, and country.

Based on sensor, the Europe radiation hardened feedback sensors market is segmented into resolver, encoder, hall effect sensor, potentiometer, and others. The resolver segment held the largest market share in 2023.

By application, the Europe radiation hardened feedback sensors market is segmented into space, aerospace and defense, nuclear power plant, and others. The space segment held the largest market share in 2023.

By country, the Europe radiation hardened feedback sensors market is segmented into Germany, France, Italy, the UK, Russia, and the Rest of Europe. Germany dominated the Europe radiation hardened feedback sensors market share in 2023.

Power Device Corporation, MACCON GmbH & Co. KG, Honeywell International Inc, Magics Technologies NV, and Netzer Precision Position Sensors A.C.S. Ltd are some of the leading companies operating in the Europe radiation hardened feedback sensors market.

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