



TECHNOLOGY DESCRIPTION

Based on the space technology used in ESA's Rosetta mission, a non-contact, non-invasive and easily retrofittable sensor solution for current measurement has been developed. The sensor is simply mounted on a cable and uses high-precision magnetic field data to measure the currents in all conductors simultaneously.

The sensor based on miniaturized magnetometers is simply mounted on a cable and measures the currents in all conductors simultaneously using high-precision magnetic field data. As a result, this new sensor solution can recognise and classify anomalies in current profiles caused, for example, by defective motors or seized bearings in machines that are sealed or difficult to access. This is crucial for intelligent load management and predictive maintenance in the context of industrial automation or future manned space missions.



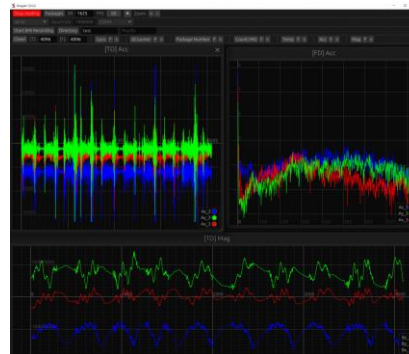
INNOVATIVE ASPECTS

- New contactless, non-invasive current sensor based on space technology
- Vital for industrial automation
- Easy-to-install, flexible and safe solution
- Highest precision and reliability



TECHNOLOGY READINESS (in space application)

TRL 8 (2024)



COUNTRY OF ORIGIN

Germany

LATEST UPDATE

06/2024

TAGS

#sensor

#high-precision

#magnetic field

#contactless

#intelligent

#monitoring

APPLICATION AREAS

Aviation

Construction &
Civil Engineering

Health

Mechanical
Engineering

Safety & Security

Space
technologies

Transport &
Logistics

TECH CARD

