

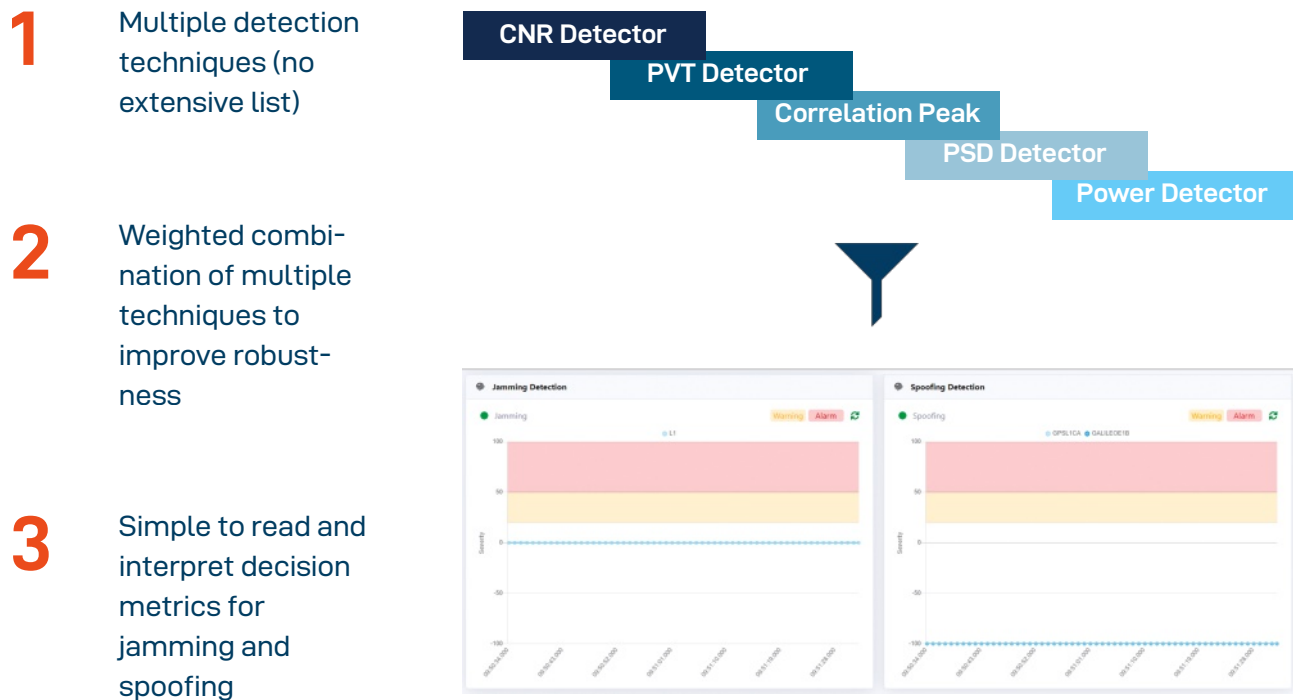
WE ARE THE NAVIGATION EXPERTS



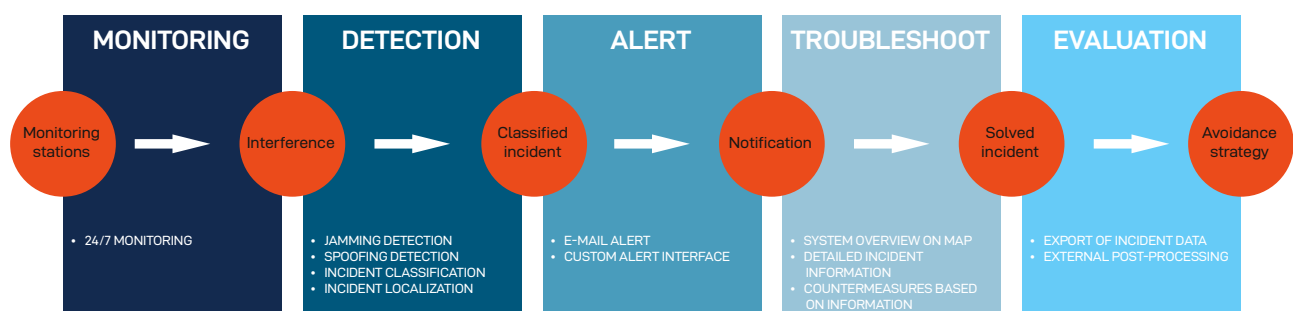
GNSS QUALITY ASSURANCE

Global Navigation Satellite Systems (GNSS) positioning and timing services form the backbone of many applications and markets. Civilian GNSS services are free of charge and globally available but insufficiently protected against unintentional and even intentional disturbances. OHB Digital Solution researches for more than 20 years on how to provide means to monitor and augment the GNSS services with GNSS quality assurance. For many applications, it's not only precision that matters, but predominantly integrity too! OHB's knowledge and experience in GNSS quality assurance are available in many different forms in our GIDAS product family.

The core and heart behind the GNSS interference detection & analysis system (GIDAS) product family is OHB's knowledge of and experience with a multitude of different radio frequency interference detection techniques. We built up our experience in the course of more than 80 research projects, measurement campaigns and permanent on-site installations within the last two decades. Each available detection technique operates best in a very distinct working range, only with the smart combination of a wide range of different techniques a robust determination of either jamming or spoofing is possible reliably.



On this foundation, the GIDAS product family is built to support our customers in reliable GNSS applications and operations. OHB Digital's core concept of safe and integer GNSS navigation foresees a multiple layer approach.



By constantly monitoring the GNSS signals, GIDAS is capable to detect, classify and even localize a radio frequency interference source in near-real-time. A wide range of GNSS users takes the ubiquity and free availability for granted, without considering the vulnerability of GNSS leading to misleading navigation or undetected failure. Awareness of the presence of GNSS interference is the first step of mitigation. As every customer application comes with its very distinct requirements OHB offers GIDAS features in different shapes. But all GIDAS product derivatives have one thing in common – the rock-solid experience of OHB in dealing with GNSS interference.

GIDAS EMBEDDED algorithms

The heart and core of GIDAS. Our knowledge regarding GNSS interference detection poured into source code, forming a C++ library to be directly integrated into customer solutions.

GIDAS EMBEDDED micro controller

We bring our knowledge directly to customer platforms. By supporting selected microcontrollers, GIDAS algorithms can run side-by-side with customer applications on existing hardware platforms.

GIDAS EMBEDDED analytics

GIDAS Analytics is a software suit for detailed post processing of digital I/Q signals. This is the best way to use our knowledge for your R&D or product development.

GIDAS MONITORING CENTER local

The monitoring center is the core entity of any permanent installation of GIDAS. It hosts a central database, the web-based user interface, and alarming interfaces.

GIDAS MONITORING CENTER nationwide

Having multiple GIDAS installations distributed nationwide requires one central dashboard to monitor, configure and maintain the system. The generation of nationwide interference reports has never been easier.

GIDAS MONITORING SENSOR stationary

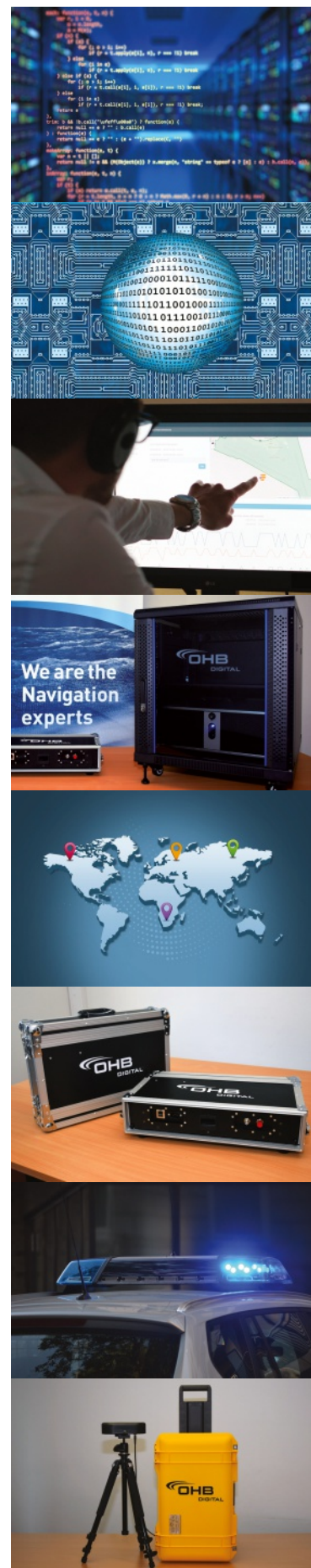
The monitoring sensors form the eyes and ears for the GIDAS system. A stationary monitoring sensor is composed of a dual-module GNSS antenna and a receiving unit with a small form factor.

GIDAS MONITORING STATION mobile

Applications such as the enforcement of GNSS-based tolling systems require mobile units mounted on the rooftop of vehicles to monitor GNSS interference on the move.

GIDAS MONITORING STATION portable

For full autonomous operation, GIDAS is also available in a portable, full sustaining form factor. GIDAS portable includes everything to monitor GNSS signals everywhere you have to.





GNSS QUALITY ASSURANCE

GIDAS adds to the operational safety of many different GNSS reliant applications. OHB's GIDAS is already operational in ports and airports, to help to secure GNSS navigation. The GIDAS product family addresses system manufacturers equally as end customers with a requirement on reliant GNSS positioning or timing. We bring our knowledge to your platform, product, service, or operation.

A first step of safe GNSS applications is the awareness of present threats – **GIDAS** detects, classifies, localizes and alerts if GNSS is about to be interrupted. OHB makes your GNSS-dependent application more robust and reliable.

Get in touch with us to learn how we can make your GNSS-based operations safe!

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