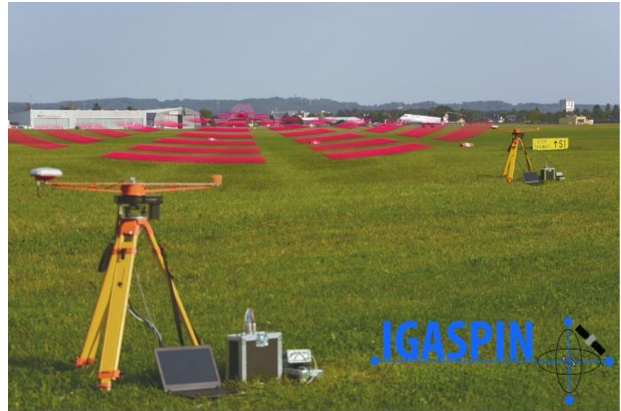




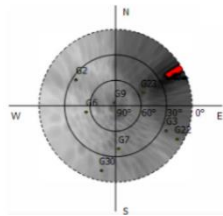
RIDe



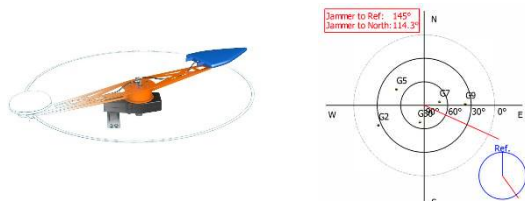
Rotating Identification Device

OVERVIEW:

RIDe1 is a synthetic aperture antenna which using displacement information of an circular moving GNSS antenna can exploit the principle of spatial diversity for spoofing detection, direction-of-arrival (DoA) finding, and mitigation with Nulling.



RIDe2 is a similar platform to RIDe1 which is additionally equipped with a directional antenna for determination of jamming DoA.



FEATURES:

RIDe1-with 1 antenna

1. Spoofing detection.
2. Spoofing DoA finding
 - a. Elevation and azimuth,
 - b. Accuracy > 1° in both axes.
3. Spoofing mitigation
 - a. Nulling approach.
4. Supports all GNSS frequencies.

RIDe2-with 2 antennas

1. Jamming detection.
2. Jamming DoA finding
 - a. Azimuth,
 - b. Accuracy > 1°.
3. Supports all GNSS frequencies.

Both RIDes

1. Platform:
 - a. 1-4 rotation per second,
 - b. waterproof,
 - c. heating system.
2. Graphical User Interface (GUI)
 - a. easy configuration,
 - b. user feedback.
3. By installation of multiple RIDes, the interferer location can be determined (Accuracy > 3m).



RiDe1* - for spoofing	
Power [more than the noise level]	>5 dB/MHz
Type	-Time-synchronized -Non time-synchronized -Meaconing
Antenna	-1 omnidirectional antenna
Actions	-Detection -DoA finding -Mitigation
RiDe2* - for jamming	
Power [more than the noise level]	>5 dB/MHz
Type	Sinus, Chirp
Antenna	-1 omnidirectional antenna -1 directional antenna
Actions	-Detection -DoA finding

HARDWARE	
Weatherproof	-waterproof, -with a heating system
Rotation	1-4 rotations per second
Rotation radius	0.25-0.5 m
Weight	≈ 15 kgs
RF Front-End	
GNSS signals	Galileo E1, E5ab, E6 GPS L1 CA & L1C, L2P & L2C, L5 BeiDou-2 B1I, B2I, BeiDou-3 B1C, B2a, B3I GLONASS L1, L2 IRNSS L5 + S QZSS L1, L2, L5 SBAS L1
Signal IF sample rates (bandwidth)	Selectable: 5, 10 (standard), 20, 25, 50, 100 MSamples/Sec.
CONTROLLER UNIT	
OS	Microsoft Windows 10 Pro (incl. License und Inst)
Display	1x 17.3" Full HD IPS 144 Hz Thin Bezel
Graphics Card	1x NVIDIA GeForce GTX 1650 4 GB GDDR6
Processor	1x Intel Core i7-9750H
Optional HW**	<ul style="list-style-type: none"> ▪ 1x Omnidirectional antenna ▪ 1x Directional antenna ▪ 2x RF cables

* All data subject to change.

** Optional Hardware is included on request only.

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