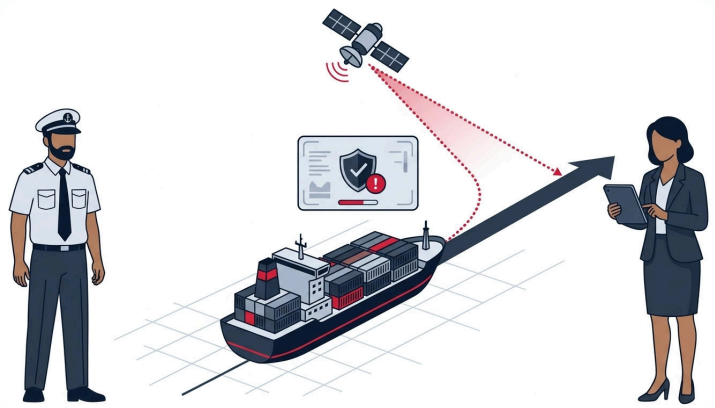
GeoWatch

"Independent navigation trust & GNSS spoofing detection."

GPS can look completely valid and still be dangerously wrong.

GeoWatch compares reported GPS against physical vessel motion, **warning your bridge the moment they disagree.**



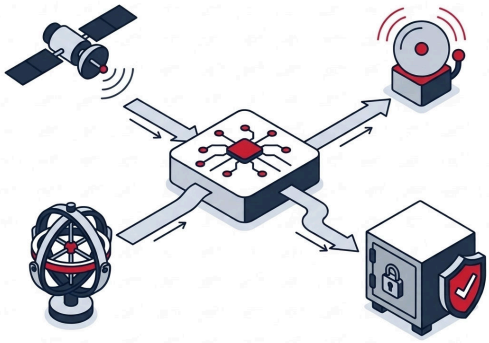


The "believable" wrong position

- ECDIS, AIS, radar, and autopilot all repeat the same spoofed GPS feed.
- Electronic warfare subtly shifts ship tracks into shallows without sounding an alarm.
- Corrupted satellite almanacs can impair receivers for days after leaving a conflict zone.

Unspoofable physical motion

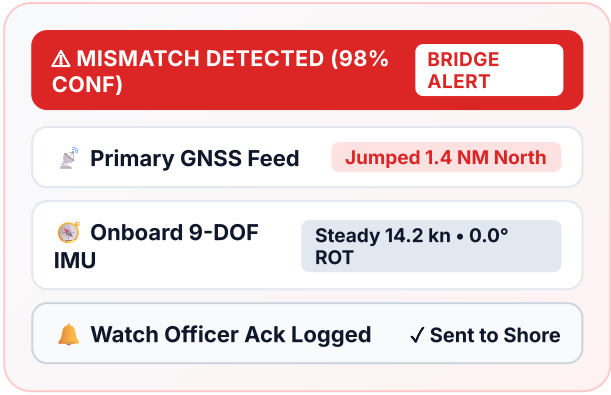
- Cross-examines GPS coordinates against an onboard 9-DOF inertial sensor.
- Catches impossible position jumps, frozen fixes, and DOP flatlines.
- Plugs in via USB/serial in minutes—no mast rewiring or drydock downtime.



9-DOF IMU	Non-Radio Physical Motion Baseline	>95% Conf	Deterministic Physics Zero False Guesses	SHA-256	Tamper-Evident Forensic Audit Vault

Bridge alarm & shore visibility

- Immediate visual and audible bridge alert prompts manual cross-checks.
- Notifies shore operations via email & Teams with **crew acknowledgement timestamps**.
- Learns historical voyage corridors and flags unexplained lateral drift.



Tamper-proof forensic proof

Raw NMEA + IMU → SHA-256 Geotape

Defensible Legal Proof:

✓ Verbatim 10-minute append-only bundles
✓ Cannot be smoothed, edited, or forged
✓ Protects against port-state & charter claims

- Captures raw NMEA sentences and motion vectors in SHA-256 hashed bundles.
- Proves your vessel was targeted by external electronic interference.
- Defends crew diligence during P&I inquiries, charter disputes, and vetting audits.

Deterministic defense across high-risk corridors

Operational Defense Matrix

RED SEA	PERSIAN GULF	EASTERN MED	NORTH EUROPE
Bab-el-Mandeb	**Strait of Hormuz**	**Levant & Black Sea**	**Baltic & North Sea**
THREAT: Circle spoofing & ghost AIS tracks	THREAT: Territorial lures & false waypoints	THREAT: Airport bleed & multi-band denial	THREAT: Persistent jamming & DP drive-off
GEOWATCH: IMU rejects false drift in <3 sec	GEOWATCH: Validates SOG against Doppler	GEOWATCH: Detects simultaneous SNR drops	GEOWATCH: Bridges gaps with SHA-256 logs

SINGLE-VESSEL EVALUATION PACKAGE

Start with one vessel for $695/year

and $30/month from year two onwards

Complete evaluation package with hardware included. Don't wait for a maritime casualty to discover your GPS was spoofed.

1. Plug In Edge Unit → 2. Pair in 60s → 3. Verify Every Mile

Deploy on 1 Ship — $695 Year 1

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