

## GIDAS EMBEDDED

# GNSS SECURITY

### ADVANCED PROTECTION FOR MISSION-CRITICAL TIME

Modern airports, rail networks, telecom operators and critical infrastructure rely heavily on GNSS for accurate time. But GNSS signals are vulnerable to spoofing, jamming, interference and manipulation, making protection essential for operational safety and cybersecurity.

The MOBATIME GNSS Security Feature introduces a powerful, multilayer protection concept that acts as a GNSS Signal Firewall, ensuring that only verified satellite signals are used by your timing system.

### PROTECTION AGAINST RF LAYER ATTACKS & ANOMALIES

The GNSS Security Feature continuously evaluates incoming GNSS signals using a multi-detector security engine that identifies:

- Spoofing attempts
- Jamming and interference
- Abnormal satellites positions / signal levels
- Multipath effects
- Doppler or pseudorange deviations

Using weighted decision logic, the system validates the authenticity of satellite data. If anomalies or manipulations are detected:

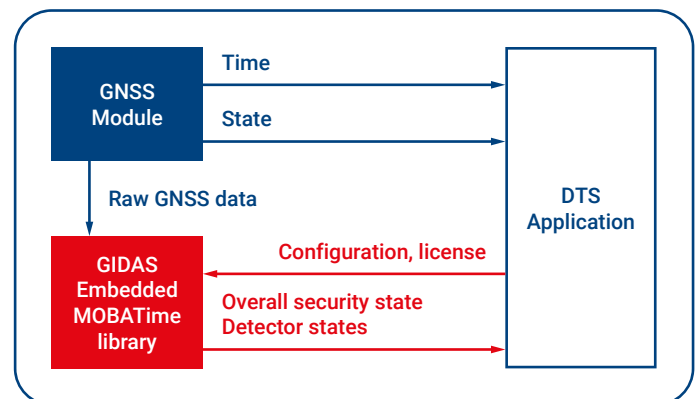
- Compromised GNSS input is instantly discarded / isolated
- The device switches to secure holdover mode
- Alarms are raised to the monitoring system

This ensures uninterrupted, trustworthy Stratum-1 time, even under GNSS disruption.

### HIGH-STABILITY HOLDOVER FOR UNINTERRUPTED TIMING

When GNSS is discarded / isolated, the DTS 4160c / DTS 4210 maintains precise time using a high-stability Rubidium oscillator. This guarantees:

- Excellent long-term stability
- Reliable performance for aviation and industrial environments
- Continuous time distribution even in prolonged GNSS outages



Your system stays operational, accurate and compliant - no matter what happens outside.

### LICENSE MODEL

One-time license per device. The license activates the GIDAS Embedded software features for a customer device and includes the usage of the GIDAS background IP. The license validity does not end.

The license is bound to a specific device and cannot be transferred. The license does not include future upgrades. Future upgrades to the functionality of GIDAS Embedded are possible, but not automatically included.

### SUPPORTED DEVICES

DTS 4160c.grandmaster  
DTS 4210.timecenter

*Do you have any questions?  
We are happy to help.*

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