

ELECTRONICS & DEFENSE



# SECURESYNC®

## TIMING AND SYNCHRONIZATION PLATFORM



# Timing and Synchronization Platform

## About SecureSync

SecureSync provides industry-leading security for high performance and low latency applications with enhanced resiliency provided by alternative signals and Interference Detection Mitigation (IDM) technologies for defense, financial and industrial applications.

SecureSync harnesses Safran's leading PNT technology into one flexible, modular platform designed to synchronize critical military and commercial infrastructures that require extreme reliability and security.

- Multi-GNSS configurations (GPS, Galileo, GLONASS, BeiDou)
- Internal precision time-keeping via TCXO, OCXO or Rubidium oscillator
- Secure network management and control
- Built-in high-performance NTP server; PTP options
- Ruggedized shock and vibration-tested chassis (1RU)
- Low phase noise frequency options
- Supports M-CODE, SAASM



### Adaptable

SecureSync is the key enabler of highly available time and frequency synchronization distribution architecture. It adapts to demanding infrastructure environments, with extended temperature support ( $-20^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$ ). Time distribution to legacy systems can be achieved with a range of synchronization signals, while timing protocols (NTP, PTP) are available for synchronizing of recent systems through the networks.

### Flexible

SecureSync offers a broad range of flexible design options, including a variety of internal oscillators for holdover and phase noise, and onboard clocks that can be synchronized to many external references. The platform can be configured for specific applications, with the ability to extend the number of option cards on the platform (up to six cards can be accommodated per unit).



**SRO-100 Features & Applications**

### SecureSync Rubidium Oscillator

The slim SRO-100 is a smart, low cost GPS/GNSS-disciplined rubidium Oscillator (GPSDO) that synchronizes, disciplines, and controls any primary reference source, such as GPS/GNSS, Cesium, Hydrogen Maser, and T1/E1, at cutting-edge 1ns resolution.

## SecureSync Platform: Key Features



### Built-In Security

SecureSync incorporates a high level of operational security with advanced cybersecurity protection.

### Networking

- Access Control Lists (ACLs)
- iptables firewall support

### Login

- Login banner support

### SSH

- Public/private key support

### Passwords

- Configurable password policy
- Password expiration
- M-CODE
- SAASM

### HTTPS

- Signed certificate support (SHA256 default)
- Configurable cipher usage
- TLS v1.1 and 1.2

### Military Encrypted Signals

- M-CODE
- SAASM

### NTP

- Symmetric keys

### Reference Resilience



Reinforced with alternate signals of opportunity to GPS to improve resilience.

- Multi-GNSS configurations (GPS, Galileo, GLONASS, BeiDou)
- STL Option (GNSS backup)
- Interference Detection Mitigation Suite
- Internal precision time-keeping via TCXO, OCXO or Rubidium oscillator



### Easy Monitoring

SecureSync provides local and distant access to useful operational data.

- Local and remote syslog
- SNMP (Simple Network Management Protocol)
- Email notifications
- Advanced REST API

### Scalability



SecureSync provides high networking capability and scalability for NTP and PTP deployment.

- Available dual GbE
- RJ-45 and available SFP (copper or fiber)
- IPv4/IPv6 stack
- Available VLAN support
- NTP and available PTP
- GbE expansion option cards



### Versatility

SecureSync can be configured to fit your specific application and is field upgradeable to align with future requirements.

- Multiple oscillator options including low g-sensitivity for harsh environments
- Available low phase noise, high stability frequency outputs
- Available software-configurable I/O
- Additional signal diversity and density through dozens of option cards
- Available AC, DC power in fixed and hot-swap options



### **Sophisticated Military Operations**

With its M-CODE/SAASM support, built-in security, interface flexibility, and complimentary Interference Detection and Mitigation (IDM) suite, the SecureSync Platform is ideal for defense applications, including Radars, test ranges and Intelligence Surveillance Reconnaissance (ISR) applications.

### **Datacenters and Fintech**

SecureSync's sophisticated networking capability and scalability, and available hot swappable power supplies are especially well-suited to datacenters and fintech applications, where reliability, speed and accuracy are essential.

### **Power and Automation**

SecureSync's flexible networking capability and flexible interface are excellent options for power authorities, utilities, and process control industries.

### **Transport and Air Traffic Management**

SecureSync's built-in IDM suite provides an extra level of security and protection, and its flexible networking capability and available hot swappable power supply are ideal for the transport and ATM industries.

### **Broadcast and Telecom**

As you move into a 5G world, SecureSync's networking capability and available hot swappable power supply will keep your systems up and running accurately, precisely and reliably.

### **Public Safety**

Powered by NetClock, SecureSync is fully NENA-compliant and the #1 recommended time synchronization platform for public safety, used in over 90% of US 911 call centers. Trust SecureSync to deliver precise, reliable, legally traceable time that will stand up in court and protect you from potential litigation.

### **About Safran**

Safran is the world leader in Resilient Positioning, Navigation and Timing (PNT) solutions that improve the reliability, performance and safety of critical, remote or high-risk operations. With a presence in more than 100 countries, Safran provides virtually failsafe GPS/GNSS and PNT solutions to support military and commercial applications worldwide.

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[sales@nav-timing.safrangroup.com](mailto:sales@nav-timing.safrangroup.com)  
[safran-navigation-timing.com](https://safran-navigation-timing.com)

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