



Time and Location You Can Trust™

Resilient Timing and Synchronization for Commercial Applications

The World's Most PNT-Reliant Systems Trust Orolia.

We have a proven track record of delivering the right Resilient Positioning, Navigation and Timing (PNT) products, solutions and support to the world's most time-sensitive critical infrastructure and testing systems.

From precision timing and synchronization, to advanced GNSS and PNT simulation, to testing and measurement, Orolia is your trusted partner for networks and systems that are too critical to fail. With Orolia, you'll meet your PNT assurance goals with confidence.

Reliability. Scalability. Industry-Leading Support.

As your business grows, so does your need for precision timing and synchronization. Your challenges may include:

- Optimizing network operations and improving quality of service
- Managing network latency
- Improving data accuracy and security
- Legal traceability
- Complying with regulations and standards

Orolia offers reliable and scalable solutions with options ranging from traditional GPS/GNSS timeservers to indoor (wireless) options like alternative signals, field support for network time and precision time protocols (NTP/PTP), modular design for customized I/O configurations, advanced security support that includes jamming and spoofing detection and mitigation, and more. Orolia's Resilient PNT solutions are also backed by the best support program in the industry.

Better Support. Better Value.

We can provide virtually any type of resilient PNT service to support your business needs. We also offer standard service plans and packages beyond our industry-leading warranty and technical support to ensure your business continuity. When your system simply has to work, count on Orolia 24/7/365.

Consulting and Professional Services

Implementing a timing network requires specialized knowledge and protocols that even the most seasoned networking or UNIX professionals may not have. At Orolia, we have nearly half a century of experience in timing solutions. Our experts will guide you through the various stages of your timing initiative to help you meet your objectives on time and within budget. We'll free up your time and resources to focus on other tasks ... and reduce overall project costs.

Engineering Services

Timing network design and deployment
Advanced system architecture
TSN-focused system design and deployment

Testing

GNSS interference testing
Performance testing

Training

Operations/NOC team training
Tailored product training

Security and Audit

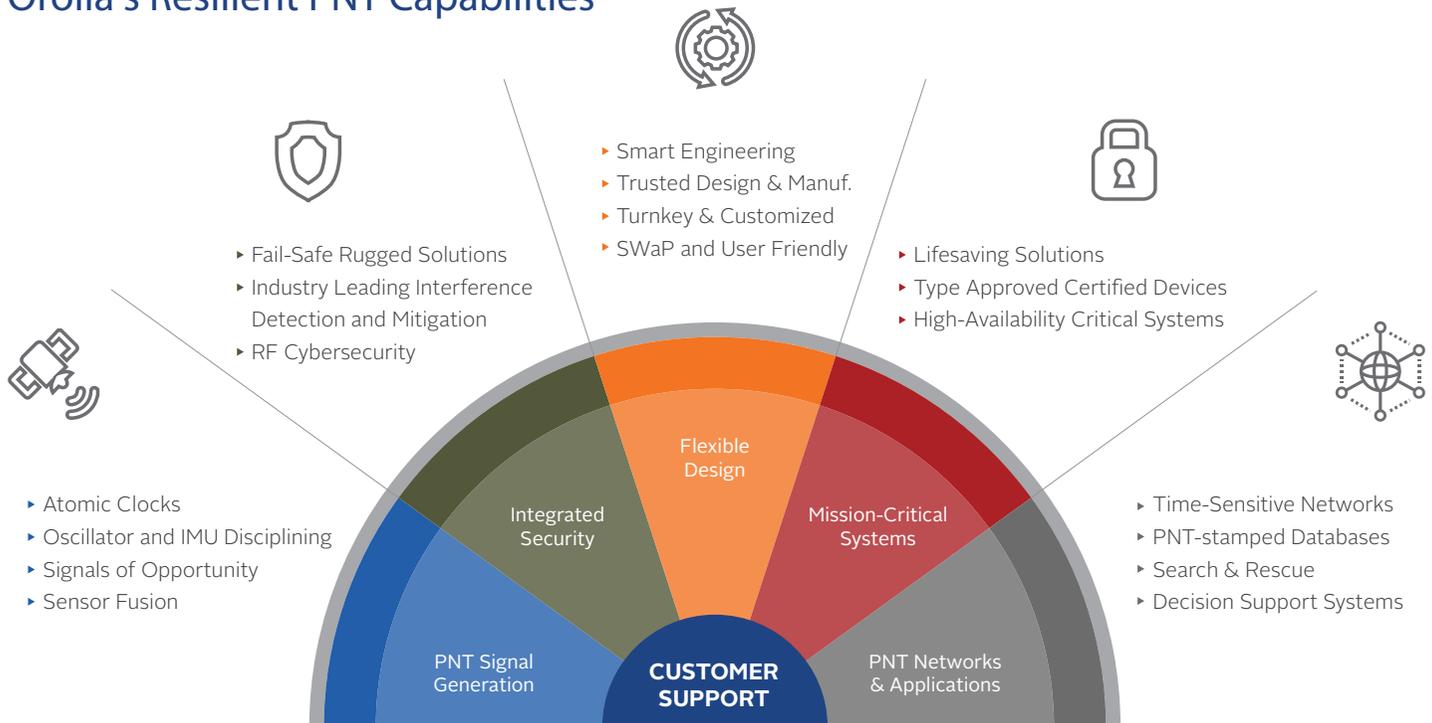
PNT network security audit
PNT cybersecurity audit
Spoofing and jamming vulnerability testing
Timing system security optimization

Support Plans

Annual Service Plan (ASP) is designed for lab and factory environments, as well as testing applications. It includes unlimited phone/email support, annual calibration and factory check, free product updates, loaner service, and priority factory repair. Recommended for GSG-5 and 6 series.

Premium Support Package (PSP) includes 24/7 emergency tech support, express next-day loaner service, priority repair services, gold option replacements, calibration and onsite service options.

Orolia's Resilient PNT Capabilities



Meeting requirements at the best value with a flexible, configurable and scalable open architecture approach.

Commercial Timing Solutions

Enterprise-Class SecureSync®

SecureSync combines Orolia's precision GPS master clock technology and secure, network-centric approach with a compact modular hardware design in a 1RU chassis to deliver a powerful, scalable and flexible time server.



SecureSync BroadShield™ Option

An interference detection suite that keeps your GPS/GNSS synchronization safe from jamming and spoofing, BroadShield is the only GPS-dependent PNT solution designed to protect critical infrastructure systems. It contains over 75 jamming and spoofing detection algorithms, and automatic switch to backup synch or holdover upon detection of interference. No additional hardware is required.



ThreatBlocker

When paired with BroadShield, ThreatBlocker provides the ultimate protection against jamming and spoofing. BroadShield detects the jamming or spoofing, then alerts the system to cut RF from passing downstream, thus protecting your receivers from processing deceptive signals.



BroadSense

BroadSense is a GPS jamming and spoofing detection sensor. Utilizing sophisticated GNSS receivers and 75+ advanced algorithms, BroadSense can detect when the GPS signal or GPS spectrum is compromised.



STL (Satellite Time and Location) Option

Satellite Time and Location (STL) is a revolutionary new source for precision time based on the Iridium® constellation of satellites. As reliance upon GPS and other GNSS signals becomes more common for critical applications, STL provides an ideal augmentation for resiliency and security or as a standalone indoor solution when roof access isn't an option.



Orolia 8230 Passive Anti-Jam Antenna

Our unique conical antenna pattern rejects interference signals from the horizon for or lower elevation angles, where most of the interference comes from, and only receives signals from higher elevation angles where satellites are located. It offers all the performance in timing accuracy of a standard antenna plus 20 dB or more of interference rejection, and covers GPS L1, GLONASS L1, BeiDou B1, Galileo E1, and QZSS L1.



VelaSync™ 1232 High-Speed Time Server

For high frequency trading and other low-latency network applications, VelaSync 1232 offers multiple 1GbE (RJ-45), 10GbE (SFP+), 25GbE (SFP28), and 40GbE (QSFP) network ports for setup, management and simultaneous NTP and PTP server/grandmaster capability. It also includes built-in network sync monitoring.



NetClock® GPS NTP Server

NetClock is an affordable, high-performance GPS based NTP time server for networks that require legal traceability or general network timing. It delivers reliable timing performance with the highest security, reliability and ease of management.



TSync Timing Boards

TSync provides board-level timing that is ideal for domain controllers and mission-critical embedded applications, with complete synchronized timecode reader/generator boards and peripheral slot cards to offer flexibility and easy integration. Boards are available in PCIe, cPCI, PMC, PCI-104, VPX, and other form factors as needed, and include Windows and Linux drivers.



PRISMA Compliance

This is the first and only existing software solution that provides true UTC traceability and real-time reporting to comply with MiFID II and FINRA. Gather, analyze and report on all elements in your timing network in real time. It uses a scalable, low latency time series database by QuasarDB, it is NTP/PTP compatible, it supports multisite replication and it is easy to deploy on virtually any network.





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The industry-leading Spectracom products you rely on are now brought to you by Orolia, the global leader in resilient positioning, navigation and timing solutions.

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