

## OSA suite

### Precise and assured synchronization

Mobile network operators are facing major challenges. As well as meeting stringent requirements for frequency and phase synchronization, they also need innovative solutions to address the footprint, power consumption and sky view limitations of new city environments. And they need to do all this while monitoring and assuring sync accuracy.

Whether at the edge or core of the mobile backhaul network, deep in the radio access network, in utility distribution networks, or in defense communication networks, our portfolio of synchronization devices provides you with the ideal solution. Complemented by our powerful synchronization network management system, configuration, management, monitoring and assurance of your entire network synchronization infrastructure becomes a simple task. What's more, our miniature network synchronization solutions enable precise synchronization in the most space-restrictive environments, indoor and outdoor, and even in deep urban canyons with no clear view.



### Your benefits

✓ **Assured end-to-end solutions**

Our OSA portfolio has the unique capability of monitoring synchronization quality while operating in service

✓ **Long and successful experience**

Oscilloquartz has been a pioneer in time and frequency synchronization since 1949

✓ **Cutting edge technology**

Revolutionary indoor built-in dual GNSS receivers and antennas, enabling PRTC and IEEE 1588v2 grandmaster

✓ **Syncjack™ technology**

Built-in synchronization accuracy monitoring, testing and assurance functionality - enabling sync monitoring while in service


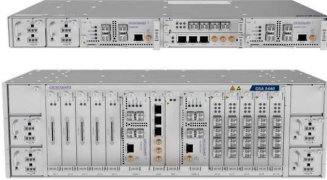
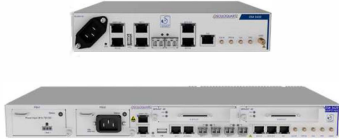



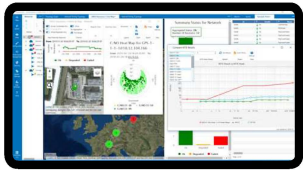
✓ **Operational simplicity**

Ensemble Controller and Sync Director for superior management and sync monitoring capabilities

✓ **Compact and green design**

Distribution of accurate timing with the smallest size and power consumption on the market

## OSA suite at a glance

	Product	Major features and applications
	<b>OSA 3230B</b>	Cesium primary reference clock (PRC/ePRC) Meet ITU-T G.811/Stratum 1 PRC and G.811.1 ePRC specifications. Ideal for back-up of GNSS in ePRC applications
	<b>OSA 5430</b> <b>OSA 5440</b>	Modular, high-performance IEEE 1588v2 PTP core grandmaster, NTP server and SSU supporting 10Gbit/s as well as 1Gbit/s interfaces. Ultimate scalability, with a carrier-class fully redundant design
	<b>OSA 5410 Series</b> <b>OSA 5420 Series</b>	Family of IEEE 1588v2 PTP synchronization distribution, testing and assurance devices, with NTP server and GNSS receiver and multiple sync fanout options for deployment at the radio access network edge. Also ideal for deployment in legacy networks
	<b>OSA 5401</b>	SFP-based PTP grandmaster, boundary and slave clock designed for deployment deep in the radio access network, enabling you to upgrade legacy systems with IEEE 1588v2 PTP and Synchronous Ethernet functionality
	<b>OSA 5405-I</b> <b>OSA 5405-O</b>	PTP grandmaster and GNSS receiver with a revolutionary dual GNSS antenna to deliver accurate small cell synchronization without the need for a clear sky view. Two variants for indoor and outdoor installations
	<b>Ensemble Controller</b> <b>Ensemble Sync Director</b>	Advanced platform for reliable, secure and user-friendly management and surveillance of ADVA FSP and OSA networks, with full FCAPS support. Sync Director extension for timing delivery management and sync assurance
	<b>Professional sync services</b> <b>OSA Sync Survey</b>	To identify existing and potential problems, helping you take control of your synchronization performance and make major savings. Sync Director GNSS Assurance provides analytic tool for monitoring and analysis of GNSS status and reliability

For more information please visit us at [www.tritowertelecom.com/adva](http://www.tritowertelecom.com/adva)  
To request a free consultation call 585-617-5060 or email [info@tritowertelecom.com](mailto:info@tritowertelecom.com)

Product specifications are subject to change without notice or obligation

