



NEWS RELEASE

Adtran's Oscilloquartz optical cesium clock outperforms in tests at leading European metrology institute

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News summary:

- Precision synchronization technology is crucial for scientific measurement applications
- A renowned national authority on metrology based in Central Europe has conducted a rigorous evaluation of the OSA 3300-HP
- Adtran's market-first high-performance optical cesium clock achieved outstanding results with unprecedented levels of accuracy and stability

HUNTSVILLE, Ala.--(BUSINESS WIRE)-- Adtran today announced that one of the world's leading metrology institutes has conducted a three-month-long evaluation of its **OSA 3300-HP** high-performance optical cesium atomic clock. Based in Central Europe, the national laboratory tested Adtran's industry-first solution to establish its suitability for scientific measurement and calibration applications that require precise synchronization. The OSA 3300-HP succeeded in delivering the strict timing accuracy and long-term stability needed for metrology use cases with results far exceeding product specifications. The findings underline the value of Adtran's Oscilloquartz optical cesium technology for a broad spectrum of industries, from astronomical research to defense operations.

Adtran's OSA 3300-HP has set new benchmarks for timing accuracy and long-term stability.

(Photo: Business Wire)

"We're pleased to see this validation for our OSA 3300-HP.

As the market's first commercial

high-performance optical cesium atomic clock, it offers levels of performance that far exceed best-in-class magnetic



cesium devices. Its unique capabilities have the potential to enhance the work of scientists and engineers in a diverse range of metrology, science, research, time scale and ground station fields, including space exploration,” said Gil Biran, GM of Oscilloquartz, Adtran. “Now that it’s achieved these successful results in some of the industry’s most thorough tests, science and research institutions across the world will be able to harness our device to bring new levels of accuracy to their work.”

Adtran’s OSA 3300-HP represents a major achievement in network synchronization. Building on Oscilloquartz’s 74-year history and the expertise of its team, the device provides a precise and ultra-stable frequency source for the most demanding and critical applications. It enables highly accurate synchronization over an extended 10-year lifetime thanks to its advanced optical cesium technology, which pumps atoms to the desired energy states more efficiently than legacy magnetic-based solutions. The OSA 3300-HP’s robust and compact design makes it suitable for multiple applications, even in ground space-constrained environments. It’s also fully compliant with the latest RoHS standards and strict EU demands.

“Assessments by this leading scientific evaluation center are recognized as among the most stringent evaluations in the world of metrology. By meeting and surpassing these rigorous standards, our OSA 3300-HP has proven its value for metrology, time-keeping institutes and scientific research. It will be the foundation for future innovation in sectors from satellite navigation to nanoscale technology,” commented Jörg Urban, AVP of EMEA business development at Oscilloquartz, Adtran. “Our optical pumping timing solutions have set a new benchmark for precision and availability. As well as having a transformative impact on metrology advancement, our technology provides the vital resilience required for PNT assurance in critical infrastructure. What’s more, it empowers communication service providers to harness robust and accurate GNSS backup to deliver valuable timing offerings with differentiated service level agreements.”

Further details including official results from the OSA 3300-HP evaluation are now available on [request](#).

A brief summary of the findings can also be found in these [slides](#).

About Adtran

ADTRAN Holdings, Inc. (NASDAQ: ADTN and FSE: QH9) is the parent company of Adtran, Inc., a leading global provider of open, disaggregated networking and communications solutions that enable voice, data, video and internet communications across any network infrastructure. From the cloud edge to the subscriber edge, Adtran empowers communications service providers around the world to manage and scale services that connect people, places and things. Adtran solutions are used by service providers, private enterprises, government organizations and millions of individual users worldwide. ADTRAN Holdings, Inc. is also the largest shareholder of Adtran Networks SE, formerly ADVA Optical Networking SE. Find more at [Adtran](#), [LinkedIn](#) and [Twitter](#).

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