

# Protempis Unveils Thunderbolt GM330 PTP Grandmaster Clock

Setting a New Benchmark for Private 5G, Small Cell, and O-RAN Network Timing & Synchronization

**ANTWERPEN, Belgium, October 31, 2023 (NewsWire.com) -**

Protempis proudly announces the launch of the Thunderbolt™ GM330 PTP Grandmaster Clock, an innovative solution designed to meet the time and synchronization demands of Private 5G Wireless, Small Cell, O-RAN networks, industrial networks, and other emerging sectors. This announcement will take place at the International Timing and Sync Forum (ITSF) 2023 in Antwerp, Belgium.



Protempis has revolutionized the industry-standard grandmaster clock, focusing on the specific requirements of next-generation networks. The GM330 boasts up to 40 Gigabits of line rate switching, and its inclusion of four copper and optical SFP+ (Small Form-Factor+) based 10-gigabit Ethernet ports sets a new standard, highlighting both its performance and versatility for seamless integration into next-generation networks.

With versatile network interface protocols, Protempis has fine-tuned the GM330 to deliver precise frequency and phase synchronization signals, supporting IEEE 1588 Precision Time Protocol (PTP), Network Time Protocol (NTP), and Synchronous Ethernet (SyncE) simultaneously. The GM330 can support a range of 128 to 4000+ concurrent PTP clients (depending on the PTP profile) and handle 5,000 NTP transactions per second. There is support for a broad range of PTP profiles, allowing the GM330 to be used in a variety of applications and deployments.

In addition to its technical capabilities, Protempis has placed a strong focus on ease of management, including industry-standard protocols like zero-touch provisioning for streamlined deployment and ongoing operations.

The GM330 ensures continuous availability of traceable time through its embedded dual-frequency, multi-GNSS (GPS, GLONASS, BeiDou, Galileo, QZSS, and NavIC) receiver, generating precise 10MHz and under 5ns stability pulse per second outputs. Leveraging a precision oscillator, the GM330 delivers phase holdover accuracy better than 1.5 microseconds over a 24-hour period.

"We've established a solid presence in the market with the GM200, and we are now offering

enhanced PTP capability, integrated Layer 2 switching, POE+, coupled with our well-proven GNSS timing receiver technology to enable cost-effective deployment," stated Karen Guldán, President of Protempis. "The GM330's design provides an optimized solution for network providers, delivering best-in-class value in the market."

Measuring just half a rack 1RU in size, users can deploy the GM330 in both indoor and outdoor applications. In server rooms, the GM330 can be installed side by side for redundancy, or for increased port density and bandwidth. The GM330 offers an extended operating temperature range, making it suitable for unconventional networking environments such as telecom cabinets. It can be powered by AC, DC or Power over Ethernet+ (PoE+).

This product is expected to be commercially available in the first quarter of 2024.

### **About Protempis**

Backed by more than 40 years of experience, Protempis provides GNSS time frequency and PTP synchronization solutions for communication systems, data networks, utilities, broadcast, and other critical infrastructure. Protempis takes GNSS antennas, receivers, disciplined clocks, and packet-timing products to higher levels of integration, affordability, and performance, with emphasis on world-class reliability. For more information, visit [protempis.com](http://protempis.com).

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<http://www.protempis.com>

## **Company Address**

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