Trimble Announces New GNSS Timing Module--Delivering Superior Standard for 5G Network Synchronization

Dual-Frequency Timing Module Provides Anti-Jamming and Anti-Spoofing Capabilities

SUNNYVALE, Calif., March 25, 2021 / PRNewswire -- Trimble (NASDAQ: TRMB) introduced today its first dual-frequency embedded timing module that provides next-generation networks with 5-nanosecond accuracy. The Trimble RES 720TM GNSS timing module is a surface-mount module that is easily integrated into network equipment. It uses L1 and L5 GNSS signals to provide superior protection to jamming and spoofing, mitigates multi-path in harsh environments, and adds security features to make it the ideal choice for resilient networks.

Precise timing and synchronization is vital to today's wireless infrastructure efficiently optimizing and improving network performance for enhanced service delivery. Backed by Trimble's more than 35 years of experience, innovation and long-term commitment to the market, the RES 720 module measures 19 millimeters by 19 millimeters and provides a low-cost, easy-to-use, highly accurate and reliable GPS timing source for critical infrastructure in a broad range of industries.

The RES 720 is an ideal solution for 5G Open RAN / XHaul, smart grid, data center, industrial automation and SATCOM networks as well as calibration services and perimeter monitoring applications.

Trimble engineered the timing module to meet the resilient timing requirement mandated by the U.S. 2020 Executive Order (EO13095) for timing services and critical infrastructure operators. Using dual-frequency (L1 and L5), RES 720 provides better multi-path detection capabilities. Additionally, it provides protection against signal jamming and spoofing.

Powered by Trimble's Smart GNSS Assurance™ technology, the timing module offers protection against jamming and hacking of signals with automatic fallback to available GNSS signals. Infrastructure equipment suppliers, system integrators and network operators can benefit by integrating highly accurate synchronization capabilities into their network and synchrophasor devices, while enabling resilient timing for critical infrastructure.

"With the integration of these security features and dual-band capabilities, the RES 720 offers unparalleled performance, integrity and resilience, enabling network operators to achieve unmatched network optimization," said Karen Guldan, general manager, Trimble Timing & Frequency Division. "In addition to providing industry-leading timing solutions, Trimble is committed to delivering world-class customer support and service."

Trimble's timing module's multi-band capability allows it to compensate for the ionospheric error from multi-GNSS satellite constellations, while reducing the timing error under clear skies to less than 5 nanoseconds. To further improve its accuracy locally, the RES 720 module features differential timing modes for highly accurate local timing.

The RES 720 is expected to be available in the second quarter of 2021. For more information, visit: timing.trimble.com/products/res-720.

About Trimble GNSS Time & Frequency

Communication systems, financial networks, utilities, and other critical infrastructure sectors rely on precision timing for synchronization and operational efficiency. Trimble GNSS receivers provide the precision time and frequency for some of the world's largest communications and computer networking companies. Trimble offers precision time and frequency products to 3G/4G wireless, broadband and digital broadcast networks. With more than 35 years of experience, Trimble takes GNSS receivers and disciplined clocks to higher levels of integration and performance, providing superior technology, quality and cost benefit to customers. For more information, visit: timing.trimble.com.

About Trimble

Trimble is transforming the way the world works by delivering products and services that connect the physical and digital worlds. Core technologies in positioning, modeling, connectivity and data analytics enable customers to improve productivity, quality, safety and sustainability. From purpose-built products to enterprise lifecycle solutions, Trimble software, hardware and services are transforming industries such as agriculture, automotive, construction, geospatial and transportation. For more information about Trimble (NASDAQ: TRMB), visit: www.trimble.com.

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