Evigia launches Rio™ UWB Real-time Location System

June 14, 2020

Evigia Systems announces the availability of two products in the Rio™ Real-Time Location System (RTLS) product line:

Rio Total Visibility™, a real-time location system which offers high-precision location tracking of assets, inventory, and personnel.

Rio Safeworks™, an enhanced personnel location safety system designed for deploying social distancing and contact tracing applications.

The Rio system enables real-time location visibility, even in large areas and complex environments, enhancing employee safety, optimizing equipment utilization and operations, and improving inventory workflow tracking. Rio provides a complete turnkey RTLS platform, combining compact tracking tags, networked anchor nodes, real-time tracking software, and an extensible software API.

The system utilizes Ultra-Wideband (UWB) based positioning which offers significant performance advantages: typical location accuracy is 20 cm, which is much greater precision than offered by beacons (1-3 meters) or Wi-Fi (5-15 meters) location. Latency time is very low, with position data updated more than 20 times/second. In addition, UWB positioning offers 3D location, allowing "Z-height" to be measured accurately for locating assets within specific shelf storage level, for example.

Tracking is done by deploying small, battery-powered tags which utilize Evigia's SmartSense™ Power Management to provide 2+ year performance. The tags send data to fixed location "anchor" nodes which have a known fixed installation position in the facility infrastructure. This configuration allows the tags to use "time-of-flight" (ToF) RF signals to calculate the distance to multiple anchors and derive a 3D location with positioning accuracy of 10-30 cm. The anchors form a reliable mesh network with no interference to existing 2.4GHz networks, coordinating data and timing information between anchors and connecting via a gateway node to on-premise network or cloud infrastructure. Data is exchanged via MQTT messaging or formatted to customized end user specifications. Rio system management and user dashboard software and the extensible Rio software API enable seamless system management, implementation, and integration to legacy resource planning business operation systems.

With Rio, businesses optimize operations by gaining real-time visibility and accurate insights into ongoing business processes, providing actionable data, automated business rules, alerts, and data analytics. Benefits include increased workplace safety, improved revenues through productivity and resource utilization, reduced waste and redundancy, and streamlined operations made possible by automated management of workflow, inventory, regulatory, and workforce safety requirements.

The Rio system is available immediately, with systems currently deployed in warehouse, maintenance operations, and asset tracking use cases. In addition, Evigia is launching Rio SafeWorks™ RTLS Safety Solution for social distancing, safety tracking, isolation-alerts, contact tracing, and reporting based on accurate location tracking. The system operates as a standalone or seamlessly integrates with Rio Total Visibility solution and existing enterprise management systems.

Learn more at https://rio.evigia.io

For additional information about Evigia's Rio Real-Time Location System announcement, please contact Ms. Haleh Najafi at +1-734-302-1140 or hnajafi@evigia.com.

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