

RFID USED IN RUGGED HANDHELDS AND TABLETS

OVERVIEW

Enterprises and business professionals today are being affected by the 24/7/365 nature of being connected. The enterprise presents its own challenges for mobility, especially for rugged environments. These settings may be remote, have harsh operating conditions, pose security threats to sensitive information, or present dangerous weather situations. Mobile computers may be used by construction workers hanging steel beams, firefighters in remote mountains, miners miles underground, or soldiers in a combat theatre. In these situations, the users need to know that these devices are rugged enough to handle extreme heat, cold, moisture and take a heavy pounding. RFID is a growing customer requirement for these devices.

To support these requirements, Trimble and ThingMagic partnered to create an RFID Reader accessory for the Trimble Nomad handheld. The UHF RFID Reader accessory includes a mounting kit, which allows users to add UHF RFID capability to their Trimble Nomad handheld computers. The handheld devices have the ruggedness and durability for users with both physically and technically demanding tasks. For example, using the Trimble Nomad with an RFID scanner, building contractors can perform a variety of functions, such as asset check-in, check-out, transfers and inventory validation, much faster than traditional scanning. When integrated with the Trimble® AllTrak™ Asset and Tool Management System, contractors can more easily track and manage all of their jobsite assets and tools, resulting in improved equipment monitoring and asset utilization.

ThingMagic also partnered with DAP Technologies and Omni-ID. DAP and Omni-ID partnered to launch a series of mobile tablets for harsh environments that incorporate both active *and* passive RFID capabilities – an industry first. As a result, a single device can track and manage assets, collect information, synchronize systems, report data and receive and respond to messages. These rugged tablets include ThingMagic's high-performance UHF RFID reader module, the Micro, for reading tag information on critical assets and equipment and transmitting that information for management and inventory purpose. The size of the Micro makes it unobtrusive for embedding in mobile devices that still require high performance.

Another industry that's jumped at the opportunity to apply these kinds of solutions is oil and gas production. Oil and gas companies are now investing in tools that enable them to achieve the vision of the "Digital Oilfield revolution." Simply put, the Digital Oilfield is defined by a focus on how the petroleum business can deploy information technology to support its main business drivers, namely maximizing and discovering oil reserves, optimizing hydrocarbon production, improving safety and protecting the environment. And of course much of this work takes place in hard-to-reach, harsh working environments.

Similar to opportunities for productivity enhancement in other industries, the key to most of the activities associated with the Digital Oilfield is the real-time capture and analysis of data. The auto-ID functionality of today's mobile computing devices, when coupled with their ruggedized form factor and intuitive interfaces, allows asset tracking and data collection to be a more simple and consistent process, almost becoming an

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afterthought when in the field. This means fewer manual processes and the opportunity to generate new data for business process improvement.

ABOUT JADAK:

JADAK, a business unit of Novanta, is a market leader in machine vision, RFID, barcode, printing, and color and light measurement products and services for original equipment manufacturers. The company designs and manufactures embedded detection and analysis solutions that help customers solve unique inspection, tracking, scanning and documenting challenges. The company is ISO 9001 and ISO 13485 registered.

Novanta is a trusted technology partner to OEMs in the medical and advanced industrial technology markets, with deep proprietary expertise in photonics, vision and precision motion technologies.

ThingMagic is JADAK's RFID line of products and services.

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