

INTELLIGUARD® SOLUTION FOR MEDICATION MANAGEMENT

BACKGROUND:

Medica Corporation uses proprietary knowledge of ion-selective electrodes and analytical microchemistry to manufacture a line of easy-to-use, easy-to-maintain, low-cost analyzers that can detect concentrations of various electrolytes in blood, such as potassium and sodium. The company's rapid growth is a result of a strategic focus on the worldwide need to lower healthcare costs, particularly in developing countries. Medica sought a solution to ensure their test results were the most accurate and safe for patients. Test reliability is highly dependent on the quality of the reagent in use. Medica designs its analyzers and reagents as a complementary system so that test accuracy is optimized. Therefore, authenticating the disposable reagent system used with the analyzer is critical to the quality of data received by the healthcare professional and the patient. Accurate test results are a precursor to proper patient treatment and ultimately patient safety.

THE APPLICATION:

- Blood electrolyte analyzer
- Verify correct reagent used with analyzer
- Improve test accuracy and patient safety



THE REQUIREMENTS:

- Configuration management capability built into electrolyte analyzer to ensure that proper disposable reagent systems are being used and highest reliability test results are being provided.
- RFID reader technology must be embedded in a new line of electrolyte analyzers.
- Reader technology must also fit onto installed base of existing electrolyte analyzers.
- Solution must be cost effective so as not to add significant cost to product line designed to serve price sensitive segment of blood gas analyzer market.
- Reader platform must scale over time to meet their varying requirements.
- Quick integration time.



THE SOLUTION:

- SkyeTek RFID reader module embedded as a product feature
- Within six months of contacting SkyeTek, Medica's EasyLyte Analyzers were on the market with RFID-enabled capability to confirm that the correct reagent is being used.
- The flexibility and configurability of ReaderWare, SkyeTek's intelligent software layer, offered a solution that worked with both new and legacy systems.
- Medica is moving towards a completely integrated RFID solution by licensing SkyeTek's Advanced Universal Reader Architecture (AURA), comprised of ReaderWare software and ReaderDNA reference designs, so that they can design the technology into their product lines as a standard, native feature.

The Results:

Medica's EasyLyte Analyzers began shipping in September 2005 and have seen great success since their introduction. Together, Medica and SkyeTek have ensured that patients receive proper treatment by maximizing test result accuracy coming from Medica's electrolyte analyzers. In the near future, Medica plans on enhancing its other product lines by licensing SkyeTek's AURA and integrating it into the design of its other blood analyzers.

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. JADAK acquired Skyetek in 2015.

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