Positive ID - Innovation for Diabetes Management

Mobile Healthcare Solution, Powered by Sierra Wireless AirPrime Embedded Modules, Revolutionizes Diabetes Management

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PositiveID Corporation develops unique medical devices and biologicaldetection systems, focused primarily on diabetes management, rapid medicaltesting and airborne bio-threat detection.

Its HealthID Division develops healthcare and information managementproducts through its diagnostic devices and identification technologies, and itsproprietary disease management tools. PositiveID’s products are designed toimprove healthcare and the patient’s quality of life by allowing easy immediatehealth management for physicians and a more effective tracking for thepatient, thanks to wireless communications.

Business challenge

With modern advances in medical care, most people with diabetes can nowmanage their condition effectively and live otherwise normal, healthy lives. Tostay on top of diabetes, however, patients need to closely track their bloodglucose levels.

“For people who have diabetes to get the best care, it is helpful for theirhealthcare professional to understand the blood glucose level trends thatoccur on a daily basis” says Mary Ellen Harrison, vice president, PositiveID.“Today, for most patients, the only way to do that is to keep manual logs ofglucose levels and take those records to their doctor. Unfortunately, becausethe process is so time-consuming, few people actually do it.”

PositiveID aims to change that with iglucose™. The smartphone-size deviceconnects to market leading data-capable glucometers and wirelesslycommunicates blood sugar readings to a cloud-based database, accessedby patients and healthcare providers. To make this happen, PositiveID needssecure, reliable cellular connectivity.

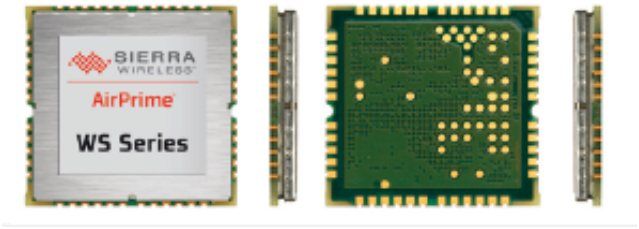
“This is a medical device, so high quality is critical,” says Harrison. “We alsoneed a wireless module that provides good battery life in a small footprint tokeep the form factor small. To make iglucose accessible to as many users aspossible, we also want to keep the price low, without sacrificing quality.”

Sierra wireless AirPrime Embedded Wireless Module

PositiveID considered several cellular suppliers. After an exhaustive analysis,Sierra Wireless AirPrime embedded modules emerged as the ideal solution.iglucose is not yet approved by the FDA for sale in the United States. “Whenyou are submitting a medical device for approval to the U.S. Food and DrugAdministration, it’s very important that you choose high-quality suppliers,”says Harrison. “It’s very helpful to partner with a company like Sierra Wirelessthat has so much credibility in this technology.”

The iglucose devices use AirPrime embedded GSM modules to securelycommunicate with the cloud-based iglucose database. The AirPrimeembedded modules seamlessly integrates hardware, software, and services,simplifying PositiveID’s development. In fact, PositiveID began working withSierra Wireless in January 2011 and had a working product to demo lessthan three months later. By providing AirPrime embedded modules that arealready certified and deployed in more than 30 countries, Sierra Wirelessalso helps accelerate time-to-market.

“Anytime someone contacts us about deploying iglucose in a new country,we find that the Sierra Wireless module is already approved with the localcarrier,” says Harrison. “We recently had an opportunity in Brazil. Within twoweeks of the initial inquiry, we received confirmation that the AirPrime GSMmodule was approved and ready for sale there.”



Results

The combination of iglucose devices and AirPrime wireless communicationsis helping to transform diabetes management, empowering peoplewith diabetes and those who care for them. Authorized physicians canimmediately take proactive steps to correct problems and parents canreceive messages and alerts about their child’s health status. The AirPrimemodules benefit PositiveID by providing:

- Reliable, high-quality wireless connectivity suitable for a medical device
- Easy-to-integrate wireless technology that simplifies development
- Small form factor to enable a portable, compact solution that can be used anywhere, anytime
- Low power consumption to optimize the device’s rechargeable battery, allowing it to stay charged for up to one week
- Strong carrier relationships and global expertise to accelerate time to market with proven track record solution in m-health

Solution:

- Sierra Wireless AirPrime embedded wireless module

Key Benefits:

- Reliability and high quality
- Easy integration and simplified development
- Fast rollout to global markets