



Sierra Wireless AirPrime™ Modules Enable Real-Time Patient Monitoring Solution for RS TechMedic B.V.

RS TechMedic B.V. is a medical technology provider based in the Netherlands. The company aims to reduce complications and injuries sustained by patients suffering chronic medical conditions. RS TechMedic develops innovative and high-quality medical technology focused on telemedicine, remote patient monitoring and remote medical diagnostics. Its products are used by a range of healthcare organizations, including hospitals, telemedicine centers, cardiology centers and ambulance trusts across the world.

BUSINESS CHALLENGE

RS TechMedic's flagship product is its Dyna-Vision™ patient monitoring system. Used in a range of healthcare scenarios, the Dyna-Vision™ allows physicians to remotely monitor the vital signs of patients, regardless of whether they are in hospital or at home. The device collects a range of information including ECG, heart rate, rr-interval, respiratory rate, temperature, and SpO2 (the patient's oxygen saturation level) through sensors on the patient's body.

In order for physicians to remotely check on their patients' health, and react quickly in the case of an emergency, RS TechMedic required a way to wirelessly transmit this information over cellular networks.

R.A. Brest van Kempen, CEO of RS TechMedic, explains their requirements: "The wireless module needed to be small enough so that the total size of our Dyna-Vision™ device could be minimized. After all, nobody wants to carry around a bulky device all day, especially if they are unwell. Similarly, the power consumption needed to be low – it would be impractical for patients to repeatedly charge the unit as they go about their daily lives."

The latest feature of Dyna-Vision™ is that it can accurately predict critical medical conditions of patients, up to six hours before they occur. The early intervention of medical staff can prevent the patient's condition from deteriorating, but only if the data gets through to them successfully. The quality and reliability of the wireless modules were therefore of paramount importance to RS TechMedic.

SIERRA WIRELESS AIRPRIME EMBEDDED MODULE

RS TechMedic turned to Sierra Wireless, the leading company for wireless M2M solutions in the healthcare sector. Sierra Wireless AirPrime Q2687 wireless modules helped create the world's first patient monitor with built-in cellular technology and provided RS TechMedic with the levels of reliability they required for Dyna-Vision™.

Developed on open and proven technologies, Sierra Wireless allowed RS TechMedic to rapidly design and integrate their solution with a services platform that enabled fast deployment and cost-effective maintenance and support.

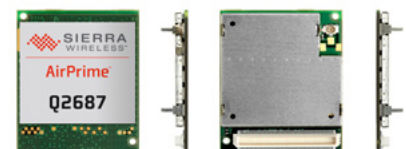


SOLUTION:

- Sierra Wireless AirPrime Q2687 embedded wireless module

KEY BENEFITS:

- Compact form factor and low power consumption
- Full certification for US and European markets
- Rapid development and launch to market



Brest van Kempen comments: "Sierra Wireless' modules include extended firmware that manages the wireless communication and an AT commands interface. Added to the fact that they are based on open standards, we found the integration stage was painless and rapid, allowing us to launch to market quickly."

COMPACT FORM FACTOR AND LOW POWER CONSUMPTION

The main benefits of Sierra Wireless' solution included its size and power consumption: the module met RS TechMedic's requirements exactly, both for keeping the total size of the unit down and minimizing power use. Importantly, the module is fully certified for European and US markets, another vital consideration for RS TechMedic as it allowed the company to rapidly launch in those markets without the need for additional testing and certification.

RS TechMedic was also impressed with the service they received both from Sierra Wireless and its distributor, Alcom Netherlands. Communications channels between the three companies were kept constantly open and a consultative approach was taken to the development of the Dyna-Vision™ units. Through its integration support, Alcom Netherlands played a crucial role in creating a robust and efficient telemedicine solution which responds to the needs of patients and practitioners.

RESULTS

The Sierra Wireless AirPrime module allows the Dyna-Vision™ to send patients' critical data to physicians in real-time over the cellular network enabling extensive diagnostics in cardiology, pulmonology and neurology. The device can also be used to send medical information to specialists who may not be based in close proximity to the patient, speeding up the diagnostic process. Sierra Wireless' modules are helping RS TechMedic achieve its aims through:

- Secure and reliable wireless connectivity
- Rugged products designed to exceed healthcare industry requirements
- Fast deployment and cost-effective maintenance and support

Brest van Kempen concludes: "Sierra Wireless made the launch of Dyna-Vision™ much smoother than it would otherwise have been. They provided the right product, expertise and partner relationships to support the launch of Dyna-Vision™ worldwide, delivering an easy integration with our device. This saved us a great deal of time and money in the development phase and allowed us to launch to market rapidly."

To find out more about Sierra Wireless solutions for healthcare, please visit www.sierrawireless.com/healthcare

To find out more about RS TechMedic's Dyna-Vision™ Solution, please visit www.rstechmedic.com



"Sierra Wireless provided the right product, expertise and partner relationships to support the launch of Dyna-Vision worldwide, delivering an easy integration with our device. This saved us a great deal of time and money in the development phase and allowed us to launch to market rapidly."

R.A. BREST VAN KEMPEN
CEO, RS TECHMEDIC