



CINTERION
WIRELESS MODULES

Cinterion Wireless Modules in the Press

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COMMERCIAL FEATURE

INTERVIEW WITH ERIK BRENNEIS, CHIEF SALES OFFICER, CINTERION WIRELESS MODULES

By Metering International

WHAT IS YOUR PLACE IN THE METERING VALUE CHAIN?

Cinterion is the world's leading producer of GSM / GPRS / UMTS modules for machine to machine communication. These modules are integrated into meters or terminals in order to automatically send the metering data to a centre of information. Our modules are used in electricity, gas, water and heat applications. In residential AMR solutions, you will find our modules either in the meter for point to point GPRS connections or in the data concentrator, collecting the data from the metering end points and sending it to the information centre via GPRS.

WHERE ARE YOUR PRODUCTS USED IN THE FIELD TODAY?

Our modules are used in all kinds of metering projects around the world. Originally, the first major application was industrial and commercial meter reading via GSM. There are today millions of I&C meters installed around the world, which communicate via GSM. In smaller numbers, there are gas and water meter readouts via GSM / GPRS. In recent years, more and more AMR residential solutions, using GSM / GPRS, have been installed. The main countries using GPRS today are the Nordic countries; in Italy there are several 100 k installed concentrators with GSM technology.

WHAT IS YOUR LARGEST REFERENCE PROJECT IN METERING?

Our largest reference project in metering is at Fortum in Sweden, where Telenor Cinclus have installed more than 600 k meters with our GPRS technology. The rollout of the complete project, including installation, took less than two years.

HOW DO YOU VIEW THE DIFFERENCES BETWEEN THE DIFFERENT COMMUNICATION TECHNOLOGIES TO BE USED IN AMR INSTALLATIONS?

In general, there are three major types of communication technologies which are used in AMR installations: proprietary RF

solutions, PLC and GSM/GPRS. While proprietary RF solutions, due to various disadvantages are losing market share, PLC and GSM/GPRS/UMTS are gaining and very often are used within one project.

In general, the choice of technology for a utility or turnkey solution provider will depend mainly on the requirements (e.g. transmission speed, reliability of the communication lines, two-way communication, future – proof etc.), network configuration (is point-to-point connection needed? Does the PLC network support communication?), total cost of ownership and in the end on the legislation. Depending on these factors, a utility will either choose one technology or a mix of technologies within one local distribution area.

WHAT ARE THE ADVANTAGES OF GSM / GPRS AND WHAT MARKET SHARE DO YOU FORESEE FOR GSM / GPRS?

Pure PLC and RF technologies are mainly used in urban areas, where the main purpose is a simple readout of household metering data, usually once a month, for billing purpose. If you want to have a fast real-time, two-way future-proof communication, GPRS is the best. This is most widespread and cost effective solution due to the fact that GSM/GPRS is a global technology. The network is stable with already implemented features for error and exception handling and a utility does not need to maintain the communication channel themselves, as is the case with a proprietary RF or a PLC.

Also, in rural areas, where there are only few metering points connected to one transformer, PLC would be too expensive due to the high price of the PLC concentrator per transformer station.

When we look at all AMR installations, running and planned projects around the world, we foresee a global share of 30 - 50 % for GSM / GPRS in the mid term. In the long term with new, faster and more cost effective wireless technologies this percentage will become even higher.

WHAT SPECIFIC TECHNICAL FEATURES DO YOU REGARD TO BE MOST IMPORTANT IN AMR SOLUTIONS USING GSM?

When we look at the industries using GSM modules, metering is one of the industries with the highest requirements regarding quality, longevity and reliability. This is the case, because the lifetime of the meter is usually 10 years and more, and it is used in a holiday hut in the North of Finland (sometimes – 40 degrees) as well as in the Middle East, where temperatures easily reach more than 50 degrees at the metering point. Only automotive solutions have similar requirements regarding ruggedness. Also, the cost of failure in a metering solution is much higher than, for example, in a consumer device like a router, because a specialist will need to physically drive to the meter and exchange the whole meter in case of failure.

However, there are also other important features like the easy connection to the network, connection performance and stability, the transmission speed etc.

Another very important feature is the "ease of integration", meaning that our customers manage to integrate the GSM module into their application easily. We have a global support organization with a local presence in 20 countries in order to support our customers during this critical design-in process and improve their time to market.

ARE THERE OTHER IMPORTANT FACTORS TO BE CONSIDERED WHEN CHOOSING A GSM PRODUCT?

There are two issues that are easily overlooked when choosing a GSM product and supplier: IPR protection and company stability.

GSM is a global standard, but there are numerous patent holders around the world. We cover our customers against any claims of GSM IPR violations connected with the use of our product. There have been cases in the past where suppliers neither covered these IPRs nor did they inform their customers



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ABOUT CINTERION WIRELESS MODULES

Cinterion Wireless Modules was founded in June 2008 when Siemens spun off its highly successful Wireless Modules business unit. The company specializes in wireless machine-to-machine communication (M2M) based on GSM, GPRS, EDGE, and UMTS/HSPA technology. Cinterion is currently the global leader in wireless module production and offers a broad portfolio of pre-certified products for metering applications. Cinterion has regional offices all over the world for customer and engineering support. The headquarter is in Munich, Germany.

THE CINTERION EVOLUTION PLATFORM

The Evolution Products offer scalability, compatibility as well as an easy path to future upgrades and added functionality as technology needs expand. Portfolio benefits include maximum flexibility, high functionality, ease of integration, as well as backward and forward compatibility, which ensures a reliable, high quality and cost efficient solution that preserves the technology investment.

about the criticality of the issue beforehand, which led to far higher cost than initially calculated.

Also, company stability and portfolio lifetime is a very critical issue in our industry, since it usually takes a customer between 6 and 12 months to go to market after starting the integration process with our product. We have seen several cases in the past, where one market player has acquired another and then, after a while, the old product portfolio was terminated. This forced the affected customers to redesign their product and in the worst cases led to major loss of business. In the current economic times, we are already seeing that our customers are putting a lot more effort into making sure that their GSM partner will be around in the years to come.

HOW DO YOU VIEW YOUR INDUSTRY DEVELOPING?

We are the global market leader for GSM, GPRS and UMTS machine to machine modules and fortunately, we have managed to maintain our level of profitability even in these hard economic times. This enables us to continue our technology leadership and to maintain our portfolio, which is the largest in the industry.

Most of our competitors have been less fortunate and are struggling with the current macro-economic climate, which has put them into a difficult position. As we have seen in the metering market in the last couple of years, the projects get bigger and bigger and stability and reliability become more important. This has driven industry consolidation.

We are seeing a similar scenario in our own industry and expect a major consolidation and reduction of the number of companies offering GSM modules. We are in a very good position to remain the global No. 1 in this industry and can offer our customers a stable future-proof portfolio.



ABOUT THE AUTHOR: Erik Brenneis is Cinterion Wireless Modules' Chief Sales Officer. He had previously held the position of Vice President Sales at Siemens Wireless Modules, where from 2005 he was tasked with responsibility for global sales.

From 2001 to 2005, Mr Brenneis was responsible for the European sales at Landis+Gyr AG in Zug, Switzerland. Before that, his career trajectory saw him serving Siemens in various job positions, gain professional experience in Germany and the USA.

Mr. Brenneis holds a Master's degree in Electrical Engineering and a Bachelor's degree in Business Administration.

WHAT OTHER INDUSTRIES ARE YOU ACTIVE IN?

Our customers are system-integrators and solution providers. Their customers, the so-called end-users, are active in many specialized vertical markets besides Metering: Tracking and Tracing, Payment Systems, Automotive, Security, Industrial Computing, Remote Maintenance and Control, Routers and Gateways and Health Care.

WHAT ARE THE NEW PRODUCT HIGHLIGHTS FOR THIS YEAR?

We are continuously developing new products. This year we will extend our successful Evolution product line. The Evolution product line offers a broad range of scalable technologies and features. Customers are also able to choose their preferred mounting concept (connector or solderable LGA). The Evolution modules share mechanical and software compatibility and therefore enable our customers to upgrade their applications from GPRS to EDGE or UMTS, seamlessly. Combined with a strong roadmap and continuous innovations the Evolution product line offers our customers flexibility and investment protection.

For further information, please contact erik.brenneis@cinterion.com or your nearest local Cinterion representative. ■■