



CINTERION
WIRELESS MODULES

eHealth — Mobile Health Care

Intelligent Cellular Connectivity for Health & Wellness Applications

www.cinterion.com/eHealth



GSM / GPRS / EDGE / UMTS / HSPA for Health & Wellness Applications

The majority of medical devices today work as individual units, monitoring and reporting results for only one specific aspect of patient health, which doctors and nurses then piece together for a complete picture of patient wellbeing. But wouldn't it be better if medical professionals could avoid compiling and analyzing disparate data, and instead focus precious time and attention on caring for the patient?

Fortunately, the healthcare industry has realized this inefficiency and is moving toward a system in which connected devices monitor, aggregate, visualize and manage medical data on web-based platforms. These new systems allow quick and easy access to medical data and deliver a clear and complete picture of all aspects of a patient's health. Web-based platforms that perform this task can be connected by many different technologies but the most efficient method is with the intelligent use of wireless modules and M2M technology. Wireless modules reliably communicate vital information over cellular networks, eliminating the need for expensive and time consuming fixed line communication installation. M2M technology improves patient mobility and avoids the pitfalls of competing technology's limited distance and inconsistent performance.

Secure and Highly Reliable Applications

Cinterion offers a broad product portfolio that serves all medical industry requirements — from small form factor modules easily integrated in existing connected solutions to scalable platform modules for use in gateways without the need for additional processors. Cinterion enabled medical monitoring solutions are extremely easy to use and free of the constraints of fixed line networks — allowing complete mobility for both patient and device and simplified installation when compared to complicated wired solutions.

With Cinterion M2M technology, medical devices and applications are more robust and vital patient data can be transmitted securely utilizing the latest encryption technologies. End-to-end data security is effectively supported by inherent security mechanisms of today's cellular networks. M2M technology utilizes regulated frequency bands, which is one of the differentiating benefits of cellular technology as opposed to WiFi.

Cinterion's market proven technology is also flexible and highly reliable for seamless, always-on worldwide communications making truly global health care solutions a reality.

Cinterion's strong reputation for reliability is achieved through stringent quality management and high quality manufacturing supporting traceability requirements.



M2M Telemonitoring and Ambient Assisted Living

Cinterion M2M technology can extend the reach of ambient assisted living (AAL) homecare systems to any location where wireless coverage is available — and it's easy to use and install! With M2M telemetry monitoring, also known as telemonitoring, mobile, wireless sensor systems can remotely monitor and communicate a patient's vital parameters, whether at home or on the go. Telemonitoring devices can automatically call for help in real time when needed, which allows for faster reaction times and can ultimately help save lives.

Better Chronic Care Management

Regular health monitoring is crucial for patients with chronic diseases, which can worsen slowly over time without symptoms until suddenly, a critical threshold is reached. Suddenly, life threatening conditions can arise that result in serious illness and expensive hospitalization. With Cinterion enabled telemonitoring devices, experts can detect the smallest variation in vital statistics before serious conditions occur enabling earlier detection and treatment. These devices improve the quality of care provided and save medical costs, prevent hospitalization and potentially save lives. This type of disease management is applied to diabetes, COPD (chronic obstructive pulmonary disease), and CHF (chronic heart failure), among others. Medical telemonitoring solutions are efficient and cost-effective tools for the treatment and prevention of chronic diseases as well as in the rehabilitation process.

Improved Medical Care Quality through Remote Monitoring

Cinterion enabled mobile sensors for ECG (aka EKG), blood pressure, blood sugar, blood oxygen, and other conditions are connected to a patient to consistently monitor and transmit crucial health information to be reviewed by health providers. When medical parameters and vital statistics are measured more frequently and during real life activities — from grocery shopping to exercising to socializing — a more complete health profile is captured. This enables better treatment and improved overall wellbeing for the patient and reduced costs for the patient and healthcare provider alike.

New Services and Business Models

Mobile Health (mHealth) and Cinterion wireless modules can provide answers to challenges that healthcare providers are facing today. Optimized integrated mobile care can improve cost efficiency through shorter hospital stays, optimized productivity for medical staff and doctors and improved quality of medical services at the same time. With Cinterion as a technology partner, businesses in this emerging market can extend and enhance their range of services and increase benefits for end users, to gain clear competitive advantages in this quickly evolving business landscape.

Cinterion Wireless Modules

Cinterion Wireless Modules is the worldwide leading supplier of cellular machine-to-machine (M2M) communication modules and combines unparalleled M2M engineering expertise and localized worldwide customer support with a strong portfolio of high-quality GSM, GPRS, EDGE, UMTS and HSPA products.

Cinterion is a reliable partner and valued by customers in numerous industries for its award-winning modules which enable machines, equipment and vehicles to communicate over wireless networks helping enterprises dramatically cut costs and increase productivity and efficiency. Cinterion products are carrier approved and used for a variety of solutions including remote maintenance and control; metering; payment systems; industrial PDAs; routers and gateways; security systems; health care; automotive and eToll; tracking and tracing; environmental monitoring and more.

Cinterion's processes and systems are certified according to ISO 9001:2008 and ISO/TS 16949:2002 by TÜV Germany.



Cinterion Global Support

Local engineers, a competent helpdesk, a dedicated team of R&D specialists and an advanced development center are the hallmarks of our leading support offer. The Cinterion support includes:

- Personal design-in consulting for hardware and software
- Extensive RF test capabilities
- GCF/PTCRB conform pretests to validate approval readiness
- Guidelines for local approvals and acceptances
- Regular training workshops

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Further information about our products and services is also accessible via www.cinterion.com

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