Wireless Modules
Intelligent communication for tomorrow's world
A vision for success
Tapping pioneering insights

Ultra-compact communication modules and terminals can be easily integrated in the broadest range of fixed and mobile devices and systems. Siemens technology is not just revolutionizing telephony, it is redefining the reach of data transmission and remote control. It is opening up a whole new world of possibilities in telemetry, telematics and mobile computing.

You can send and receive emails with your electronic organizer, check the latest stock prices on the move, or turn on the heat on your way home. Whether a business, industrial or home environment, the possibilities of today’s technology are endless. The smallest devices are being transformed into powerful tools – tools that make our lives better, safer and more convenient.

The Wireless Modules Business Unit is represented worldwide through our network of local offices and distributors. Competent, professional help is always close at hand. And, of course, you can always contact our hotline for technical advice.

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All of this and more thanks to Cellular Engines and DECT Engines from Siemens.

New communication forms are crossing geographic boundaries and expanding our global horizon. Dramatic new technologies are shaping our lives by enabling us to communicate any time, any place.

Thanks to Siemens, machines and appliances are learning to “talk”. We no longer need to rely on expensive, inflexible cables. Wireless Modules are changing the world we live in!

Wireless Modules are a sure charter for success. They combine the quality and reliability typical of Siemens with the flexibility and panache of a visionary Business Unit. Delivers modules development and manufacturing to marketing of wireless modules — for seamless integration across a wide application spectrum. Whether you’re looking for a base or gate evolution, Wireless Modules offer unparalleled performance for voice, data, SMS and fax.

You benefit...

... from the in-depth know-how and solid R&D backbone of the Information and Communications division. In 1995, we presented the first GSM-based module for system integration – the M1. We have now moved on to the third generation, and we continue to leverage our unique insights to define the wireless standards of tomorrow.

And the best bit is that we want to share our knowledge with you. Forget about investing resources in developing wireless technologies. Turn to Siemens Wireless Modules for faster than ever time-to-solution. Our broad product offering is complemented by application engineering and customized integration support.

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In theory, you can integrate any of our modules in your communication solutions. The equipment choice is generally dictated by the application in question, your communication requirements (i.e., local or global reach), the underlying technologies and your budget.

GSM
GSM stands for “Global Standard for Mobile Communication.” It is the most widely acknowledged wireless standard worldwide. It covers voice, data, SMS and fax.

The potential applications of GSM-based Cellular Engines are exhaustive. These compact modules and terminals can be easily installed in the widest range of mobile and fixed devices and systems. And, most importantly, no infrastructural investments are necessary. All you need is a SIM card. And you benefit from a marked drop in communication costs thanks to increasingly flexible, cost-effective tariff structures.

DECT
DECT stands for “Digital Enhanced Cordless Telecommunication.” Siemens leverages many years of experience with its cordless Gigaset family to drive innovations in the DECT field. No larger than a check card, DECT Engines are powerful enough to build a local network enabling flexible, cordless communication between the base station and peripherals.

DECT Engines are ideal for data and voice communication in baise or on the company premises. Once the network has been installed, communication is free of charge. Compared with other cordless solutions, DECT Engines offer a high level of resilience to faults and interferences. They also ensure advanced data security. DECT Engines are an efficient, cost-effective way to control, monitor, archive and exchange data.

Wireless Modules are already successfully deployed in the following fields:

- Mobile navigation systems
- Hands-free car solutions
- Access control systems
- Intelligent car alarm systems
- Security and surveillance stations
- Industrial systems and applications
- Traffic management systems
- Service management systems
- Information terminals in trains
- Telephone bulletproof and GSM repeaters for telecom systems
- In-house logistics systems
- Mobile data recording devices

Wireless Modules can also be easily integrated in telephone handsets without any prior knowledge or understanding of the underlying wireless technologies.
Intelligent communication for a competitive lead

The only good vending machine is a full vending machine. It should work to perfection and entice customers with an appealing presentation.

The GSM-enabled stock reporter has taught vending machines for drinks and snacks to "talk". The operator receives regular updates on stock levels, faults, and any attempted break-ins.

The operator ensures maximum efficiency by planning in advance, visiting only those machines with low stock levels or a fault. This means that all machines remain in peak operating condition and are always well stocked. Unnecessary trips and unproductive deployment of resources are a thing of the past.

With Wireless Modules, sales increase while costs drop. In addition, Wireless Modules will soon be supporting cashless payment using a cellphone. The transaction will simply be added to the telephone bill.

The possible scenarios are unlimited, carving out vast market potential for your communication solutions. Wireless Modules are a powerful source of inspiration ...

Smart fleet management to stay ahead of the rest

Even on the street, service, speed and flexibility is the key to overtaking the competition. How has a delivery company kept regional sales figures up in an express order? By reorganizing resources and taking the fastest, most direct route. Wireless Modules provide the technology.

By linking the entire fleet to a GSM-enabled management system, dispatch headquarters has a complete overview of the availability and location of all resources. This enables the company to respond with speed and agility to customer requests. A mouse-click reveals which driver is closest to this customer and which driver has enough space to load the consignment. The routes are carefully planned to ensure even, optimum distribution of workload. Knowing the exact location of a vehicle at any time allows a rapid response to a security risk or attempted robbery.

In short, Wireless Modules save time and cut costs. Even more importantly, a fast, efficient service makes for happy customers. And happy customers always come back!

Vending machines that talk

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Remote control with telemetry

Telemetry involves remote control and monitoring across a broad spectrum of industrial applications. It is a cost-effective tool that provides independent, cost-effective way to trigger systems such as gas or electricity meters. To log remote data, automated systems store all relevant information and present it to the user. A typical system involves data collection at remote locations, transmission to a central location, and analysis of the data.

The possible applications of telemetry vary significantly in sensitivity and are highly diverse. Remote access to local process lines can accurately monitor and control local process lines. The readings from gas and electricity meters can be transmitted to the central location.

Wireless Modules support flexible tariffs based on the time of day and consumption patterns. You can present the customer with a personalized offer. Service innovation benefits everyone by enhancing customer loyalty.

Alarm systems for complete peace of mind

Alarm and fire detection systems that operate over the fixed network have one serious flaw: they do not provide fail-safe security. If an intruder cuts the phone wire, for example, or if there is a fault on the line, the alarm signal cannot be transmitted.

GSM alarm systems are the perfect complement to the fixed network infrastructures. If stand-alone security is required, GSM ensures that the signal is transmitted to the emergency services. This level of security was only possible in the past with expensive, dedicated, leased lines. GSM provides the same without the cost.

GSM is also the perfect solution for locations not served by the fixed network (summer houses, mobile homes, rail carriages etc.). Other in-house application scenarios are also conceivable with DECT. Alarms and sensors can be connected to the control panel without unsightly cables and wires. And the system can be controlled from anywhere in the house using a handy mobile terminal.

Peak service during peak hours with POS terminals

The food may be excellent but the service has to be beyond compare to make a truly lasting impression. Guests are looking for friendly and fast service, especially when things get busy.

Palmtops or smartphones equipped with DECT Engines can be used by hotel and restaurant staff to transmit guests' orders immediately to the bar or kitchen. Drinks can be poured and served while the food order is transmitted directly to the kitchen. Waiters no longer waste time running about, and are immediately free to wait on the next guest. A few key strokes and the order is taken care of. This saves time, costs, and unnecessary legwork. Most importantly, perhaps, it lends an element of calm and control to what can be a hectic working environment.

Payment by credit card is also easier. A mobile credit card reader communicates with the cash register by radio signal. Without leaving the credit card out of his or her sight, the guest can pay directly at the table. Payment has never been so secure.

Everything under control with in-house logistics

Teledexian devices are now a thing of the past. DECT has done away with the mountains of paperwork that used to accompany deliveries. If you put the right individuals in the correct roles, you avoid overhead costs and products were delivered in what quantities and the exact quantities of each package is not lost in transcription. It is precise to human error.

DECT has changed all of that. Incoming goods are immediately registered with a mobile terminal or hand scanner. The data is then forwarded to the central database. Even the fork-lift drivers receive updated instructions on loading and unloading. Everything is in the right place, in the right time, DECT is fast, reliable and error-free.

The same terminals can be used to check stock levels. Inventory data is recorded with a mobile terminal and trans- ferred to the central database. Incoming goods are immediately registered with a mobile terminal, and are immediately put on the market. A key service is the register of the right goods at the right time and in the right quantity. Most importantly, perhaps, it lends an element of calm and control to what can be a hectic work- ing environment.

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The possible applications of telemetry are highly diverse. Remote access to local process lines can accurately monitor and control local process lines. The readings from gas and electricity meters can be transmitted to the central location. The possibilities are not as limited as we thought.

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Milestones in the Wireless Modules history

Contact

Cellular Engine TC35
- The first third-generation module.
- Dual-band, ultra-compact, and optimized in power consumption.

Cellular Engine A20
- This robust, powerful engine is the smallest 8-watt module worldwide. It is ideal for use in cars, offering excellent connectivity even under difficult conditions.

DECT Engine MD32
- The first DECT module for in-house data communication.

Cellular Engine M20 and Cellular Engine M20 Terminal
- Universal engines for voice and data communication. Available as a compact mini-module or a plug and play terminal with standard interfaces.

Cellular Engine A1
- The first automotive module for voice and SMS.

Cellular Engine M1
- The pioneer in GSM-enabled data transmission modules.

Visit our Web site for more information and technical documentation:
www.siemens.de/wm

Please contact the following email address if you have further questions or would like to arrange a personal consultation:
wireless.modules@mch.siemens.de