The Mobile Internet Revolution. It's an everyday thing.

M3000 OEM modem
Setting the standard for next generation wireless modems.

ERICSSON
The latest release of the Mobitex system software contains a number of significant enhancements. A more robust radio protocol increases sensitivity and improves coverage. Power management functions have been introduced to significantly extend battery life for portable devices, while other functions ensure that radio links are established more quickly.

The M3000 OEM wireless modems are naturally designed to take advantage of these advanced Mobitex features. Other network enhancements include improved IP connectivity, an Internet Access Server (IAS) and a TCP/IP backbone, meaning that Mobitex devices can easily connect to the Internet. Taken together, these advances in Mobitex technology reflect Ericsson's commitment to ensuring that Mobitex remains the most cost-effective wireless data technology and delivers the best value for users.

Setting the standard for the next generation

The M3000 series of OEM wireless modems for Mobitex is a new product family from Ericsson designed for original equipment manufacturers who wish to develop new wireless data products or adapt existing products for use on Mobitex based networks.

Ericsson’s M3000 series of OEM wireless modems for Mobitex offers unparalleled ease of integration for designers while delivering performance and functionality for end-user applications that will set the standard for next-generation wireless devices. Because the M3000 is a compact, low-power and extremely sophisticated device, it will be the core component in innovative wireless information appliances.

The M3000 series represents a completely new platform for Mobitex terminal devices. Although new for Mobitex, it is a well-proven platform which is identical in most respects to that used in Ericsson’s most advanced mobile phones. This means that with the introduction of the M3000, Mobitex is leveraging the power of Ericsson’s world-leading technology in mobile communications.

Only the best stay ahead

Ericsson is the world leader in mobile communications. Of all calls made by the world’s more than 475 million mobile telephone subscribers, more than 40 percent are handled by Ericsson equipment. Ericsson has pioneered virtually every advance in mobile communications and is the only supplier able to offer complete systems for all third-generation (3G) standards.

As the Internet and data traffic begin to dominate even wireless networks, Ericsson is committed to retaining its lead in mobile data communications. As in mobile telephony, Ericsson offers a full range of wireless data products for all technologies from Mobitex to CDPD, GPRS and tomorrow’s WCDMA systems. Like all Ericsson products, the M3000 series of OEM wireless modems for Mobitex is the result of experience and expertise that is unrivaled in the wireless industry.

Mobitex – the world standard for data-only networks

Originally taken into commercial operation in 1987, Mobitex is today the de facto world standard for wireless data communications and is used in more than 20 countries on five continents. Mobitex applications include wireless point-of-sale terminals, vertical applications in the transport and service sectors and interactive messaging, a new service that has opened a large and growing horizontal market.

The latest release of the Mobitex system software contains a number of significant enhancements. A more robust radio protocol increases sensitivity and improves coverage. Power management functions have been introduced to significantly extend battery life for portable devices, while other functions ensure that radio links are established more quickly.

The M3000 OEM wireless modems are naturally designed to take advantage of these advanced Mobitex features. Other network enhancements include improved IP connectivity, an Internet Access Server (IAS) and a TCP/IP backbone, meaning that Mobitex devices can easily connect to the Internet. Taken together, these advances in Mobitex technology reflect Ericsson’s commitment to ensuring that Mobitex remains the most cost-effective wireless data technology and delivers the best value for users.
Everything you need in a modem

The M3000 family of Mobitex OEM wireless modems is the result of over ten years’ experience in designing Mobitex products and careful attention to the features requested by Ericsson customers. In developing the M3000, Mobitex design engineers have leveraged Ericsson’s world-leading wireless technology to deliver an advanced product that provides everything you need in a modem.

Flexible power supply
The M3000 operates in the wide voltage range of 6-9 VDC, which makes it well suited for operation from a dual cell, Li-ion accumulator, including charging.

Low power consumption
Advanced design techniques and state-of-the-art ASICs keep power consumption to a minimum. Naturally, the M3000 OEM wireless modems are also designed to take advantage of the latest features of the Mobitex system, including Power Down and Sleep Mode, so that power consumption is reduced even further.

High sensitivity
At -121 dB, radio sensitivity is outstanding. In fact, Ericsson engineers have achieved a level of performance that is unparalleled in the industry and will keep users connected even under the most demanding conditions at the fringe of the cell or indoors.

Common form factor
The M3000 series uses the same form factor as other Ericsson modems. This means that several bearer technologies can be supported with a single design, thus reducing development and production costs for your product.

Connectors
The M3000 OEM wireless modems use a simple serial interface, using 3.3V-CMOS technology for easy integration and communication directly to the host UART, without additional interface circuits, thus simplifying product design and reducing component costs. In addition, the M3000 provides I/O, A/D and D/A channels for device monitoring and control.

Wide temperature range
The M3000 series are able to transmit full 2W in temperature range of -25°C to +65°C.

Integration couldn’t be easier
The Mobitex M3000 OEM wireless modems have the features you need for fast and easy integration with new or existing products. Compact size, wide input voltage, low power consumption, high sensitivity, standard connectors and a powerful development environment for design and testing make the M3000 the ideal choice for any OEM manufacturer of wireless data devices. Designed for low-cost/high-volume applications, the M3000 will allow you to get your product to market faster and maximize return on your investment in product development.
The M3000 would not be such a revolutionary product if it were just a modem. Much more than a modem, the M3000 offers a complete platform for embedded applications that empowers designers to create innovative devices that push the envelope for wireless data solutions. A wide range of options can transform the M3000 into an extremely versatile component that is able to perform almost any wireless computing task.

Applications that stretch the imagination
Imagine a wearable wireless device that knows where you are and can tell your car how to get to where you want to go. Another example might be an access control system that can detect a break-in, alert the police and lock up the intruder while the police respond. All this and more is possible when the M3000 provides the platform for embedded applications that are only limited by the imagination.

We may still need the police – and you definitely do not want to let your car do the driving – but the M3000 is capable of performing tasks that no one has yet imagined in a wireless computing device. So why not let your imagination run wild? When designing your next wireless computing device, evaluate the M3000 and see for yourself what it can do. The results may surprise you and fire the imaginations of whole new groups of users.

Onboard applications (OBA)
Because the radio functions require only a fraction of the M3000’s processing power and memory, there is capacity to spare. Firmware developed by Ericsson provides a runtime environment and an onboard application interface (OAI) for third-party applications.

Java Virtual Machine (JVM)
As an option, a JVM can be added that provides a high-level interface to the OBA firmware, lower-level radio and Mobitex transport functions which allows developers to implement embedded applications in Java. The M3000 can store up to 1.5 Mbytes of compiled Java bytecode to be executed by the JVM.

I2C bus control
An I2C (Inter-IC Control) bus is a standard feature of the M3000 that allows the modem to communicate with and control (or be controlled by) any other component in the device. Used in combination with the I/O, A/D and D/A channels for device monitoring and control, the I2C bus provides an unprecedented level of functionality for a wireless device.

GPS receiver
An GPS module allows the M3000 to continuously monitor the device’s position, transmitting the positioning data over the Mobitex network as required by the application. With a GPS module, the M3000 opens the door to a wide range of location-dependent and point-of-interaction applications.

Bluetooth-enabled
Ericsson’s powerful new Bluetooth technology is available as an add-on module for the M3000. With Bluetooth, the M3000 can communicate with portable PCs, handheld organizers or any other Bluetooth-enabled device, thus extending the reach of your application beyond the wireless device to the user’s total mobile computing and communications environment.
Ericsson is shaping the future of Mobile and Broadband Internet communications through its continuous technology leadership. Providing innovative solutions in more than 140 countries, Ericsson is helping to create the most powerful communication companies in the world.