

• GSM modules

• SIEMENS GSM terminals

• M2M solutions

• EnOcean

• Accessories wireless modules

CATALOGUE ▶▶▶

2007



Dear Sir or Madam,

WM OCEAN is well-established company in communication area. We offer a spread portfolio of GSM/GPRS/EDGE products and UMTS/HSDPA applications. WM OCEAN is also authorized distributor of the Siemens and EnOcean products. Our customers can buy not only products of the above mentioned companies but also accessories for these products such as connectors, antennas, antenna cables, GPS and so on... We distribute our products all over the world. Thanks to the perfectly working logistic the transport is always arrange according to your requirements and needs.

Our products catalogue and technical documentations are available on:

www.wmocean.cz

or:

WM OCEAN s.r.o.
Pod Vinicí 2028/20
143 01 Prague 4
Czech Republic
tel: +420 225 371 777
fax: +420 225 371 779
e-mail: wmocean@wmocean.com

Direct representation:

Siemens - Wireless Modules

SIEMENS

EnOcean



GSM modules

SIEMENS MC39i

The MC39i represent a new generation of dual band GSM/GPRS radio modules. Smaller than a business card, and exceptionally flat and energy efficient, the MC39i can be used in a wide variety of ways in M2M applications

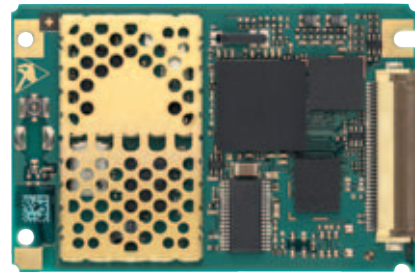
The MC39i is suited for M2M applications such as vending machines, gateways, security applications, traffic systems, transportation and logistics, or measurement and remote maintenance. The MC39i, which is GPRS Class 10 capable, has potential uses in the consumer sector in mobile telecommunications solutions.

Always-on connections and high transfer rates permit the fast transmission of voice, data, SMS and fax information. Flexible installation ensures simple integration of the radio modules into your product.

Representing the state of the art in technology, the MC39i also support the Packet Broadcast Control Channel (PBCCH), which is a double signaling channel that greatly improves transmission performance in GPRS mode. The link between the module and your application is established via a ZIF connector (special cable connector).

Key features of the MC39i include:

- GSM dual band (900/1800 MHz) and GPRS class 10
- PBCCH support
- Small size (54.5 x 36 x 3.6 mm)
- Low power consumption



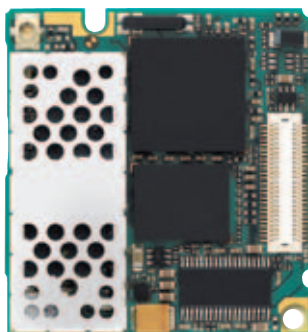
SIEMENS MC55/56

The MC55 and MC56 wireless modules are the smallest double tri-band modules on the market today. Being extremely compact in size, they are especially suitable for use in mass-produced consumer goods like mobile phones, smart phones, PDAs and other portable devices. Together, the two models of the tri-band module that are now available cover all of the GSM/GPRS networks that exist across the world - and subsequently enable you to develop products for the global market.

Next-generation cell phones, smart phones and PDAs are continually getting smaller and more compact. Weighing only 5.5 grams and with dimensions of 35 x 32.5 x 2.95 mm, the MC55/56 modules give you the highest degree of flexibility possible when it comes to integrating voice and data communication in your own products.

When combined, the two module variants constitute a double tri-band solution: while the MC55 supports the radio frequencies commonly used in Asia and Europe (900, 1800 and 1900 MHz), the MC56 supports 850, 1800 and 1900 MHz, which makes the latter particularly suitable for use in devices destined for the North American market. By using both, you can develop your products for use throughout the world. The modules are designed for Microsoft® Windows Mobile™ 5.0-based devices (Smartphones and Pocket PCs). The required RIL/MUX software is enclosed in the scope of delivery.

The support team at Siemens Wireless Modules will assist you in integrating the modules, and offers a full range of services from product design to product certification. The MC55 and MC56 modules have obtained worldwide certification based on R & TTE, FCC, GCF, UC, IC, CE and PTCRB standards. Certification from various network operators has also been obtained. Thanks to its comprehensive support services and long-term experience on the mobile communications market, Siemens can help you reduce both the costs and the risks involved in product development so that new products can be launched on the market within a short time.



The major features of the MC55/56 at a glance

- Compactness (35 x 32.5 x 2.95 mm), weighs only 5.5 grams
- Double tri-band operation: 900, 1800 and 1900 MHz (MC55), and 850, 1800 and 1900 MHz (MC56)
- Voice and data communication
- TCP/IP via AT commands with: TCP, UDP, HTTP, FTP, SMTP, POP3
- Designed for Microsoft® Windows Mobile™ 5.0-based devices (Smartphones and Pocket PCs).
- GPRS (class 10), PBCCH support.

SIEMENS MC75

The MC75 is the first GSM/GPRS radio module featuring EDGE technology, which is currently the fastest data transfer standard in worldwide GSM networks. EDGE („Enhanced Data Rates for GSM Evolution“) allows downloads and streaming of data-intensive multimedia files, exchange of email attachments and fast internet or intranet access. Thanks to EDGE, users can easily conduct their business activities on the Internet or on the company intranet using their smartphone, PDA or laptop PC - in fact, this can be done three times faster than when using GPRS; EDGE theoretically has a maximum bit rate of 474 kbps compared to GPRS with 171 kbps.

As GSM evolves in the direction of UMTS, the EDGE standard's role is growing increasingly important. As a supplement or alternative to UMTS, it offers high data transfer rates and a significantly better utilization of network capacity without any additional investments in the existing infrastructure being necessary. While the UMTS infrastructure is still being developed, EDGE already ensures a global coverage even in rural areas. In areas where there is still no UMTS infrastructure, EDGE can fill regional gaps during the transition period until UMTS is launched. In addition, EDGE offers mobile network operators without a UMTS license a cost-effective high-speed alternative.

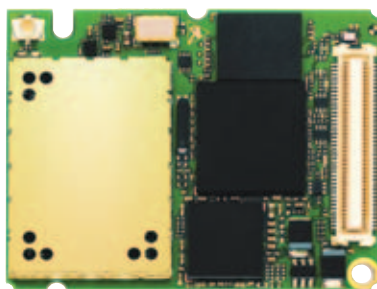
Whether on private or business trips, continental borders are no longer a hindrance for individuals, IT or mobile telecommunications. This has only been the case since PCMCIA cards, GSM/GPRS modems, and cell phones were equipped with triband technology. In order to fully utilize the fast EDGE technology in every area of the world, mobile phones and mobile computers of the next generation need an additional frequency range. The MC75 is therefore equipped with quadband GSM, which means it can be used in all existing GSM networks. Fast data transfer via EDGE is thus available to continent hoppers everywhere and via the best possible route.

Thanks to the integrated RIL/NDIS driver, the MC75 is especially suited for smartphones and PDAs based on the Microsoft © Windows Mobile™ operating system. This ensures optimal communication between the operating system and the module.

The MC75 includes a USB connection allowing plug and play, which is particularly convenient when using GSM/GPRS modems. Further benefits of integrating the module into all mobile communication solutions include its extremely compact size of 34 x 45 x 3.5 mm, the one-sided layout of the printed circuit board's components, and its light weight of less than 10 grams.

In addition, the MC75 provides the approvals necessary for worldwide use free of charge. Thus, it meets requirements in accordance with R & TTE, FCC, IC, UL, GCF, and PTCRB as well as any country-specific requirements, which network providers may have. This makes it possible for manufacturers to reduce their application development costs as well as their total cost of ownership. The MC75 facilitates a faster launch of mobile computing applications and smartphones on the world market.

And last but not least, the MC75 is lead-free, in accordance with the EU Directive on the Restriction of Specific Hazardous Substances in Electrical and Electronic Equipment (RoHS).



The main features of the MC75 include:

- Quadband GSM (850/900/1800/1900 MHz)
- EDGE (E-GPRS) Multislot Class 10
- GPRS Class 12
- RILNDIS driver for Microsoft © Windows Mobile™
- based devices
- Fully compatible with USB 2.0 full speed

GSM modules

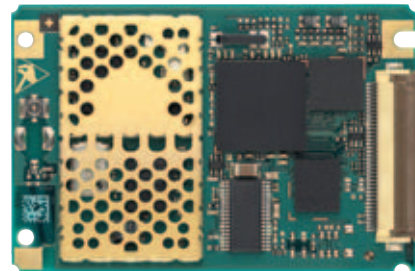
SIEMENS TC35i

Small dimensions, a flexible installation design, simple integration and low power consumption are all essential features of the TC35i radio module. Developed primarily for high-volume M2M applications, the TC35i is employed in the areas of measurement and remote maintenance, transportation and logistics, traffic systems, gateways and access, vending machines, security, health care and building technology.

The link between the TC35i radio module and your application is created via a ZIF connector and a GSC aerial socket. R&TTE, GCF and network operator approvals have been obtained, making it simpler for you to obtain approvals for your own applications.

The most important features of the TC35i include:

- GSM dual band (900/1800 MHz)
- Small size (54.5 x 36.0 x 3.6 mm)
- Low power consumption (stand-by mode: 25 mA, talk mode: 300 mA)
- SIM Application Toolkit
- Extended AT commands for M2M applications



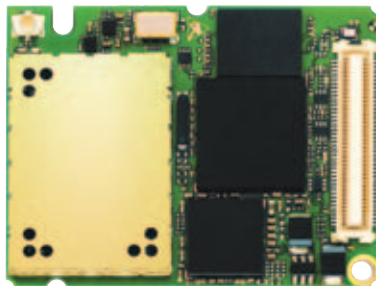
SIEMENS TC63

The TC63 incorporates the same top-quality GSM/GPRS technology as the TC65, but doesn't feature its Java™ platform. That's why it is particularly well-suited to classic applications that require additional hardware. Featuring quad-band radio technology, GPRS Class 12 and an integrated TCP/IP stack, the module sets new standards in GSM/GPRS connectivity. The potential uses of the TC63 are manifold - no matter how you utilise the module, be it in security-related applications, vending machines, fleet-management systems or a whole host of other applications, the module is a real all-rounder in the m2m sector!

The new standards the TC63 sets particularly refer to its many uses and its connectivity. As a quad-band module, it can be employed in GSM networks anywhere in the world. It also possesses two serial interfaces, USB and I 2 C bus interfaces and an integrated TCP/IP stack - in short, you can connect a wide range of devices to it. What's more, its temperature range (-30 to +65°C) has been enhanced to optimise it for use in m2m applications.

Like all other Siemens modules, the TC63 comes with full type approval (FTA) plus worldwide approval from all of the large mobile network operators in accordance with the following standards: R&TTE, FCC, UL, IC, GCF and PTCRB. As a result, applications developers can keep costs down and lower the total cost of ownership. In addition, newly produced m2m applications can be launched on the global market even faster than ever.

The TC63 already conforms to the EU Directive on the Restriction of Specific Hazardous Substances in Electrical and Electronic Equipment (RoHS) - it's lead-free.



The following points are the key features of the TC63:

- Includes quad-band technology that can therefore be employed in any mobile network worldwide (850/900/1800/1900 MHz)
- Enables high-speed data transfer using GPRS Class 12
- Integrated TCP/IP stack enabling the simple integration of wireless Internet services
- Enhanced operative temperature range and a robust means of mounting
- Made entirely of lead-free materials

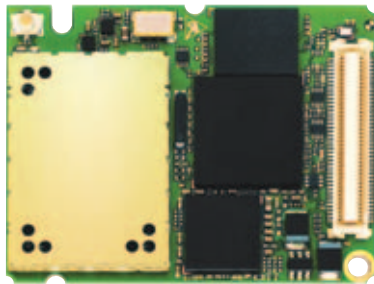
GSM modules

SIEMENS TC65

Being based on Java™, the TC65 provides developers working in the machine-to-machine sector (M2M) with a sophisticated developer's software platform. It also incorporates top-quality GSM/GPRS technology including quad-band radio technology and GPRS Class 12. Its various interfaces - GPIOs, I²C bus and SPI bus - and the TCP/IP stack allow the module to be integrated in virtually any m2m application. The launch of the TC65 marks the introduction of a new, modern generation of wireless modules to business fields like vending machines, point of sales, remote metering and the security sector.

Apart from saving you development time, the Java™ support offered by the TC65 reduces your costs, as the module requires no additional hardware such as a controller, memory or a TCP/IP stack. Java™ is a complete software platform in itself that enables you to develop brand-new m2m applications without the burden of licence fees and dependence on other manufacturers' technology. Owing to its IMP 2.0 profile, the wireless module allows you to make software updates easily and securely via the air interface (OTAP). In addition to this, it enables data encoding in applications that involve transmitting data in a secure environment (e.g. HTTPS and PKI). The TC65 can process data at high speed thanks to the integrated ARM7 processor, and the memory it requires is provided by its 1.7 MB Flash memory.

Full type approval (FTA) plus worldwide approval from all of the large mobile network operators conforming to standards such as R&TTE, FCC, UL, IC, GCF and PTCRB round off the TC65's suitability as a developer's platform. By using this wireless module, applications engineers can reduce the total cost of ownership as well as put their new m2m applications onto the global market faster. Not only that, but the TC65 is entirely lead-free, thereby meeting the requirements of the EU's Directive on the Restriction of Specific Hazardous Substances in Electrical and Electronic Equipment (RoHS) .



The following points are the key features of the TC65:

- Java™ support, IMP 2.0 (IMP 1.0 was used in the TC45)
- Includes quad-band technology that can therefore be employed in any mobile network worldwide (850/900/1800/1900 MHz)
- Enables high-speed data transfer using GPRS Class 12
- High processor performance due to an ARM7 processor
- Large amount of memory space - Flash: 1.7 MB, RAM: 400 kB
- Integrated TCP/IP stack enabling the simple integration of wireless Internet services
- Secure data transfer and reliable software updates over the air
- Enhanced operative temperature range and a robust means of mounting

SIEMENS AC75



Quadband, EDGE, Java™ and compliance with all of the relevant quality standards used in the automotive sector make the AC75 from Siemens the best-equipped hardware and software platform around for wireless applications in environments as demanding as the car manufacturing industry. Thanks to its state-of-the-art communications technology, the AC75 can be utilized anywhere in the world, it provides the highest data transfer rates possible, and has clear time-saving and cost-saving benefits for manufacturers with respect to product development. What makes these savings possible is the integrated Java™ open platform, with which engineers can use components on the module such as the processor and memory for their own applications. This simplifies development considerably and eliminates the need for further investments.

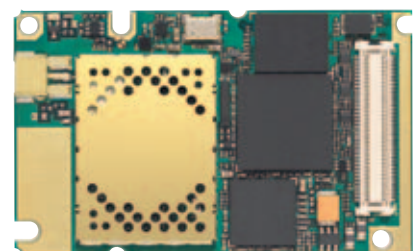
The AC75 is predestined for applications deployed in tough environments demanding special qualities. It meets all the requirements of the automotive sector regarding quality, such as the ISO TS 16949 standard for development and production and the VDA standard for voice transmission. It also works errorfree over an extended temperature range, offers antenna diagnostics, and features a SIM access profile (SAP) and a Rosenberger antenna connector. In addition to this, our customers can count on getting expert support based on our team's in-depth and long-term experience of working in the automotive sector.

Worldwide applicability, top quality standards, intelligent and resource-saving development - the AC75 is the first rugged module to integrate all these features on one and the same board. This is what makes it the perfect basis for modern applications, such as e-call and Toll Collect, security tracking, fleet management, multimedia systems, and machine-to-machine applications that need to be especially robust.

The AC75 has received full type approval (FTA), including approvals from U.S. mobile operators and the E-mark, with all the necessary certification as part of the package. What's more, as the module is lead-free, it complies with the European directive on the restriction of the use of certain hazardous substances in electrical and electronic devices (RoHS).

Some of the key features of the AC75 include:

- Java support with the IMP-NG
- Quadband support: GSM 850/900/1800/1900 MHz
- EDGE (E-GPRS) multi-slot class 10
- Extended temperature range from -30°C to +85°C
- Integrated TCP/IP stack
- RIL driver for equipment based on Microsoft® Windows Mobile™
- SIM Access Profile



GSM modules

SIEMENS XT55/56

The XT55 and XT56 are the first compact double tri-band GSM/GPRS modules equipped with a GPS receiver for satellite navigation. The combination of these two technologies allows seamless tracking of goods, vehicles, and persons. The tracking modules will make many new applications possible, particularly in the fields of transportation and logistics as well as security. The two models of the tri-band module cover all of the GSM/GPRS networks that exist across the world - and subsequently enable you to develop products for the global market.

The modules can, for instance, make the transportation of valuable freight more secure by continually transmitting positioning data on the location of the freight to the owner and the freight forwarder.

The Siemens modules XT55 and XT56 with GPS are all-in-one solutions that accelerate new products' time-to-market: pre-configured functions and their compact size make them easy to integrate into new applications. The custom evaluation kit includes various standard settings and protocols for the modules, enabling seamless integration into new applications. R&TTE, GCF, FCC, PTCRB, IC, CE and network operator certification have already been obtained, thereby simplifying the approval process.

The modules are designed for Microsoft® Windows Mobile™ 5.0 based devices (Smartphones and Pocket PCs). The required RIL/MUX software is enclosed in the scope of delivery.



Key features of the XT55/56 include:

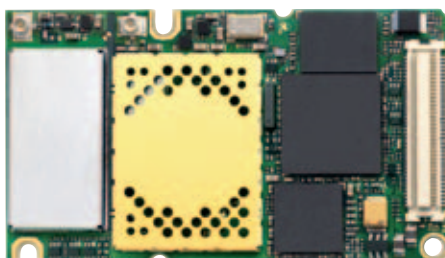
- Double tri-band operation: 900, 1800 and 1900 MHz (XT55), and 850, 1800 and 1900 MHz (XT56)
- GPRS class 10, PBCCH support
- Compact dimensions (53 mm x 34 mm x 5.1 mm)
- TCP/IP via AT commands with: TCP, UDP, HTTP, FTP, SMTP, POP3
- TricklePower (low power consumption in energy-saving mode)
- GPRS class 10
- More precise positioning thanks to crystal oscillator (TCXO) technology
- Designed for Microsoft® Windows Mobile™ 5.0 based devices (Smartphones and Pocket PCs)

SIEMENS XT65

With the XT65, M2M developers can implement tracking functions and the associated options more simply and economically than ever. The logical linking of GPS and GSM technology optimises the combination of these two technologies. Moreover, complex M2M applications can be developed on the Java™ platform within very short development times and for the lowest possible cost in the areas of vehicle tracking, personal emergency call systems, fleet management solutions and navigation systems.

Thanks to Quad-Band, XT65-based tracking applications can be used worldwide. The integrated GPS receiver can receive position data via all cellular phone networks around the world. The GPRS technology for data transmission allows the permanent transmission of the relevant data for locating and positioning. Since the module includes components such as an integrated processor, memory and a large number of interfaces, solutions developers can save substantial costs. In addition, the interaction with the Java™ platform means that applications can be developed much faster.

The XT65 is also lead-free, thus conforming to the RoHS Directive (EU Directive on the Restriction Of The Use Of Certain Hazardous Substances In Electrical And Electronic Equipment).



Key features of the XT65:

- State-of-the-art GPS receiver (16 channels)
- Quadband GSM (850/900/1800/1900 MHz)
- GPRS multi-slot class 12
- Java™ IMP-NG Integrated TCP/IP stack
- RIL driver for Microsoft® Windows Mobile™ based devices



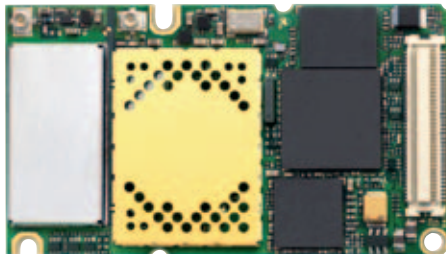
GSM modules

SIEMENS XT75

Thanks to the XT75, the integration of tracking functions and the associated options is now simpler and cheaper than ever. The XT75 is the first module that links GPS and GSM technology logically which consequently optimises the combination of these two technologies. Add to that the integrated Java™ Open Platform, which offers a complete application platform for developing complex M2M solutions. This means that applications such as vehicle tracking, personal emergency call systems, fleet management solutions and navigation systems can be brought to market within very short development times and for the lowest possible costs.

Thanks to Quad-Band, the module can send position data from any place around the world. Moreover, the XT75 features EDGE technology which can achieve data transfer rates of up to three times the speed of ISDN. The high data transfer rate is especially useful for applications such as navigation systems which can be augmented with additional services such as Internet services for the passenger or updates for maps and places of interest. Considerable cost savings can be made due to the fact that the module incorporates such components as a processor, memory and a large number of interfaces. The interaction with the Java™ platform means that solutions providers can also benefit from huge cuts in the time needed for development.

The XT75 is also lead-free, thus conforming to the RoHS Directive (EU Directive on the Restriction Of The Use Of Certain Hazardous Substances In Electrical And Electronic Equipment).



Key features of the XT75:

- State-of-the-art GPS receiver (16 channels)
- Quadband GSM (850/900/1800/1900 MHz)
- EDGE (E-GPRS) multi-slot class 10
- Java™ IMP-NG
- Integrated TCP/IP stack
- RIL driver for Microsoft® Windows Mobile™ based devices

SIEMENS HC15

HSDPA 3.6 Mbit/s download speed on the 2100 MHz Band connected via a robust mounting and interface concept and controlled via AT commands, this feature set enable manufacturers to develop high-speed data applications within a very short time and at low total cost of ownership. Those applications which are based on Windows® profit from the NDIS Driver and the USB 2.0 full speed interface. As a result the HC15 is optimized for applications like Gateways, USB modems and Routers which are deployed in Europe, Middle East, Africa and Asia.

High Speed Downlink Packet Access (HSDPA) is a packet-based data service in the UMTS network, which allows a download speed which is ten times faster than UMTS. This offers new services for the End User like live streaming of video and music, high-speed data downloads, broadband Internet Access and Interactive Games. In addition HSDPA will be pushed by the Mobile Network Operators due to network efficiency, which will be doubled in comparison with a GSM based network and the opportunity to replace fixed line Broadband Internet Access with wireless technology. Today the GSA (Global mobile Supplier Association) stated that 121 HSDPA networks in 55 countries around the Globe are already committed. The GSA forecasted that HSDPA will be the future mobile data standard with 90% market share. In addition, the HC15 provides the approvals necessary for worldwide use free of charge. Thus, it meets requirements in accordance with R&TTE, UL and GCF as well as country-specific requirements, which network providers in Europe, Middle East, Africa and Asia may have. This makes it possible for manufacturers to reduce their application development costs as well as their total cost of ownership.

And last but not least, the HC15 is lead-free, in accordance with the EU Directive on the Restriction of Specific Hazardous Substances in Electrical and Electronic Equipment (RoHS).

Some of the key features of the HC15 include:

- HSDPA 3.6 Mbit/s
- HSDPA/UMTS (WCDMA/FDD): 2100 MHz
- GSM/GPRS/EDGE: 900/1800 MHz
- NDIS driver for Microsoft® Windows XP based devices
- Voice & Data support
- USB 2.0 full speed



SIEMENS HC25

In a nutshell: Siemens Wireless Modules offers you a breakthrough with regard to mobile devices and solutions such as PDA, industrial handhelds, entertainment devices, routers, gateways and much, much more. You ask how? The answer is the HC25! The 3.6 Mbit/s HSDPA module offers Tri-Band UMTS, Quad-Band GSM, a RIL/NDIS/USB driver, full voice and data support and a robust mounting and interface concept. This ensures a short time-to-market and cost-efficient development.

The HC25 supports both Quad-Band GSM/GPRS/EDGE and Tri-Band UMTS/HSDPA functionality, enabling the module to cover all the frequencies used worldwide. As a result, applications based on the HC25 can be deployed anywhere in the world. In addition, the module is already approved according to all worldwide standards and certifications: R&TTE, GCF, CE, FCC, PTCRB, UL, IC as well as local approvals and network operator certifications. This enables manufacturers to create new HSDPA devices which fulfill both local and global GSM and UMTS requirements.

The provided driver ensures optimal linkage between the communication module and a Microsoft® Windows XP or Microsoft® Windows Mobile™ system. This software driver is dedicated to the Microsoft® operating system which allows plug-and-play functionality with Microsoft® Windows® XP (NDIS) and easy integration with devices based on Microsoft® Windows® Mobile (RIL/NDIS). Together with the USB 2.0 full-speed interface, the software driver makes the HC25 the perfect choice, especially for PDAs, entertainment devices, industrial handhelds and USB modems.

To be able to develop enhanced communication solutions, the HC25 comes with full voice and data support. This allows the HC25 to use different voice modes – handset, headset and handsfree mode – and to use voice and data at the same time. Our support services additionally ensure optimization of the voice functionality of an application in particular, thus guaranteeing that you are using the latest wireless technologies, in a flexible way and of the highest possible quality.

Like all Siemens wireless modules, the HC25 is lead-free, thus complying with the EU Directive on the Restriction of Specific Hazardous Substances in Electrical and Electronic Equipment (RoHS).

Some of the key features of the HC25 include:

- HSDPA 3,6 Mbps
- HSDPA/UMTS 850,1900,2100 MHz
- EDGE/GPRS 850,900,1800,1900 MHz
- EDGE/GPRS multislots class 10
- Data + Voice
- USB 2.0 full speed
- RoHS compliant - leadfree



SIEMENS GSM terminals

ES75H



Frequency bands:

- UMTS (WCDMA FDD): 2100 MHz (EMEA)
- EDGE/GSM/GPRS: 900/1800 Mhz

Data rates:

- HSDPA: max 3.6 MB/s DL and 384 KB/s UL..
- UMTS: up to 384 KB/s DL and UL..
- EDGE: up to 237 KB/s DL and 118 KB/s UL..
- GPRS: up to 85,6 KB/s DL and 42,8 KB/s UL

Antenna: External

Input power: External power supply

Compatibility : Laptops and PCs with USB interface (1.1/2.0)

Operating systems: Windows XP, 2000

75mm x 55mm x 25mm, Weight: 162 g

Status indicators: Status LED

Accessories:



AM-35PX-POWR



A-GSM-M3-250XXX



MD9-FD9

ES75

The ES75 is the modem with MC75 the first GSM/GPRS radio module featuring EDGE technology, which is currently the fastest data transfer standard in worldwide GSM networks. EDGE („Enhanced Data Rates for GSM Evolution“) allows downloads and streaming of data-intensive multimedia files, exchange of email attachments and fast internet or intranet access. Thanks to EDGE, users can easily conduct their business activities on the Internet or on the company intranet. EDGE can be done three times faster than when using GPRS; EDGE theoretically has a maximum bit rate of 474 kbps compared to GPRS with 171 kbps.

Features:

- quad-band 850/900/1800/1900 MHz
- EDGE (E-GPRS) class 10
- GPRS class 12
- USB
- RS232

Accessories:



AM-35PX-POWR



A-GSM-M3-250XXX



MD9-FD9



SIEMENS GSM terminals

SIEMENS TC35i Terminal



The TC35i Terminal makes integration as simple as possible, primarily for users in the M2M market segment: a stand-alone device, the terminal is fitted with standard interfaces for a power supply, an antenna, a PC, and a handset, with its plug & play technology making it very easy to put into operation. Thanks to its robust case, the TC35i Terminal is ideal for use in many different business segments, such as in measurement and remote maintenance, traffic systems, transportation and logistics, vending machines, security, and building technology.

The radio terminal's dual-band capability and a large input voltage range make allow for a wide range of uses. R&TTE, GCF and network operator approvals as well as the „E“ mark required for approval for operation in vehicles, are already in place, making it easier for you to obtain approval for your own applications.

Key features of the TC35i Terminal include:

- GSM dual band (900/1800 MHz)
- Large input voltage range
- Standard interfaces
- Integrated SIM card holder
- SIM Application Toolkit
- Extended AT commands for industrial applications

Accessories:



AM-35PX-POWR



A-GSM-M3-250XXX



MD9-FD9

SIEMENS MC35i Terminal

Developed primarily for the M2M market segment, the ultra-compact MC35i Terminal boasts an always-on connection and high-speed data transfer capabilities. The robust dual-band GSM unit with GPRS class 8 can be used in a wide range of areas including metering and remote maintenance, traffic systems, shipping & logistics, security, vending machines, and building technology.

With standardized interfaces, you can easily link up the MC35i Terminal to your own products via plug & play, thus shortening development times and reducing development costs. Another advantage is that R & TTE and GCF approval, carrier certification, and the E-mark (required for installation in vehicles in Europe) have already been obtained for the terminal.

The most important features of the MC35i Terminal include:

- GSM dual band (900/1800 MHz) and GPRS class 8
- Support for the Packet Broadcast Control Channel (PBCCH)
- Broad input voltage range
- Standardized interfaces
- Integrated SIM card holder

Accessories:



AM-35PX-POWR



A-GSM-M3-250XXX



MD9-FD9



SIEMENS GSM terminals

SIEMENS TC65 Terminal

The quad-band TC65 Terminal is going to revolutionise the machine-to-machine market! With features like the Java™ software development platform and a host of standard industrial interfaces, it's the first choice for product developers looking for an intelligent plug & play solution for m2m applications. Besides these key features, the compact and robust housing of the TC65 Terminal incorporates a SIM card holder and can also be DIN rail-mounted. Siemens mobile's new wireless terminal is perfectly designed for applications in fields such as fleet management, security, vending machines, metering and remote control.



The Java™ environment enables users to run the application software directly via the TC65T's microprocessor. This, in turn, enables the user to control the particular m2m application that is being run. Data from sensors and actors can be transmitted to a server via the Internet by means of the integrated TCP/IP protocol stack, for instance. Working in the convenient and protected software environment offered by Java™ makes it possible for developers to use the resources of the communication part and keep the number of redundant components in the target application down, thereby saving costs. And what's more, your time to market will be cut down dramatically!

IMP Next Generation (NG) lets you update your application software over the air (OTA) in a simple and reliable way, as well as transfer and receive confidential data in a secure environment using HTTPS or PKI encryption. The TC65 Terminal also features an LED that indicates the current operating status of the device.

Just like its variant, the TC65, the TC65 Terminal has FTA (full type approval) plus approvals from the world's largest network operators in accordance with R&TTE, FCC, IC, GCF and PTCRB standards. Thanks to these formal certifications, product developers can gain access to new markets and applications much more easily and shorten the time it takes to create a product that is ready for market launch.

Besides all these top selling points, the TC65 Terminal meets the latest environmental standards, including the EU's RoHS directive on limiting the use of hazardous substances in electrical and electronic devices.

The key features of the TC65 at a glance:

- Java™ support, IMP-NG
- Quad-band technology (850/900/1800/1900 MHz)
- High-speed data transfer using GPRS (class 12)
- Robust housing
- Range of standard interfaces (I2C bus, SPI bus, analogue-digital converter (ADC), serial, audio, 10 GPIOs and a SIM card interface)
- High-performance processor (ARM7) and enhanced memory
- Integrated TCP/IP stack
- Secure data transfer and easy software updates over the air (OTA)

Accessories:



AM-35PX-POWR



A-GSM-M3-250XXX



MD9-FD9

SIEMENS ER75



EDGE router ER75 is a compact electronic device based on the MC75 module of SIEMENS which enables data transfers using GSM, GPRS and EDGE technologies. Primarily, the ER75 router expands the capabilities of the MC75 module by the option of connecting more PCs by means of the built-in Ethernet interface.

In addition, the firmware of the ER75 router provides automatic establishment and maintenance of GPRS connection. By means of integration of DHCP server it provides the users simple installation and Internet access.

The following points are the key features of the ER75:

- quad-band 850/900/1800/1900 MHz
- EDGE (E-GPRS) class 10
- GPRS class 12
- Ethernet - connector RJ45 (10/100 Mbit/s)
- USB 2.0 - connector USB-B
- Dimensions 30x90x102 mm

Accessories:



AM-35PX-POWR



A-GSM-M3-250XXX

SPEEDY

High Speed UMTS Modem
Quad Band GSM/GPRS
(850MHz, 900MHz, 1800MHz, 1900MHz)

The SPEEDY modem gives consumer and business users the speed of broadband Internet access, the freedom of portability and the easy plug and play. It provides always on high-speed Internet access whenever and wherever it's needed - around the house, in the office, at meetings, even outdoors, supports download speeds of up to 2Mbps. Built on the 3GPP UMTS standard, predicted to become the leading global mobile standard. Compact design allows for easy transport for portable use by consumer and business users. Modem comes with a SIM cardholder allowing operators to use SIM/ USIM authentication.

General features:

- Supply voltage range 9-30V
- Compact plastic housing
- Dimensions 105 x 80 x 30 mm
- Weight approx. 150g
- Ambient temp range: -25 to +60 °C
- Auto power off +60 to +75 reduced rf performance
- Protection class Ip40
- CE certificate



SPEEDY +



Double Wireless Router - professional multitasking device that offers one voice line (telephone or exchange) connectivity and internet access for a local computer network (cabled or wireless).

Features:

- „Double Wireless“:
 - Fixed mobile terminal for GPRS, EDGE, UMTS-HSDPA, UMTS-TDD, CDMA 1x RTT, CDMA 1x EVDO
 - WIFI data transfers between WLAN users up to 54Mbps – IEEE802.11BandG
- All-In-OneDevice:
 - Fixed terminal for voice and Internet access (depending on version)
 - WIFI Access Point
 - VPNRouter
 - Firewall
 - LANServer
 - Video Surveillance Server
- 100% Plug-an-Play: Instant Internet connection for multiple clients, there is no need for user store – configure their PCs, notebooks or PDAs.

BELL-BOY

The BELL-BOY is a simple GSM device for the remote control switch on, switch off and a restart of the plug in device.

The under-the-cover GSM module SIEMENS provides you an easy wireless remote control by the SMS or by the ringing.

The BELL-BOY includes the integrated thermometer, the SIM Card holder, the switch for manual control or reset.

Features:

- Output: Outlet 230 V AC, current max.10 A
- Control security by using predefined numbers or by PIN
- Up to 10 numbers memory for control by SMS
- Up to 10 numbers memory for control by ringing
- Possibility of control by temperature
- Possibility of setting to permanent switch or reset
- Back confirmation of setting by SMS or by ringing
- Operating temperature from -20 to +40 °C



MAJORDOM



MAJORDOM is GSM equipment for remote control for the electric drive of the bars, gates and doors by the mobile phones. Integrated GSM module SIEMENS guarantee easy control by ringing the phone (operation free). Confirmation of authority of the MAJORDOM users are proceed by telephone directory saved on the SIM card.

Features:

- Power supply from distribution net 12V or alternative from main power supply (12V adapter). Also can be used backup battery 12V.
- 2 inputs for switching contacts (alarm output, sensors etc.) (5V)
- when is short circuit at input preprogrammed SMS is sent to preprogrammed number (for each input own text SMS as same as number)
- when is short circuit at input progressive ringing up 8 preprogrammed numbers (ALARM1 to ALARM8)
- 2 galvanically separated (switching contacts 230V/ 5A)
- 1 switching contact control by ringing only from authorised number (contact closed for preprogrammed fix time)
- The size of authorised numbers is limited by SIM card capacity (250). The numbers can be saved under different names
- Both outputs control by SMS from numbers authorised in II. level (ALARM). It is possible remotely control closing, disconnection, closing for 1-99 minutes
- Setting of all parametres (authorised numbers, unit time, competence etc.) a s same as complete control of the unit (for example: remote dialling different number from preprogrammed) by SMS from authorised numbers in level III. (ADMIN)
- Ckecking of credit level. Sending of SMS coming from operator to preprogrammed number
- Setting of all parametres via PC through RS 232 port. All parametres can be programmed directly on SIM by mobile phone or remotely by SMS.
- System interface for optional devices which will be progressively developed:
 - evidence of numbers which close contact includes time
 - control and setting parametres via LAN
 - connection of more relays outputs control by SMS
 - board with more inputs
 - voice modul

Advantages of the patented EnOcean Technology

Radio switches and sensors „supply themselves“ by available environmental energy that exists everywhere in small amounts. Switches for example can be supplied with the mechanical operation energy, temperature sensors with the temperature difference to the environment, vibration sensors with vibration energy, position sensors with motion energy, light sensors with light energy and so on. As simple as the idea seems to be, its consistent realization could be made possible only recently at Siemens Corporate Technology. The cooperation between specialists of different domains lead to the following technological innovations:

- Electronics and radio technology with extremely low power consumption
- New and highly efficient techniques of energy transformation
- Redundant techniques of radio transmission
- Intelligent, energy-saving operation concepts

PTM 200

THE ULTRAFLAT MINIATURIZED SWITCH MODULE

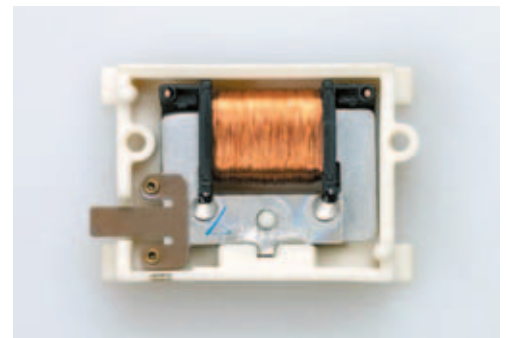


- Maintenance-free powering by finger pressure
- Optionally one or two rockers or up to four push buttons
- Dimensions 40x40x11,2 mm
- Actuating travel 1,8 mm
- Actuating force approx. 7 N

ECO 100

ENERGY CONVERTER FOR LINEAR MOVEMENT

- Qualified for powering PTM 230
- Voltage approx. 5 V at 19 uF
- Dimensions 33x22x11 mm
- Actuating travel 2 mm
- Actuating force approx. 2 N



PTM 230

RADIO TRANSMITTER MODULE

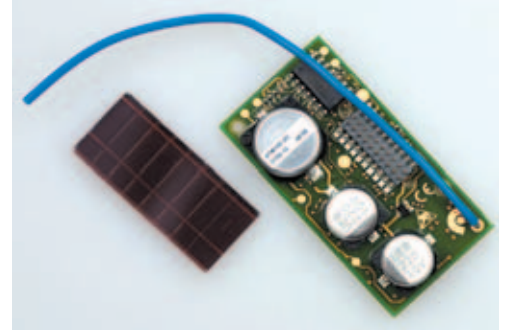


- 2 digital inputs
- Dimensions 20x25x6 mm
- Operation with ECO 100 or external energy source

STM 100

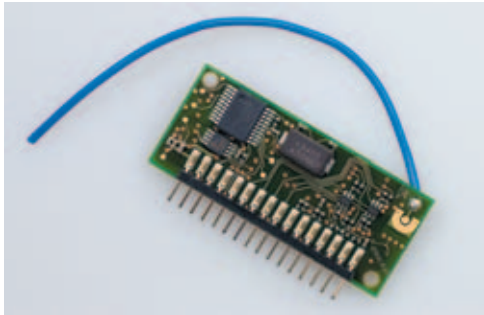
THE SENSOR MODULE

- Maintenance-free sensor module
- Powered by mini-solar cell, 13x28mm
- Dimensions 21x40x9 mm
- Operates for several days in total darkness
- Periodic presence signals
- 3 A/D converter inputs
- 4 digital inputs



RCM 110/120

THE RECEIVER MODULES



- Wireless receiver module and actuator control module for receiving and predecoding EnOcean wireless transmitter signals
- Dimensions 18x42x5,5 mm
- 5 Vdc voltage supply
- 25 mA current consumption
- Basic functions: switch, blinds control, dimming and serial interface for bus systems (RS232)
- Power section dimensioned and integrated by user to match requirement
- Simple teaching of up to 30 wireless transmitters
- Memory function (for light and blinds scenes)

TCM 110/120/130

ENOCEAN BIDIRECTIONAL

- 5 Vdc voltage supply
- 33 mA current consumption
- Dimensions 24x42x5 mm

TCM 110: Single-level repeater for EnOcean wireless telegrams

TCM 120: Bidirectional wireless, serial interface, modem functionality

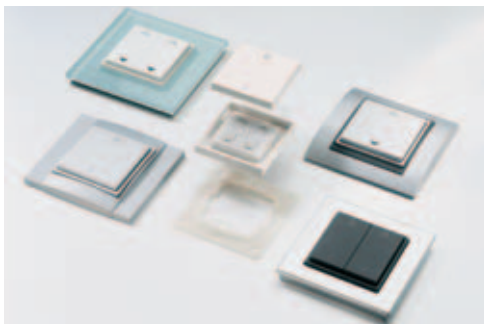
TCM 130: Software API for TCM 120 module, programmable in C

- Supports bidirectional serial interface
- Four D/A inputs, four digital outputs



PTM 250

UNIVERSAL SWITCH INSERT



- Surface mounting without casing
- Switch program frame flat on the with 55x55 mm rocker
- Single or serial rocker
- Colours: white, aluminium, anthracite

STM 250

WINDOW / DOOR CONTACT

- Maintenance-free powering by daylight
- Operates for several days in total darkness
- Immediate signal transmission as soon as window closes or opens, triggered by window magnet
- Periodic life signal
- Contact monitor (110x19 mm, height 15 mm) attachable to all frame profiles



RCM 250/255

UNIVERSAL SINGLE – CHANNEL SWITCH ACTUATOR



- EnOcean easyfit switch actuator for wireless switching of very different 230 V (RCM 250)/ 110 V (RCM 255) loads, e.g. incandescent lamps, high-volt halogen lamps or low-power motors. Up to 30 EnOcean PTM wireless switches or up to two EnOcean STM 250 wireless window contacts can be teached. Simple connection of the line voltage and load by screw terminals.

EPM 100

LEVEL METER

- The electricians installation tool for EnOcean wireless components – for range analysis and simple detection of signal quality sources of interference.



EVA 100

EVALUATION KIT



- Test board for simple startup of EnOcean wireless modules.

ANTENNAS CATALOGUE 2006

GSM antennas

GPS antennas

BLUETOOTH antennas

WIFI antennas

WM OCEAN company offers a spread portfolio of antennas to your applications. We can deliver antennas according to your requirements and needs with different cable length and end connector.

We divide the antennas on the basis of applications method (e.g. AMPS 824-894MHz / GSM 900, 1800MHz / PCN 1.9GHz / UMTS 2.1GHz / Bluetooth, Wifi 2.4GHz / Wifi 5GHz, 5,8GHz), on the basis of gain (dB), on the mounting basis (patch on the window, patch on the board, board montage, magnetic...) on the basis of cable length and end connector (SMA, FME, SMB...)

We would like to point out new product codes which we hope that will help you in placing your orders.

For example:

A-xxx-xx-xxxxxx

A-xxx-xx-xxxxxx

A.....Antenna

xxx.....GSM/GPS

xx.....Mounting method

PW patch on the window

PB patch on the board

B board montage

M magnetic

xxxxxx.....length of the cable (cm), end connector (SMA, FME, SMB)

A-GPS-PW-250SMA.....GPS antenna, patch on the Windows with 250 cm cable and SMA end connector.

GSM ANTENNAS

A-GSM-M3-250XXX/MG3D/MG3S



- GSM antenna, magnetic, 3dB, connector SMA, FME

Order no.:

- ← A-GSM-M3-250SMA
- ← A-GSM-M3-250FME
- MG3D →
- MG3S →

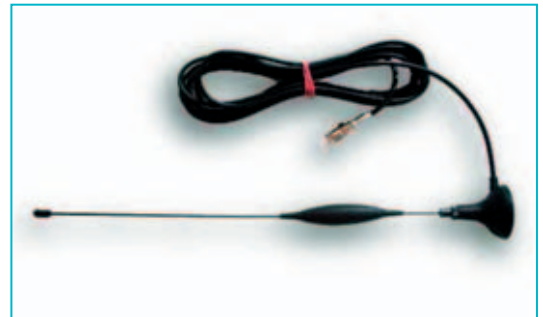


A-GSM-M5-250XXX

- GSM antenna, magnetic, 5dB, connector FME, SMA

Order no.:

- A-GSM-M5-250FME
- A-GSM-M5-250SMA



A-GSM-P1-250XXX



- GSM antenna, self-adhesive patch, dualband 1dB, connector SMA, FME, SMB

Order no.:

- A-GSM-P1-250SMA
- A-GSM-P1-250FME
- A-GSM-P1-250SMB



A-GSM-PWO-425XXX

- GSM antenna, windows montage, connector SMA, FME, SMB

Order no.:

- A-GSM-PWO-425SMA
- A-GSM-PWO-425FME
- A-GSM-PWO-425SMB



GSM ANTENNAS / GPS ANTENNAS

A-GSM-PL1-250XXX



- GSM antenna PLANAR, dualband 1dB, connector SMA,FME,SMB

Order no.:

A-GSM-PL1-250SMA
A-GSM-PL1-250FME
A-GSM-PL1-250SMB



A-GSM-SO-XXX

- GSM antenna, assembling without wire, connector SMA,FME

Order no.:

A-GSM-SO-SMA
A-GSM-SO-FME



A-GSM-RAO-XXX

- GSM antenna, assembling without wire, connector SMA,FME



Order no.:

A-GSM-RAO-SMA
A-GSM-RAO-FME



A-GPS-PW-250XXX

- GPS antenna, windows montage, connector SMA,FME,SMB

Order no.:

A-GPS-PW-250SMA
A-GPS-PW-250FMA
A-GPS-PW-250SMB



GPS ANTENNAS

GPS ANTENNAS / GPS-GSM ANTENNAS

A-GPS-PB-250XXX



- GPS antenna, board montage, connector SMA,FME,SMB

Order no.:

**A-GPS-PB-250SMA
A-GPS-PB-250FME
A-GPS-PB-250SMB**

A-GPS-B-250XXX

- GPS antenna, roof montage, connector SMA,FME,SMB

Order no.:

**A-GPS-B-250SMA
A-GPS-B-250FME
A-GPS-B-250SMB**



A-GPS-M-250XXX



- GPS antenna, magnetic, connector SMA,FME,SMB

Order no.:

**A-GPS-M-250SMA
A-GPS-M-250FME
A-GPS-M-250SMB**

A-GPSGSM-PW-250XXX

- GSP/GSM antenna, windows montage, 28dB, connector SMA,FME,SMB

Order no.:

**A-GPSGSM-PW-250SMA
A-GPSGSM-PW-250FME
A-GPSGSM-PW-250SMB**

GPS-GSM ANTENNAS



GPS-GSM ANTENNAS / WIFI ANTENNAS

A-GPSGSM-PB-250XXX



- GPS/GSM antenna, board montage, 28dB, connector SMA,FME,SMB

Order no.:

A-GPSGSM-PB-250SMA
A-GPSGSM-PB-250FME
A-GPSGSM-PB-250SMB

A-GPSGSM-M-250XXX

- GPS/GSM antenna, magnetic, 28dB,UMTS,bluethooth, connector SMA,FME,SMB

Order no.:

A-GPSGSM-M-250SMA
A-GPSGSM-M-250FME
A-GPSGSM-M-250SMB



A-GPSGSM-B-250XXX



- GPS/GSM antenna, roof montage, 28dB, connector SMA,FME,SMB

Order no.:

A-GPS-B-250SMA
A-GPS-B-250FME
A-GPS-B-250SMB

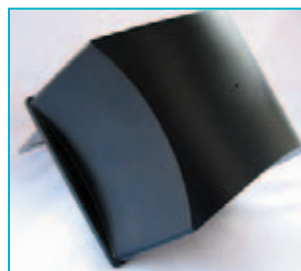
WIFI ANTENNAS

A-WIFI-12

- WIFI/WIMAX antenna, 12dB, connector N(f)

Order no.:

A-WIFI-12



CONNECTORS, DATA AND ANTENNA CABLES

WM OCEAN company offers a spread portfolio of connectors, data and antenna cables from well known manufactures to all types of SIEMENS data modules.

SIM card readers and SIM card holders for all modules

AO-SIMH SIM card holder (for SIM card reader with push button).

AO-SIMR SIM card reader with push button.

AO-SIMT Tip out SIM card reader incl. holder.



Antenna cables for SIEMENS MC55/56, MC75, TC63, TC65, XT55, XT65, XT75, HC15/25 modules

AM-45XX-KAUU10

antenna cable U.FL(f)-U.FL(f), 10 cm

AM-45XX-KAUU20

antenna cable U.FL(f)-U.FL(f), 20 cm

AM-45XX-KAUU40

antenna cable U.FL(f)-U.FL(f), 40 cm

AM-55XX-KAUS10

antenna cable U.FL(f)-SMA(f) 10 cm

AM-55XX-KAUS15

antenna cable U.FL(f)-SMA(f) 15 cm

AM-55XX-KAUS20

antenna cable U.FL(f)-SMA(f) 20 cm

AM-55XX-KAUF15

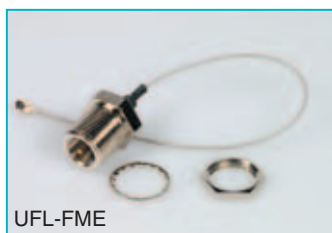
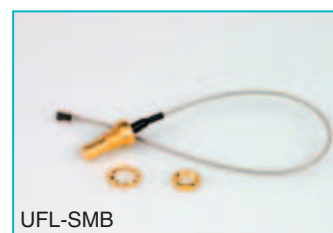
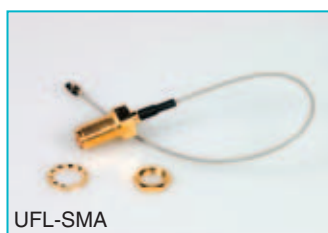
antenna cable U.FL(f)-FME(m) 15 cm

AM-55XX-KAUSMB15

antenna cable U.FL(f)-SMB(f) 15 cm

AM-45-KAUMP10

antenna cable U.FL(f)-MCX 10 cm



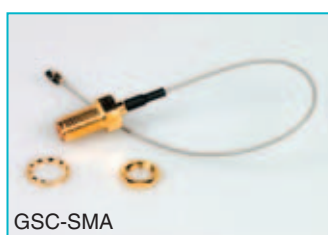
CONNECTORS, DATA AND ANTENNA CABLES

Antenna cables for SIEMENS MC39i and TC35i modules

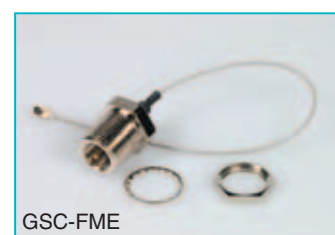
AM-45XX-KAUU10	antenna cable with connector U.FL(f)-U.FL(f), length 10 cm
AM-35XX-KAGO20	antenna cable with connector GSC(f)-open, length 20cm
AM-35XX-KAGG10	antenna cable with connectors GSC(f)-GSC(f), length 10cm
AM-35XX-KAGG20	antenna cable with connectors GSC(f)-GSC(f), length 20cm
AM-35XX-KAGS10	antenna cable with connectors GSC(f)-SMA(f), length 10cm
AM-35XX-KAGS20	antenna cable with connectors GSC(f)-SMA(f), length 20cm
AM-35XX-GFS10	antenna cable with connectors GSC(f)-FME(m) STANDARD, length 10cm
AM-35XX-GFS20	antenna cable with connectors GSC(f)-FME(m) STANDARD, length 20cm



GSC-GSC



GSC-SMA



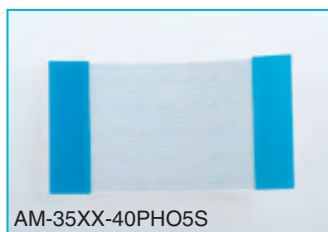
GSC-FME

Connectors and data cables for SIEMENS TC35i, MC39i modules

AM-35iX-40CN	40 pin Hirose ZIF connector with bottom contacts
AM-35XX-40PH08S	40 pin ZIF cable strip 8cm - contacts on the same side
AM-35XX-40PH05S	40 pin ZIF cable strip 5cm - contacts on the same side
AM-35XX-40PH03S	40 pin ZIF cable strip 3cm - contacts on the same side
AM-35XX-40PH05O	40 pin ZIF cable strip 5cm - contacts on the opposite side
AM-35XX-40PH03O	40 pin ZIF cable strip 3cm - contacts on the opposite side
AM-35XX-40PH08O	40 pin ZIF cable strip 8cm - contacts on the opposite side
AM-35XX-40CN	40 pin Molex ZIF connector with top contacts
AM-35XX-CAGX	GSC(m) connector for board
AM-35XX-CLIP	mounting clip for TC35i/MC39i



AM-35XX-CLIP



AM-35XX-40PH05S



AM-35XX-40PH05O



AM-35iX-40CN

CONNECTORS, DATA AND ANTENNA CABLES

Connectors for SIEMENS AC45 modules

AM-45AC-40CN4

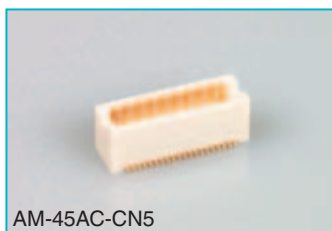
40 pin connector DF12E, 4 mm

AM-45AC-40CN5

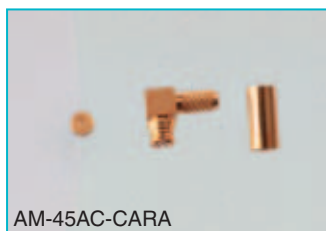
40 pin connector DF12E, 5 mm

AM-45AC-CARA

Right Angle Jack Solder-Crimp



AM-45AC-CN5

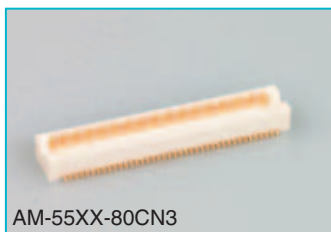


AM-45AC-CARA

Connectors for SIEMENS XT55 modules

AM-55XX-80CN3

80 pin connector DF12E, 3 mm



AM-55XX-80CN3

Connectors for SIEMENS MC55/56, HC15/25 modules

AM-45XX-50CN3

50 pin connector DF12E, 3 mm

AM-45XX-50CN35

50 pin connector DF12E, 3,5 mm

AM-45XX-50CN4

50 pin connector DF12E, 4 mm

AM-45XX-50CN5

50 pin connector DF12E, 5 mm

AM-45XX-50CN3-P

50 pin connector DF12E, 3 mm with location pins

AM-45XX-50CN35-P

50 pin connector DF12E, 3,5 mm with location pins

AM-45XX-50CN4-P

50 pin connector DF12E, 4 mm with location pins

AM-45XX-50CN5-P

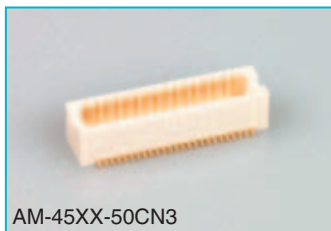
50 pin connector DF12E, 5 mm with location pins

AM-45XX-CAUX

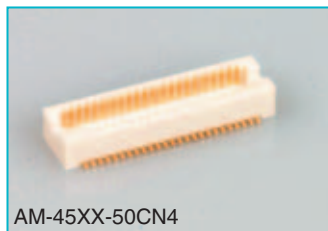
U.FL connector SMT

AM-55XX-CLIP

mounting clip for MC55/56



AM-45XX-50CN3



AM-45XX-50CN4



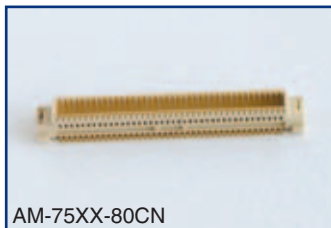
AM-55XX-CLIP

CONNECTORS, DATA AND ANTENNA CABLES

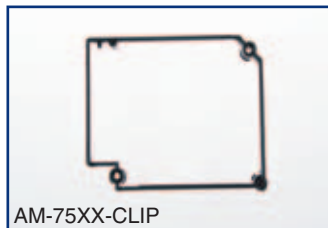
Connectors for SIMENS MC75, TC65, TC63, XT65, XT75 modules

AM-75XX-80CN
AM-75XX-80CN4
AM-75XX-CLIP

80-pin Board-to-Board connector 3mm
80-pin Board-to-Board connector 4mm
mounting clip for MC75/TC65/63



AM-75XX-80CN



AM-75XX-CLIP

Power supplies

AM-35TX-POWER
AM-35PX-POWER

power supply 12V, 500 mA, (connector RJ 6/6)
power supply 12V, 500 mA, (connector RJ 6/6)



AM-35TX-POWER



AM-35PX-POWER

Our products catalogue and detail technical documentations are available on:
WWW.WMOCEAN.COM

SIEMENS modules

ACCESSORIES FOR WIRELESS MODULES SIEMENS	MC 39i	MC 55/56	MC 75	TC 35i	TC 63	TC 65	XT 55	AC 75	XT 65	XT 75	HC15/25
AO-SIMR SIM card reader with push button	•	•	•	•	•	•	•	•	•	•	•
AO-SIMH SIM card holder (for SIM card reader with push button)	•	•	•	•	•	•	•	•	•	•	•
AO-SIMT Tip out SIM card reader incl. holder	•	•	•	•	•	•	•	•	•	•	•
AM-35iX-40CN 40pin Hirose ZIF connector with bottom contacts	•			•							
AM-35XX-40PH08S 40 pin ZIF cable strip 8 cm - contacts on the same side	•			•							
AM-35XX-40PH05S 40 pin ZIF cable strip 5 cm - contacts on the same side	•			•							
AM-35XX-40PH03S 40 pin ZIF cable strip 3 cm - contacts on the same side	•			•							
AM-35XX-40PH08O 40 pin ZIF cable strip 8 cm - contacts on the opposite side	•			•							
AM-35XX-40PH05O 40 pin ZIF cable strip 5 cm - contacts on the opposite side	•			•							
AM-35XX-40PH03O 40 pin ZIF cable strip 3 cm - contacts on the opposite side	•			•							
AM-35XX-40CN 40 pin Molex ZIF connector with top contacts	•			•							
AM-35XX-KAGO20 antenna cable with connectors GSC(f)-open, length 20 cm	•			•							
AM-35XX-KAGG10 antenna cable with connectors GSC(f)-GSC(f), length 10 cm	•			•							
AM-35XX-KAGG20 antenna cable with connectors GSC(f)-GSC(f), length 20 cm	•			•							
AM-35XX-KAGS10 antenna cable with connectors GSC(f)-SMA(f), length 10 cm	•			•							
AM-35XX-KAGS20 antenna cable with connectors GSC(f)-SMA(f), length 20 cm	•			•							
AM-35XX-CAGX GSC(m) connectors for board	•			•							
AM-35XX-GFS10 antenna cable with connectors GSC(f)-FME(m) STANDARD, length 10 cm	•			•							
AM-35XX-GFS20 antenna cable with connectors GSC(f)-FME(m) STANDARD, length 20 cm	•			•							

SIEMENS modules

	MC 39i	MC 55/56	MC 75	TC 35i	TC 63	TC 65	XT 55	AC 75	XT 65	XT 75	HC15/25
AM-35XX-CLIP mounting clip for TC35i/MC39i	•			•							
AM-45XX-50CN3 50 pin connector DF12E, 3 mm		•									•
AM-45XX-50CN35 50 pin connector DF12E, 3,5mm		•									•
AM-45XX-50CN4 50 pin connector DF12E, 4 mm		•									•
AM-45XX-50CN5 50 pin connector DF12E, 5mm		•									•
AM-45XX-50CN3-P 50 pin connector DF12E, 3 mm with location pins		•									•
AM-45XX-50CN35-P 50 pin connector DF12E, 3,5 mm with location pins		•									•
AM-45XX-50CN4-P 50 pin connector DF12E, 4 mm with location pins		•									•
AM-45XX-50CN5-P 50 pin connector DF12E, 5 mm with location pins		•									•
AM-45XX-CAUX U.FL connector SMT		•	•		•	•	•		•	•	•
AM-45XX-KAUU10 antenna cable U.FL(f), both sides, 10 cm		•	•		•	•	•		•	•	•
AM-45XX-KAUU20 antenna cable U.FL(f), both sides, 20 cm		•	•		•	•	•		•	•	•
AM-45XX-KAUU40 antenna cable U.FL(f), both sides, 40 cm		•	•		•	•	•		•	•	•
AM-55XX-KAUS10 antenna cable U.FL(f)-SMA(f) 10 cm		•	•		•	•	•		•	•	•
AM-55XX-KAUS15 antenna cable U.FL(f)-SMA(f) 15 cm		•	•		•	•	•		•	•	•
AM-55XX-KAUS20 antenna cable U.FL(f)-SMA(f) 20 cm		•	•		•	•	•		•	•	•
AM-55XX-KAUF15 antenna cable U.FL(f)-FME(f) 15 cm		•	•		•	•	•		•	•	•
AM-55XX-KAUSMB15 antenna cable U.FL(f)-SMB(f) 15 cm		•	•		•	•	•		•	•	•
AM-45-KAUMP10 antenna cable U.FL(f)-MCX 10 cm		•	•		•	•	•		•	•	•

SIEMENS modules

	MC 39i	MC 55/56	MC 75	TC 35i	TC 63	TC 65	XT 55	AC 75	XT 65	XT 75	HC15/25
AM-75XX-80CN 80-pin Board-to-Board connectors 3 mm			•		•	•		•	•	•	
AM-75XX-80CN4 80-pin Board-to-Board connectors 4 mm			•		•	•		•	•	•	
AM-75XX-CLIP mounting clip for MC75/TC65/63			•		•	•					
AM-55XX-80CN3 80 pin connector DF12E, 3 mm							•				
AM-55XX-CLIP mounting clip for MC55/56		•									
AM-45AC-40CN4 40 pin connector DF12E, 4 mm											
AM-45AC-40CN5 40 pin connector DF12E, 5 mm											
AM-45AC-CARA Right Angle Jack Solder-Crimp								•			

**Declaration of RoHS compliance
(according to Directive 2002/95/EC of the European Parliament)**

Dir Sir or Madam,

Hereby we confirm that our products do not contain more than 0.1 percent weight of lead, merkury, hexavalent chromium, polobrominated biphenyls (PBBs) or polobrominated diphenyls (PBDs) per homogeneous material or more than 0.01 percent weight of cadmium per homogeneous material so they can be used for products being in the scope of Directive 2002/95/EC of the European Parliament and of the Council of 27th January 2003 on the restriction of the use of certain hazardous substance in electrical and electronic equipment (RoHS)



lead free



WM OCEAN s.r.o.

Pod Vinicí 2028/20

143 01 Prague 4

Czech Republic

Tel: +420 225 371 777

Fax: +420 225 371 779

e-mail: wmocean@wmocean.com

www.wmocean.com