

# Wireless Modules MC55/56

## Reduce the size and maximize the connectivity

35 x 32.5 x 2.95 mm – the MC55/56 is the smallest double Tri-Band wireless module on the world market. Despite such miniaturization, the MC55/56 is a fully-fledged voice and data communications solution designed for use in M2M and mobile computing applications.

On account of its small dimensions, the GPRS Class 10 module gives you a high amount of flexibility when incorporating voice and data communications into your own application. The built-in TCP/IP stack enables you to set up a connection to the Internet in no time at all. Together the two Tri-Band models that are available – the MC55 and MC56 – provide coverage of all the GSM networks in the world, which means they allow your own application to be used globally.

With all its top-class communications features plus the built-in TCP/IP stack, the MC55/56 is the key element in a broad range of M2M applications. In addition to the driver for Microsoft® Windows Mobile™ based devices, its amazingly compact design makes it predestined for integration in PDAs, laptops, PCMCIA cards, and many other types of communications equipment.

Like all Siemens modules, the MC55/56 has received full type approval (FTA) and can therefore be used across the globe. In fact, it's been certified by the largest carriers worldwide, including US operators.



TRI-BAND



GPRS CLASS 10



HIGHLY COMPACT SIZE



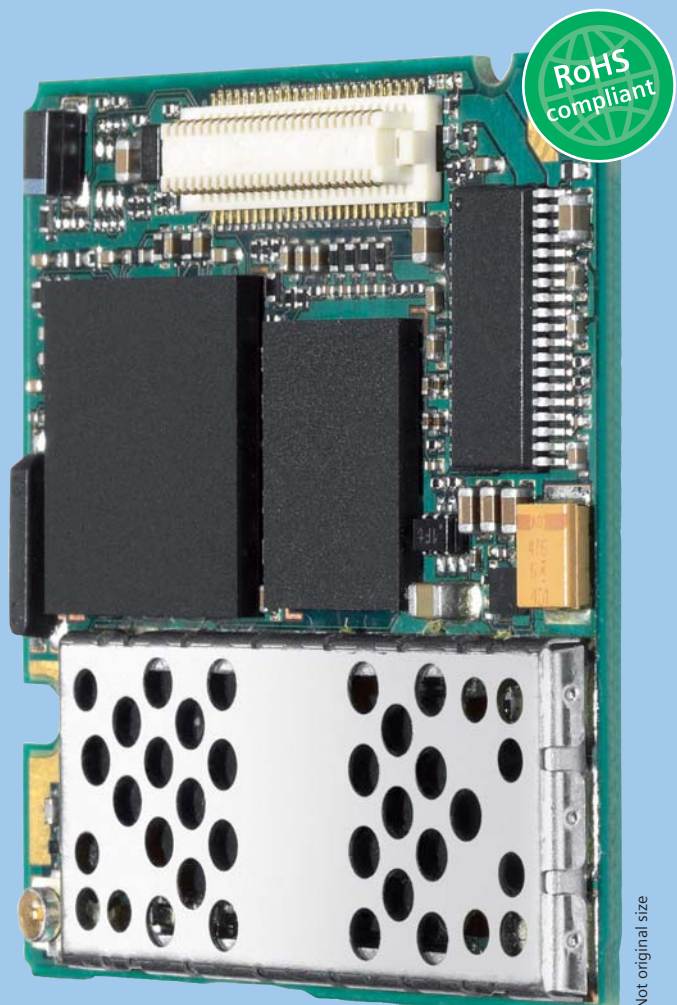
RIL DRIVER



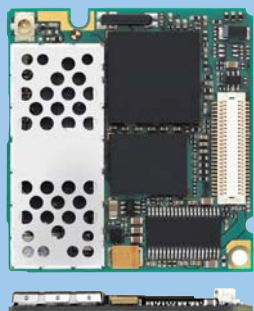
TCP/IP CONNECTIVITY



FAX FUNCTIONALITY



Not original size



Original size

# Wireless Modules MC55/56

Reduce the size and  
maximize the connectivity

## General features:

- Tri-Band GSM 900/1800/1900 MHz (MC55)
- Tri-Band GSM 850/1800/1900 MHz (MC56)
- GPRS multi-slot class 10
- Compliant to GSM phase 2/2+
- Output power:
  - Class 4 (2 W) for EGSM850
  - Class 4 (2 W) for EGSM900
  - Class 1 (1 W) for GSM1800
  - Class 1 (1 W) for GSM1900
- Control via AT commands (Hayes 3GPP TS 27.007, TS 27.005)
- SIM Application Toolkit
- TCP/IP stack access via AT commands
- Internet Services: TCP, UDP, HTTP, FTP, SMTP, POP3
- Supply voltage range: 3.3 ... 4.8 V
- Power consumption
  - Power down 50 µA
  - Sleep mode (registered DRX = 5) 3.0 mA
  - Speech mode (average) 260 mA
  - GPRS class 10 (average) 450 mA
- Temperature range
  - Normal Operation: -20°C to +70°C
  - Restricted Operation: -25°C to +75°C
  - Switch off: +80°C
  - Storage: -40°C to +85°C
- Dimensions: 35 x 32.5 x 2.95 mm (incl. B-to-B-Connector: 3.1 mm)
- Weight: 5.5 g

## Specifications for GPRS data transmission:

- GPRS class 10: max. 85.6 kbps (downlink)
- Mobile station class B
- PBCCH support
- Coding schemes CS 1-4

## Specification for CSD data transmission:

- Up to 14.4 kbps
- V.110
- Non-transparent mode
- USSD support

## Specification for SMS:

- Point-to-point MO and MT
- SMS cell broadcast
- Text and PDU mode

## Specification for fax:

- Group 3, class 2

## Specification for voice:

- Triple-rate codec for HR, FR, and EFR
- Adaptive multi-rate AMR
- Basic hands-free operation
- Echo cancellation
- Noise reduction

## Special features:

- RIL software for Microsoft® Windows Mobile™ 5.0 based devices
- Multiplexer driver for Microsoft® Windows

## Interfaces:

- Hirose U.FL-R-SMT 50 Ohm antenna connector
- Antenna solder pad
- Hirose 50-pin board-to-board connector
  - Power supply
  - Audio: 2 x analog, 1 x digital
  - SIM card interface 3 V
  - 2 x serial interface (ITU-T V.24 protocol)
  - Battery charger

## Approvals:

- R&TTE, FCC, UL, IC, GCF, PTCRB, CE
- Local approvals and network operator certifications

More about Siemens Wireless Modules at: [www.siemens.com/wm](http://www.siemens.com/wm)

Global thinking, local understanding.



U.K. ← Football → USA

## Here, there and everywhere

Global but local - Siemens lives up to this motto! Not only are we present locally but we are also able to open up amazing global business perspectives for you! Find the details of your local Siemens contact partner here: [www.siemens.com/wm-contact](http://www.siemens.com/wm-contact)

## Technical Support

Our application engineers support you from the design-in phase over the integration of the module into the application to the certification process.

## We protect your business

Profit from our strong Intellectual Property Rights position (IPR) – guarded by our legal professionalism you secure the fruits of your business effort.

Our technology portfolio covers · +++ Java™ Open Platform +++ EDGE +++ GPS +++