Wireless Module TC63
Top-of-the-scale M2M connectivity

GPRS Class 12, Quad-Band technology, plus integrated TCP/IP stack – with features like these, the TC63 is able to facilitate top-class GSM/GPRS communication. Since it doesn't include the software developer's platform that characterizes the TC65, it's predestined for use in M2M applications that already include a micro controller and only require a high performance wireless communications connection.

The Quad-Band technology with which the TC63 is equipped means you can employ your product in any GSM network across the globe. Besides this, the TCP/IP stack integrated in the module enables data to be transferred via the Net – to a company server, for instance. Standard industrial interfaces such as serial ports and an I^{2}C bus make it possible to connect the wireless module to your own M2M application in a simple way.

Together with the TCP/IP stack, the broad range of interfaces and the enhanced GSM/GPRS features included, the TC63 can create new business opportunities in fields like security, vending machines, barcode scanners, POS terminals, GSM modems, fleet management, tracking, and a great many others.

As it also has full type approval (FTA), there's nothing stopping you from producing a product that's ready for market launch within a very short time – the TC63 has been approved by major network carriers around the world, including US Operators.

QUAD-BAND

GPRS CLASS 12

RIL DRIVER
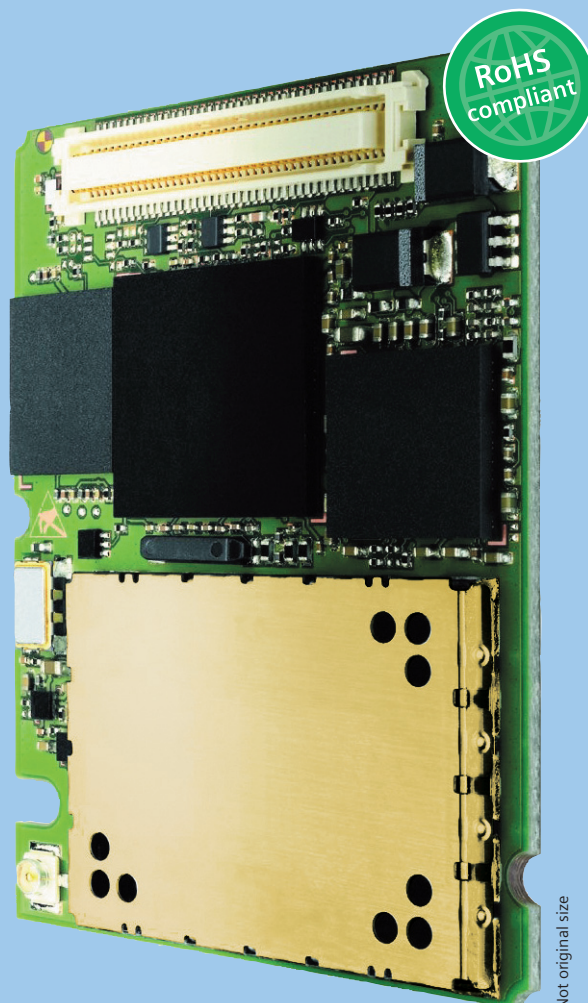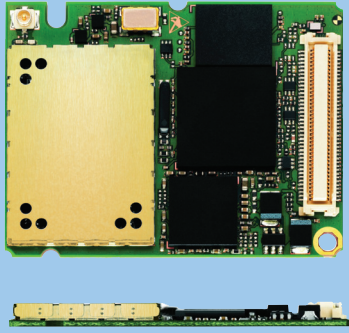
TCP/IP CONNECTIVITY

SIM ACCESS PROFILE

USB

INDUSTRIAL INTERFACES

FAX FUNCTIONALITY

RoHS compliant

Not original size

www.siemens.com/wm

Wireless Module TC63
Top-of-the-scale M2M connectivity

Original size

General features:
- Quad-Band GSM 850/900/1800/ 1900 MHz
- GPRS multi-slot class 12
- GSM release 99
- 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 and 27.005)
- SIM Application Toolkit (release 99)
- TCP/IP stack access via AT commands
- Internet Services: TCP, UDP, HTTP, FTP, SMTP, POP3
- Supply voltage range: 3.2 ... 4.5 V
- Power consumption:
  - Power down 50 µA
  - Sleep mode (registered DRX = 6) 3.0 mA
  - Speech mode (average) 300 mA
  - GPRS class 12 (average) 600 mA
- Charging control for Lithium batteries
- Temperature range
  - Normal Operation: -30°C to +70°C
  - Restricted Operation: -30°C to +75°C
  - Switch off: +80°C
  - Storage: -40°C to +85°C
- Dimensions 34 x 45 x 3.5 mm
- Weight 7.5 g

Specification for GPRS data transmission:
- GPRS class 12
- 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 1

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:
- Character framing 7E1 and 8E1 at serial interface
- Programmable module reset
- SIM Access Profile integrated
- 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
- Molex 80-pin board-to-board connector
  - Power supply
  - Audio: 2 x analog, 1x digital
  - 2 x serial interfaces (ITU-T V.24 protocol)
  - USB 2.0 full speed
  - SIM card interface 3 V, 1.8 V
  - I²C bus

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**

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**

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 +++**