

SIEMENS
mobile



Designing the future

Wireless
Modules



Be inspired

Based on the powerful J2ME™ standard, the new Dual-Band GSM/GPRS module TC45 enables easy integration of your application software. It shortens time to market by reducing development efforts, cutting costs for extra components and shrinking hardware footprints by increasing the integration level. The TC45 with Java technology can be used with a wide range of applications:

- Metering
- Fleet management & tracking systems
- POS terminals/scanners
- Vending machines
- Security systems
- Voice applications
- GSM gateways

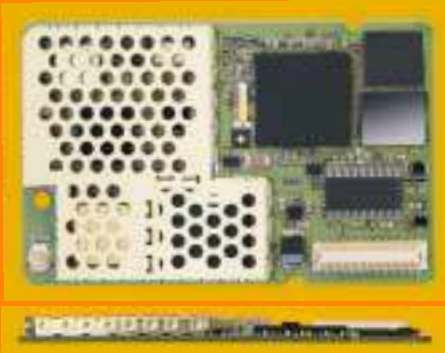
Thanks to the Java software developers kit, Wireless Modules offer you the highest flexibility with an extremely reliable GPRS/GSM subsystem.

For contact and more information please visit www.siemens.com/wm

TC45
with GPRS & Java™
pre-release

Cellular Engine TC45 with GPRS & Java™ – the open platform for boundless communication solutions

The Dual-Band GSM/GPRS module TC45 with integrated Java technology and up to nine GPIO's enables easy integration of your application. The PC-Emulator with debug environment provide you an excellent opportunity to create and test your application software. TC45 offers the opportunity to update your application software over the air (OTA) as well as over a serial interface. The use of the internal TCP/IP protocol stack enables a trouble-free internet access. As all Siemens modules full type approval (FTA) according R&TTE as well as GCF ensured.



Wireless Modules Benefits and hard facts

Original size

General features:

- Dual-Band EGSM900 and GSM1800
- Compliant with GSM phase 2/2+
- Output power:
 - Class 4 (2 W) for EGSM900
 - Class 1 (1 W) for GSM1800
- Control via AT commands
- SIM Application Toolkit
- Multiplex serial interface, RS232 compatible
- Supply voltage range 3.2... 4.5 V
- Power save mode
- Low power consumption:
 - Idle mode (registered) 25 mA
 - Speech mode 300 mA (average)
 - GPRS mode 360 mA (average)
 - Peak < 2.5 A
 - Power down 50 µA
 - Sleep mode 3.0 mA
- Dimensions: 53 x 34 x 3.5 mm
- Weight: 10 g
- Ambient temperature:
 - 20 °C... + 55 °C
- Auto switch-off at + 70 °C

Specifications for audio:

- Half rate (HR)
- Full rate (FR)
- Enhanced full rate (EFR)
- Basic hands-free operation
 - Echo cancellation
 - Noise reduction

Specifications for fax:

- Group 3, class 2, 1

Specifications for open software platform:

- J2ME™
- Flash file system (300 kB)
- PC-emulator with debug environment
- CLDC 1.0 standard
- IMP 1.0 standard

Specifications for SMS:

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

Specifications for data transfer:

- GPRS class 8
- Full PBCCH support
- MS class B
- CS 1 – 4
- CSD up to 14.4 kbps
- USSD
- Non transparent mode
- V.110

Interfaces:

- 50-pin board-to-board
 - Power supply
 - SIM 3 V
 - RS232 bidirectional bus
 - Auto bauding
 - Analog audio
 - 9 GPIO's configurable as digital audio interface, second serial interface or digital I/O ports

- Antenna connector Hirose, 50 Ω

Additional features:

- Phone book
- Multiparty call
- Call diverting
- Real-time clock
- Alarm management
- Multiple ringing tones
- Dual Tone Multi Frequency
- Application software update over the air (OTA)

More about Wireless Modules at:
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design and availability

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