

**SIEMENS**



# TC63 – Top-of-the-scale m2m Connectivity

## Wireless Modules



Customers who require a high-quality GSM/GPRS wireless module for their m2m applications but don't need the TC65's Java™ platform should take a close look at the new TC63. Featuring quadband technology, GPRS class 12, and an integrated TCP/IP stack, this module enables GSM/GPRS connectivity of the highest standard.

You can make use of the TC63 for your new ideas in the following business segments:

- Security applications
- Vending machines
- Fleet management
- POS devices and barcode scanners
- Metering and remote monitoring
- GPRS modems
- ... and many more.

Siemens is offering the TC63 to customers in conjunction with technical services to match their individual needs. So if you opt for this module, you are also deciding in favor of all-around professional support right from the start.

# TC63

# TC63 – global, easy to integrate, and as tough as can be

The quadband technology incorporated in the TC63 makes it suitable for use in any GSM network anywhere in the world. Being equipped with two serial interfaces, USB, I<sup>2</sup>C bus, and an integrated TCP/IP stack, the TC63 provides flexible and wide-range connectivity. In addition, the module is capable of operating at temperatures from - 30 to + 65 °C, which is required by many m2m applications. As far as environmental friendliness is concerned, the module is ahead of the times: the TC63 is lead-free, meeting the European requirement on limiting the use of certain hazardous substances in electrical and electronic devices (RoHS).



## Technical Data

Original size

### General features

- Quadband:  
850/900/1800/1900 MHz
- GSM release 99
- Output power:
  - Class 4 (2 W) for EGSM 850 and 900
  - Class 1 (1 W) for GSM 1800 and 1900
- AT commands Hayes GSM 07.05 and GSM 07.07
- SIM application toolkit release 99
- Supply voltage range: 3.2 to 4.5 V
- Recommended supply voltage: 3.8 +/- 0.2 V
- Power consumption:
  - Power down 50 µA
  - Sleep mode (registered DRX = 6) 3 mA
  - Talk mode (average) 300 mA
  - GPRS class 12 (average) 600 mA
- Charging control for Lithium batteries
- Dimensions 34 x 45 x 3.5 mm
- Weight < 10 g
- Ambient temperature range: - 30 to + 65 °C
- Automatic switch off at + 75 °C

### Specification for GPRS data transmission

- Class 12 multislot
- PBCCH support
- Coding scheme 1 to 4
- Class B mobile station

### Specification for CSD data transmission

- Up to 14.4 kbit/s
- V.110
- Non-transparent mode
- USSD support

### Specification for fax

- Group 3, class 1

### Specification for voice

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

### Specification for SMS

- Via GSM or GPRS
- Point-to-point MO and MT
- Text and PDU mode
- SMS cell broadcast

### Special features

- TCP/IP stack access via AT commands
- Character framing 7E1 and 8E1 at serial interface
- Programmable module reset

### Approvals

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

### Interfaces

- Molex 80-pin board-to-board connector
- Hirose U.FL 50 ohm antenna connector
- Antenna solder pad
- Audio: 2 x analog, 1 x digital
- 2 serial interfaces with the ITU-T V.24 protocol
- USB 2.0 full speed
- SIM card interface, 3 V, 1.8 V
- I<sup>2</sup>C bus

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

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Wireless Modules  
Haidenauplatz 1  
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Subject to changes in technology,  
design and availability  
Order No.:  
A31001-W25-A320-X-7600  
Printed in Germany