

# 2G

## Focus products



**CINTERION**  
WIRELESS MODULES

### Wireless Module MC55i Quad-Band miniaturized



Focus  
Product



Quad-Band



Highly  
Compact Size



GPRS  
Class 10



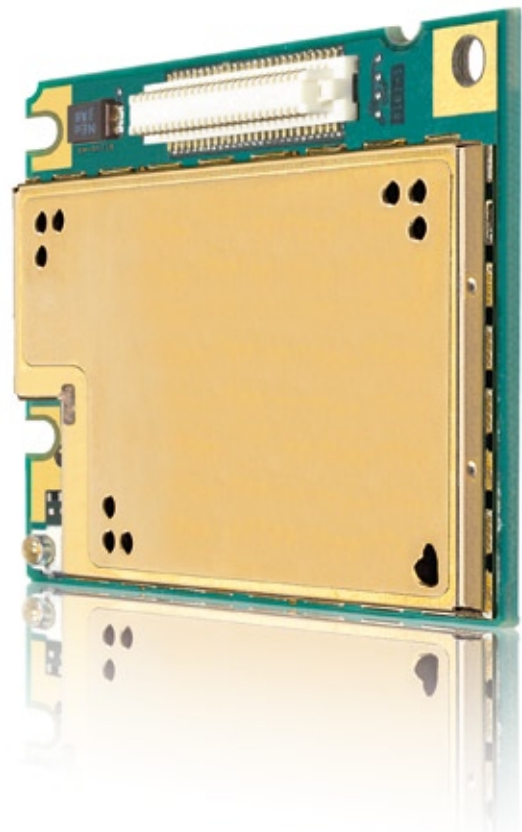
RIL Driver



TCP/IP  
Connectivity



FAX Functionality



Following up the successful MC55/56 wireless modules, the MC55i offers improved functionality while remaining compatible with its predecessor. Alongside highest reliability and quality the new MC55i comes with an optimized feature set.

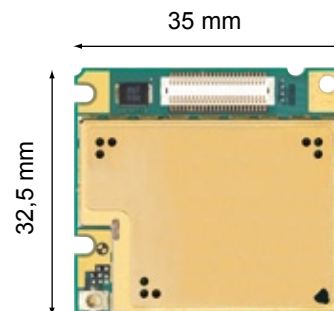
This module packs a Quad-Band GSM/GPRS baseband and TCP/IP connectivity based on GPRS Class 10 data transmission into a very small form factor. Featuring an even more stable but still compatible mount, full shielding, and small size, it brings the benefits of utmost flexibility and robustness to your development efforts.

On top of all this, the MC55i offers a RIL driver for Microsoft® Windows Mobile™ 6-based devices. Equipped with this driver, powerful communication features and interfaces, and an ingenious mounting concept, the MC55i is your all-rounder of choice for machine-to-machine and mobile computing, including metering, security, vending, POS, PCMCIA cards, laptops, and many more applications.

Like all Cinterion modules, the MC55i comes with full type approval (FTA) enabling use across the globe. It has even been certified by the largest carriers worldwide, including US operators.

# Wireless Module MC55i

## Quad-Band miniaturized



### General features

- Quad-Band GSM  
850/900/1800/1900 MHz
- 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 Server/Client, UDP, HTTP, FTP, SMTP, POP3
- Supply voltage range: 3.3 ... 4.8 V
- Power consumption typically:
  - Power down: 50  $\mu$ A
  - Sleep mode  
(fully registered DRX = 9): 2.5 mA
  - Speech mode (850/900MHz): 260 mA
  - GPRS class 10 (850/900MHz): 450 mA
- Operating Temperature Range:
  - -40°C to +70°C
  - Protective shutdown
  - 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

### Specification for GPRS data transmission

- GPRS class 10: max. 86 kbps (DL)
- 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 voice

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

### Specification for fax

- Group 3, class 2 and class 1

### Special features

- RIL driver for Microsoft® Windows Mobile™ based devices
- Multiplex driver for Microsoft® Windows XP™ and Microsoft® Windows Vista™
- Customer IMEI as variant

### Interfaces

- U.FL-R-SMT 50  $\Omega$  antenna connector
- Antenna solder pad
- 50-pin board-to-board connector
  - Power supply
  - Audio: 2 x analog, 1 x digital
  - SIM card interface 1.8 V, 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

### Cinterion Global Support

Local engineers, a competent helpdesk, a dedicated team of R&D specialists and an advanced development center are the hallmarks of our leading support offer.

The Cinterion support includes:

- Personal design-in consulting for hardware and software
- Extensive RF test capabilities
- GCF/PTCRB conform pretests to validate approval readiness
- Guidelines for local approvals and acceptances
- Regular training workshops



Cinterion Wireless Modules  
St-Martin-Str. 53  
81669 Munich, Germany

Further information about our products and services is also accessible via [www.cinterion.com](http://www.cinterion.com)

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