Wireless Module MC55i

Quad-Band miniaturized

CINTERION
WIRELESS MODULES

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 such as PDAs and smartphones. 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.

Quad-Band
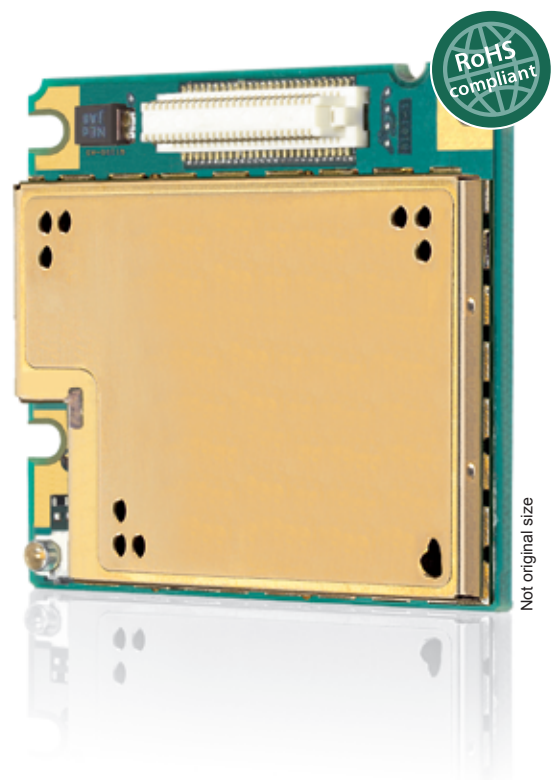
GPRS Class 10

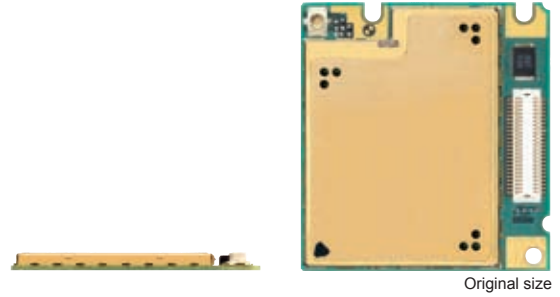Highly Compact Size

RIL Driver

TCP/IP Connectivity

FAX Functionality

RoHS compliant

Not original size

Wireless Module MC55i
Quad-Band miniaturized

Original size

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, 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
  - Operational Temperature Range:
    -20°C to +70°C
  - Restricted Operation: -40°C to +70°C
  - Switch off: < -40°C and > +70°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

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 fax:
- Group 3, class 2 and 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:
- 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 Ω 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

Global thinking, local understanding.

U.K. ← Football → USA

Here, there and everywhere
Global but local – Cinterion 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 Cinterion contact partner here: www.cinterion.com

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   +++   HSDPA   +++