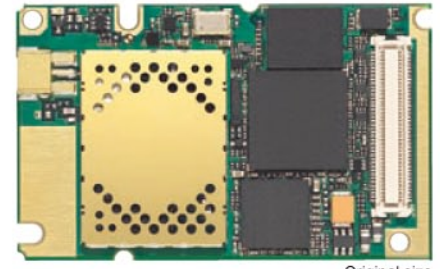


# Wireless Module AC75

## The robust application platform for worldwide wireless automotive solutions



Original size

**General features:**

- Quad-Band
  - GSM 850/900/1800/1900 MHz
- EDGE (E-GPRS) multi-slot class 10
- GPRS multi-slot class 12
- GSM release 99
- Output power:
  - Class 4 (2W) for EGSM850
  - Class 4 (2W) for EGSM900
  - Class 1 (1W) for GSM1800
  - Class 1 (1W) 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: 3.3 ... 4.5 V
- Power consumption:
  - Power down 50 µA
  - Sleep mode (registered DRX = 5) 4.6 mA
  - Speech mode (average) 335 mA
  - GPRS class 12 (average) 710 mA
- Charging control for Lithium batteries
- Temperature range
  - Operation: -30°C to +85°C
  - Switch off: +93°C
  - Storage: -40°C to +85°C
- Dimensions: 33.9 x 55 x 3.15 mm
- Weight: approx. 8.5 g

**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
- Enhanced hands-free operation according to VDA Specification for hands-free terminals, Version 1.5

**Specification for EDGE data transmission:**

- EDGE class 10: max. 236.8 kbps (DL)
- Mobile station class B
- Modulation and coding scheme MCS 1-9

**Specification for GPRS data transmission:**

- GPRS class 12: max. 86 kbps (DL & UL)
- Mobile station class B
- PBCC support
- Coding schemes CS 1-4

**Specification for CSD data transmission:**

- Up to 14.4 kbps
- V.110
- Non-transparent mode
- USSD support

**Approvals:**

- R&TTE, FCC, UL, IC, GCF, PTCRB, e-mark, CE
- Local approvals and network operator certifications

**Java™ features:**

- CLDC HotSpot™ Implementation 1.1.2
- Java ME™ profile IMP-NG
- Secure data transmission with HTTPS and PKI

**Open application resources:**

- ARM® Core, Blackfin® DSP
- Memory: 400 KB (RAM), 1.7 MB (Flash)
- Improved power-saving modes
- On-device-debugging

**Specification for fax:**

- Group 3, class 1

**Interfaces:**

- Rosenberger SMP 50 Ω antenna connector (meets automotive requirements)
- 80-pin board-to-board connector
  - Power supply
  - Audio: 2x analog, 1x PCM
  - 2x serial interfaces (ITU-T V.24 protocol)
  - USB 2.0 full speed
  - SIM card interface 3 V, 1.8 V
  - I<sup>2</sup>C bus and SPI bus
  - Multiple GPIOs, PWM

**Special automotive features:**

- SIM Access Profile integrated
- Extended temperature range
- Measurement of module temperature
- Antenna diagnostic
- Emergency call even at high temperature
- IMDS listed & GASDL compliant
- ISO/TS16949 development and manufacturing
- RIL software for Microsoft® Windows Mobile™ 5.0 based devices
- Multiplexer driver for Microsoft® Windows

**Over-the-air update:**

- Application SW: OTAP
- Firmware: FOTA (OMA compliant)

*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](http://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 +++