

## AC75i / AC65i



GPRS / EDGE  
Class 12



Quad-Band



RLS Monitoring



Multi SIM  
Interface



eCall  
compliant



Advanced  
Temperature  
Management



Antenna  
Diagnostics



Embedded  
Processing



Industrial  
Interfaces



# AUTOMOTIVE

Cinterion® AC75i / AC65i Wireless Module

Highest Reliability and Quality for Automotive Applications

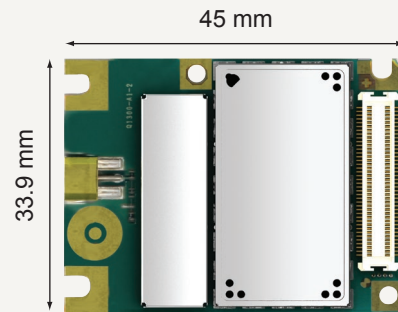
# Cinterion® AC75i / AC65i Wireless Module

## Highest Reliability and Quality for Automotive Applications

Gemalto M2M has a long history of successful products for automotive applications. Gemalto M2M automotive grade products are designed to meet the requirements of the automotive industry offering special automotive features as well as compliance with all relevant quality standards such as TS16949. Additionally Gemalto M2M offers a broad range of support packages and a full life cycle service concept.

The AC75i / AC65i represent the 6th generation of dedicated automotive modules offering advanced telematic features and are prepared to meet the requirements of the European eCall initiative. Both products are fully type approved including local network provider approvals creating a perfect basis for applications like toll collect, telematics, fleet management as well as emergency call, breakdown or roadside assistance.

### Highest Reliability and Quality for Automotive Applications



#### Gemalto M2M Support includes:

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



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.

## Cinterion® AC75i / AC65i Features

### GENERAL FEATURES

- > Quad-Band GSM:  
850 / 900 / 1800 / 1900 MHz
- > EDGE (E-GPRS) multi-slot class 12 (AC75i)
- > 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: 3.2 ... 4.5 V
- > Charging control for Lithium batteries
- > Temperature range -40 °C to +85 °C
  - > Protection switch off
- > Dimensions: 33.9 × 45 × 3.3 mm
- > Weight: approx. 8.5 g

## SPECIFICATION

- > EDGE class 12 data rates (AC75i)  
DL: max. 236.8 kbps, UL: max. 236.8 kbps  
Mobile station class B  
Modulation and coding scheme MCS 1-9
- > GPRS class 12  
DL: max. 86 kbps, UL: max. 86 kbps  
Mobile station class B  
PBCCH support  
Coding schemes CS 1-4
- > CSD Data Transmission up to 14.4 kbps, V.110,  
non-transparent
- > USSD support
- > Voice specification:  
Triple-rate codec for HR, FR, and EFR.  
Adaptive multi-rate AMR.  
Enhanced hands-free operation according to VDA  
Echo cancellation, noise suppression, DTMF
- > Fax Group 3, Class 1
- > Over-the-air Update  
Application SW: OTAP  
Firmware: FOTA
- > SMS Specifications:  
Point-to-point MO and MT  
SMS cell broadcast  
SMS over GPRS or CSD  
SMS text and PDU mode

## JAVA™ FEATURES (AC65i)

- > CLDC HotSpot™ Implementation 1.1.2
- > Java ME™ profile IMP-NG
- > Secure data transmission with HTTPS and PKI
- > Improved power-saving modes
- > Multi-threading
- > On-device-debugging

## SPECIAL AUTOMOTIVE FEATURES

- > Prepared for European eCall
- > SIM Access Profile integrated
- > RLS monitoring (e.g. for jamming detection)
- > Advanced temperature management
- > Measurement of module temperature
- > Antenna diagnostic (up to 2 ext. antennas)
- > Emergency call at high temperature
- > IMDS listed & GASDL compliant
- > TS16949 development and manufacturing
- > RIL software for Microsoft® Windows  
Mobile™ based devices

## INTERFACES

- > Rosenberger SMP 50 Ω antenna connector  
for automotive environment
- > Antenna pad for contact springs
- > 80-pin board-to-board connector
  - > Power supply
  - > Audio: 2 × analog, 1 × digital (PCM)
  - > 2 × serial interfaces (ITU-T V.24 protocol,  
up to 921 kbps)
  - > USB 2.0 full speed
  - > SIM card interface 3 V, 1.8 V
  - > I<sup>2</sup>C bus and SPI bus
  - > ADC input
  - > DAC output with PWM
  - > Multiple dedicated GPIOs

## DRIVERS

- > Multiplexer driver for Microsoft® Windows

## APPROVALS

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

**For more information, please visit**

[m2m.gemalto.com](http://m2m.gemalto.com), [www.facebook.com/gemalto](http://www.facebook.com/gemalto), or Follow @gemaltom2m on twitter.

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