

# TC65i



Powerful Processor Large Memory



SIM Access Profile



Quad-Band



Tunneling Mode



EDGE / GPRS Class 12



Industrial Interface



FOTA



USB



Java™



TCP/IP





# OTHER FAMILIES

Cinterion® TC65i Wireless Module Full Featured, Truly Industrial and Scalable Platform

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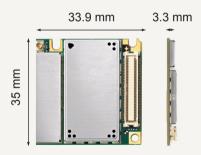
#### Connector

The Cinterion TC65i module offers scalability, compatibility and an easy path to future upgrades and added functionality as technology needs expand.

The award winning product features a flexible, easy to maintain and reliable mounting concept along with optimized size and performance. The refresher with Release 2 adds several additional features such as tunneling mode or a location API for the Java variant.

The product is based on an advanced processor design and the field proven and reliable Cinterion M2M software stack. The latest chip technology enables high performance, improved efficiency and the benefit of long-term availability. Like all Cinterion modules the TC65i includes approval (FTA) enabling use across the globe.

## Full Featured, Truly Industrial and Scalable Platform



**EDGE Class 12** – The highest symmetric data speed (236 kbps in uplink and downlink) for M2M applications requiring quick data transmissions.

**GPRS Class 12** – High symmetric data speed (86 kbps in uplink and downlink) for M2M applications.

**RLS Monitoring** – Remote Link Stability Monitoring providing network performance information which enables for example effective customized jamming detection.

**Tunneling mode** – A smart way that allows the mcirocontroller to control any device that has a serial interface like GPS receiver or NFC device through the module and enable transparent communication.

Java™ – Java offers easy and fast application development, a broad choice of tools, high code reusability, easy maintenance, a proven security concept, on-device debugging as well as multi-threading programming and program execution

**FOTA** – The new TC65i-X comes with an extended memory that allows customers to use the additional memory also for integrated Firmware Update Over The Air (FOTA).

#### 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® TC65i Features

#### **GENERAL FEATURES**

- > Control via AT commands (Hayes, 3GPP TS 27.007 and 27.005)
- > Circuit Switched Data: Up to 14.4 kbps
- > SMS, PDU mode, cell broadcast
- > Fax: Group 3, class 1
- > TCP/IP stack access via AT commands and transparent TCP service
- > Internet services: TCP, UDP, HTTP, FTP, SMTP, P0P3, Ping
- > Supply voltage range: 3.2 ... 4.5 V
- > Operational temperature range:
  - > -40 °C to +75 °C
  - > switch off: > +80 °C
- > Dimensions: 33.9 × 35.0 × 3.3 mm
- > Weight: 7.5 g

#### SPECIFICATION FOR GPRS DATA TRANSMISSION

> EDGE Class 12

DL: max. 86 kbps, UL: max. 86 kbps

> Coding schemes CS 1-4

#### SPECIFICATION FOR VOICE

- > Triple-rate codec for HR, FR, and EFR
- > Adaptive multi-rate AMR
- > Hands-free operation, Echo cancellation & Noise reduction

#### JAVA™ FEATURES

- > Java™ profile IMP-NG & CLDC 1.1 HI, GPS support
- > Multi-threading programming and program execution
- > 1,7 MB RAM and 8 MB Flash File System

#### SPECIAL FEATURES (EXTRACT)

- > Secure data transmission with HTTPS, SSL and PKI
- > Serial interface modem for Microsoft® Windows 7™/XP™/Vista™
- > RLS Monitoring (Jamming Detection)
- > Advanced Temperature Management
- > Informal Network scan (easy scan)

- > Firmware update via serial and USB interface
- > Integrated Firmware Update Over The Air (FOTA)
- > TLS for IP over AT
- > Tunneling mode for external serial devices
- > Real time clock with alarm functionality

#### **INTERFACES**

- > Antenna: U.FL-R-SMT + 50  $\Omega$  solder pad
- > Audio: 2  $\times$  analog, 1  $\times$  digital
- > 2 × Serial interfaces (ITU-T V.24 protocol)
- > SIM card interface: 3 V, 1.8 V

- > USB 2.0 full speed
- > I<sup>2</sup>C & SPI bus
- > ADC/DAC: 2/1
- > Dedicated Multiple GPIOs (digital)

#### DRIVERS

> Multiplex Driver Microsoft® Windows and Linux

#### **APPROVALS**

- > Local approvals and network operator certifications (list available)
- > CE, R&TTE, GCF, UL, FCC, IC, PTCRB, RoHS

### For more information, please visit

gemalto.com/m2m, www.facebook.com/gemalto, or Follow @gemaltom2m on twitter.

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