

# Wireless Module HC15

## HSDPA ready to integrate

When developing gateways, USB modems and routers based on high-speed HSDPA data functionality with up to 3.6 Mbit/s download speed, the choice is easy: the HC15. The HC15 Wireless Module reduces time and cost to market due to full type approval, control via AT commands and standard interfaces such as USB 2.0 full speed and NDIS driver.

HSDPA (High Speed Downlink Packet Access) technology is a transmission standard based on the UMTS standard which allows a download speed of up to 3.6 Mbit/s. The technology therefore enables services like broadband internet and e-mail access, high-speed download of large data files and streaming of videos or music.

The HC15 is designed for data applications which are deployed in Europe, Middle East, Africa and Asia. Thanks to full type approval (FTA), such solutions can be developed within a short time and at low costs.



SINGLE-BAND UMTS/HSDPA



DUAL-BAND GSM/GPRS/EDGE



HSDPA 3.6 MBIT/S

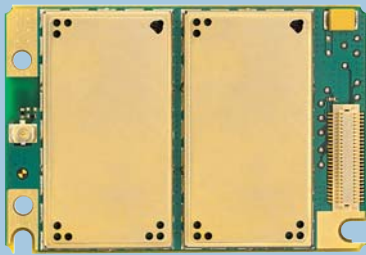


NDIS DRIVER



USB





# Wireless Module HC15

## HSDPA ready to integrate

Original size



### General features:

- HSDPA 3.6 Mbps
- Single-Band UMTS/HSDPA (WCDMA/FDD) 2100 MHz
- Dual-Band GSM 900/1800 MHz
- EDGE (E-GPRS) multi-slot class 10
- GPRS multi-slot class 10
- UMTS/HSDPA 3GPP release 5
- GSM 3GPP release 99
- Output power:
  - Class 4 (2 W) for GSM900
  - Class 3 (0.25 W) for UMTS
  - Class E2 (0.5 W) for EDGE900
  - Class E2 (0.4 W) for EDGE1800
  - Class 1 (1 W) for GSM1800
- Control via AT commands (Hayes 3GPP TS 27.007 and 27.005)
- Supply voltage range: 3.2 ... 4.2 V  
Voltage switch off: 4.3 V
- Power consumption:
  - Power down 50  $\mu$ A
  - Average Supply Current < 970mA (HSDPA data transfer)
- Temperature range
  - Normal Operation: -20°C to +65°C
  - Restricted Operation: -30°C to +75°C
  - Switch off: +85°C
  - Storage: -40°C to +85°C
- Dimensions: 34 x 50 x 4.5 mm
- Weight: approx. 10g

### Specification for HSDPA data transmission:

- HSDPA: max. 3.6 Mbps (DL), max. 384 kbps (UL)
- UE CAT [1-6], 11, 12 supported
- Compressed mode according to 3GPP TS25.212

### Specification for UMTS data transmission:

- UMTS: max. 384 kbps (DL), max. 384 kbps (UL)

### Specification for EDGE data transmission:

- EDGE class 10: max. 236,8 kbps (DL), max. 118 kbps (UL)
- Mobile station class B
- Modulation and coding scheme MCS 1-9

### Specification for GPRS data transmission:

- GPRS class 10: max. 85.6 kbps (DL), max. 42.8 kbps (UL)
- Mobile station class B
- Full PBCCH support
- Coding schemes CS 1-4

### Specification for CSD data transmission:

- GSM data rate 14.4 kbps, V.110
- UMTS data rate 57.6 kbps V.120
- RLP (Non-transparent mode)

### 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
- GSM & 3GPP: Adaptive multi-rate AMR
- DTMF supported
- CEPT supervisory tones supported

### Special features:

- Improved power-saving modes
- NDIS/USB driver for Microsoft® Windows® XP
- Customer IMEI as variant
- Firmware update via USB

### Interfaces:

- Hirose U.FL-R-SMT 50  $\Omega$  antenna connector
- Antenna pad
- Hirose 50-pin board-to-board connector
  - Power supply
  - Audio: 1 x analog
  - USB 2.0 full speed
  - UICC/SIM card interface 3 V, 1.8 V
  - Emergency-off

### Approvals:

- R&TTE, GCF, CE
- Local approvals and network operator certifications

More about Siemens Wireless Modules at: [www.siemens.com/wm](http://www.siemens.com/wm)

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U.K. ← Football → USA

### Here, there and everywhere

Global but local - Siemens 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 Siemens contact partner here: [www.siemens.com/wm-contact](http://www.siemens.com/wm-contact)

### 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 +++ HSDPA +++ Java™ Open Platform +++ EDGE +++ GPS +++