

SIEMENS



Overtake the competition

Wireless
Modules



Accelerate your automotive business with GPRS and SIM Access Profile. The AC45 GPRS module, developed especially for the automotive industry, integrates ultra-fast GPRS technology in your applications. Thanks to its innovative mounting and connecting concept, this robust super-slim module can be quickly and conveniently integrated everywhere. The target applications are:

- Radiophones and Internet radios
- Navigation systems
- Emergency call systems

The AC45 provides unlimited opportunities – and it puts every vehicle at the peak of communication technology: via hands-free phoning with outstanding sound quality, vehicle workstations featuring permanent access to Internet or Intranet, fax, fleet management, automatic SOS emergency call, diagnostic functions, dynamic navigation, local information services, on-board games and MP3 downloads.

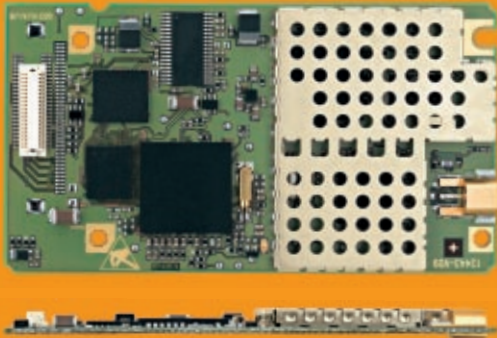
For contacts and further information please visit www.siemens.com/wm

AC45

Release 2.0 with
SIM Access Profile

The new GPRS module especially designed for automotive applications

Optimized for automotive applications the Cellular Engine AC45 provides high-speed data transfer according to GPRS class 8. Temperature monitoring and diagnostic functions (antenna) are possible. The AC45 provides hands-free operations and can be used in enhanced operating temperature ranges. The robust design and the innovative mounting and connecting concept meet automotive requirements. Full type approval according to R&TTE with reference equipment, GCF and automotive E-Mark are a matter of course. Our Application Engineering service is available to you worldwide to support you with integration into your specific solution.



Wireless Modules Benefits and hard facts

Original size

General features:

- Dual-Band EGSM900 and DCS1800
- GPRS multi-slot class 8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
- Output power:
 - Power class 4 (2 W) for EGSM900
 - Power class 1 (1 W) for DCS1800
- Control via AT commands
- SIM Access Profile
- SIM application tool kit
- Multiplexed asynchronous serial interface with 3 virtual serial channels
- Power supply (separate supply of BB and RF recommended):
 - Base-band 3.5 V
 - RF-PA 4.2 V
 - Single supply voltage 4.2 V possible
- Current consumption (typical):
 - Power down 50 μ A
 - Sleep mode (registered, DRX = 6): 3,0 mA
 - Idle mode (registered, DXR = 2): 25 mA
 - Speech mode: 300 mA (average)
 - GPRS class 8: <360 mA
 - Peak current (@ 50 Ω): \leq 2.0 A
- Weight/Dimensions:
11 g/65 x 36 x 4.3 mm
- Ambient temperature:
–29°C ... +75°C

- Temperature warning: >65°C and <–25°C
- Temperature protective shutdown: >75°C and <–29°C
- Measurement of module temperature possible
- Emergency shutdown

Specification for fax:

- Group 3: class 1, class 2

Specifications for data transfer:

- GPRS: max. 85.6 kbps (downlink)
- Coding scheme CS 1, 2, 3, 4
- PBCCH support
- CSD up to 14.4 kbps
- USSD
- Non transparent mode
- V.110
- PPP-stack

Specifications for SMS via GSM and GPRS:

- Point-to-point MO and MT
- SMS cell broadcast
- Text and PDU mode

Specifications for audio:

- Half rate (HR)
- Full rate (FR)
- Enhanced full rate (EFR)
- Enhanced hands-free operation:
 - Echo cancellation
 - Noise reduction

Interfaces:

- 40 pin board-to-board connector:
 - Power supply
 - External SIM 3 V
 - RS232 bi-directional
 - Autobauding and fixed bauding up to 230.4 kbaud
 - 2 analog audio interfaces
- 50 Ω antenna connector (meets automotive requirements)

Compatibility:

- AT cellular command interface

More about Siemens
Wireless Modules at:
www.siemens.com/wm

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