

Wireless Modules XT55/56

Tracking anything, anytime and anywhere

The XT55/56 is the first tracking module to combine Tri-Band GSM/GPRS and GPS technologies on a single PCB smaller than the size of a matchbox. As these technologies work seamlessly with each other, the module opens a new dimension for applications within the tracking and tracing market.

There are two variants of this GPRS Class 10 Tri-Band module – the XT55 and the XT56. These cover the entire spectrum of GSM networks, which means they can be used globally. Due to their exceptionally compact design, these wireless modules can be easily incorporated in M2M applications. The intelligent, energy-saving TricklePower™ Mode is one of several power saving methods which guarantee a long battery life within your application.

Thanks to its reliability, small size, worldwide utilization, and the smooth interplay of GPS and GSM communications, the XT55/56 provides ideally for security solutions, locating people and vehicles, and is equally well-suited for applications in transportation and logistics.

As it also has full type approval (FTA), there's nothing stopping you now from producing a successful product – the XT55/56 has been approved by major network carriers around the world, including the US operators.



DOUBLE TRI-BAND



GPRS CLASS 10



GPS TECHNOLOGY



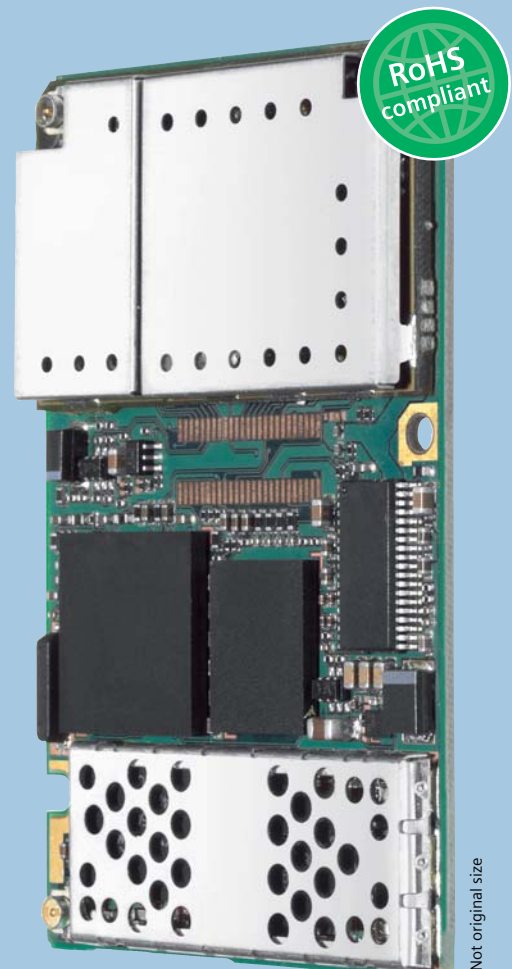
HIGHLY COMPACT SIZE



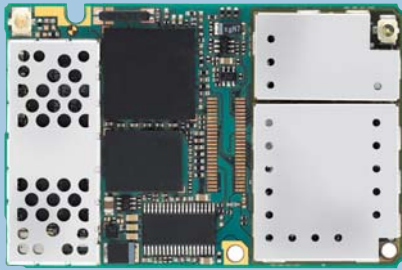
TCP/IP CONNECTIVITY



FAX FUNCTIONALITY



Not original size



Original size



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General features:

- Tri-Band GSM 900/1800/1900 MHz (XT55)
- Tri-Band GSM 850/1800/1900 MHz (XT56)
- GPRS multi-slot class 10
- Compliant to GSM phase 2/2+
- Output power:
 - Class 4 (2 W) for EGSM850
 - Class 4 (2 W) for EGSM900
 - Class 1 (1 W) for GSM1800
 - Class 1 (1 W) for GSM1900
- Control via AT commands (Hayes 3GPP TS 27.007, TS 27.005)
- SIM Application Toolkit
- TCP/IP stack access via AT commands
- Internet Services: TCP, UDP, HTTP, FTP, SMTP, POP3
- Supply voltage range: 3.3 ... 4.8 V
- Power consumption
 - Power down 50 µA
 - Sleep mode (registered DRX = 5) 3.0 mA
 - Speech mode (average) 260 mA
 - GPRS class 10 (average) 450 mA
- Temperature range
 - Normal Operation: -20°C to +70°C
 - Restricted Operation: -25°C to +75°C
 - Switch off: +80°C
 - Storage: -40°C to +85°C
- Dimensions: 35 x 53 x 5.1 mm
- Weight: 11 g

Specification for GPRS data transmission:

- GPRS class 10: max. 86 kbps (DL)
- Mobile station class B
- PBCCH support
- Coding schemes CS 1-4

Specification for CSD data transmission:

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

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
- Basic hands-free operation
- Echo cancellation
- Noise reduction

Interfaces:

- 2 separated Hirose U.FL-R-SMT 50 Ω antenna connectors for GPS and GSM
- Hirose 80-pin board-to-board connector
 - Power supply
 - Audio: 2 x analog, 1 x digital
 - SIM card interface 3 V
 - 4 x serial interface: 2 x GPS, 2 x GSM
 - Multiplexer

Specification for GPS:

- Receiver 12 channel, L1 1575.42 MHz
- Accuracy Position 10 m CEP w/o SA/Velocity 0.1 m/s, w/o SA/Time 1 µs synchronized to GPS time
- DGPS accuracy 1 to 5 m, typical, 0.05 m/s, typical
- Date WGS-84
- Acquisition rate (TTFF defined at 95% of first position localization)
 - Snap start < 3 s, average
 - Hot start < 8 s, average
 - Warm start < 38 s, average
 - Cold start < 45 s, average
- Operating Voltage 3.3 V DC ± 5%
- Low power consumption
 - approx. 200 mW at 3.3 V (Typical mode)
 - approx. 60 mW at 3.3 V (TricklePower™ mode)
- Protocols: NMEA-0183, RTCM SC-104, SiRF binary
- Crystal oscillator (TCXO)

Specification for fax:

- Group 3, class 2

Special features:

- RIL software for Microsoft® Windows Mobile™ 5.0 based devices
- Multiplexer driver for Microsoft® Windows

Approvals:

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

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

Global thinking, local understanding.



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

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 +++