



WISMO Quik

GSM/GPRS/GPS Q2501

Hardware
Platform



MOVE INTO THE POLE POSITION

Optimize your telematics developments with a unique, easy-to-use GSM/GPRS/GPS fully-integrated platform. Designed to meet automotive requirements, the Wavecom WISMO Quik Q2501 platform combines state-of-the-art wireless voice and GPRS class 10 data capabilities with a 16-channel GPS receiver in a single compact package. Operating in both GSM 900 and 1800 MHz bands, the WISMO Quik Q2501 delivers the same rugged, reliable performance that has convinced leading automakers and tier one automotive suppliers to select Wavecom wireless solutions.

Equipped with separate antenna connectors, as well as an alternative, single coaxial cable antenna feature, the GSM/GPRS and GPS functions can be used either independently or interactively. Easy to integrate, the WISMO Quik Q2501 measures just 58x32x6 mm and weighs less than 15g, making it the lightest telematic platform available.

The WISMO Quik Q2501, optimized for use as the hardware platform for Wavecom's Automotive Development Lab, is perfectly suited for telematics, alarms, security, fleet management applications.

WIRELESS VOICE & DATA WITH INTEGRATED GPS

Extended GSM/GPRS and GPS functions

GSM dual band 900/1800 MHz operations for voice and data, including GPRS Class 10, SMS/EMS messaging and GPS 16-channel NMEA-0183 receiver

Flexible Dual Operating Mode

Enables you to gain access to GPS data through the GSM application or to operate GPS and GSM/GPRS independently

Single Antenna Cable

Innovative embedded coaxial solution reduces cabling costs with a single antenna cable to handle both GSM and GPS

Reliable, rugged, road-ready

Compliant with automotive environmental requirements for temperature, humidity and vibration, as well as GCF and R&TTE approved



WISMO Quik SPECIFICATIONS GSM/GPRS/GPS Q2501



GSM FEATURES

- E-GSM 900/1800 MHz
- ETSI GSM Phase 2+
- Class 4 (2W @ 900 MHz)
- Class 1 (1W @ 1800 MHz)
- 260 mA average current in voice communication (GSM 900, Pmax)
- 190 mA average current in voice communication (GSM 1800, Pmax)
- < 3,5 mA in idle mode
- SIM Toolkit release 99
- Internal Temperature sensor

VOICE FEATURES

- Voice features (GSM mode)
- Telephony, Emergency calls 112
- Full Rate, Enhanced Full Rate, Half Rate (FR/EFR/HR)
- Echo Cancellation and Noise Reduction
- Full duplex hands free

DATA FEATURES

- GPRS Class 10 (Up to 4Rx or 2Tx)
- PBCCH support
- Coding Schemes: CS1 to CS4
- Data circuit asynchronous, transparent and non transparent up to 14400 bits/s
- SMS Point-to-Point MT/MO and SMS CB
- EMS

GSM SUPPLEMENTARY SERVICES

- Call Forwarding, Call Barring
- Multiparty
- Call Waiting, Call Hold
- USSD

GPS FEATURES:

- Receiver: 16 channel, L1 frequency, C/A code
- Accuracy:
 - 3 m CEP,
 - GPS 2 m CEP (Depending on accuracy of correction data)
- Start-up Times
 - Hot start 3.5 sec
 - Warm start 33 sec
 - Cold start 41.5 sec
- Signal reacquisition < 1 s
- Protocols:
 - NMEA-0183 Input/Output
 - UBX binary Input/Output
 - RTCM in
- Antenna
 - Embedded GPS active antenna
 - power supply (3V / 5V compatible)
 - Integrated open and short-circuit detection

INTERFACES

- Antennas: 2 separate RF connectors for GSM/GPRS and GPS
- Power supply 3.6 VDC
- 80 pin out board to board connector including:
 - GSM:
 - 3V SIM interface with SIM detection (1.8V or 5V with external level shifter)
 - 2 microphone inputs and 2 speaker outputs
 - 2 SPI bus
 - 10 input lines for 5x5 keypad
 - 1 buzzer output
 - 1 ADC, 1 DAC
 - 1 flash LED
 - 6 GPIO
 - 4 GPO
 - 1 GPI
 - 2 RS-232 serial link up to 115.2 Kbps
 - GPS:
 - 2 RS232 Serial Ports up to 115,2 Kbps
 - TIMEPULSE
 - Dead Reckoning

ENVIRONMENT AND MECHANICS

- Operating range: -35°C to +70°C
- Storage range: -40°C to +85°C
- Overall dimensions: 58 x 32 x 6 mm
- Weight: <15g (including shielding)

APPROVALS

- The module is approved worldwide under test standards such as Radio and Telecommunication Terminal Equipment (R&TTE) and Global Certification Forum (GCF).
- Automotive environmental qualification (temperature / humidity / vibration / ...)

COMPATIBILITY

- Full set of more than 550 AT commands
- GSM 07.05 and 07.07
- GPS dedicated AT commands

ADDITIONAL PROTOCOLS:

- Open AT 2.0
- IP Connectivity (TCP/IP, POP3, SMTP)
- IBM MQ/ISDP (Websphere)

WAVECOM S.A. may, at any time and without notice, make changes or improvements to the products and services offered and/or cease producing or commercialising them.

wavecom