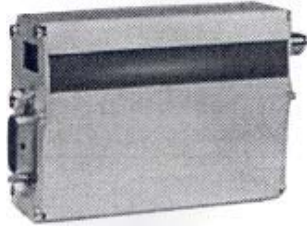## FASTRACK M13006B – GSM/GPRS Cl.10 Modem
(WAVECOM Module Q2406B inside)

FEATURES

GENERAL INFORMATION

- Dual Band GSM/GPRS 900/1800MHz modem
- GSM/GPRS (cl. 10) Data, SMS, Voice and Fax services
- Remote control by AT commands (GSM 07.07 and 07.05)
- OpenAT: develop applications directly on the modem
- Maximum output power: 2W for GSM900 / 1W for GSM1800
- Input voltage: 5.5V to 32V
- Max current @ 5.5V:
    - 300mA average 1Rx/1Tx (E-GSM 900) / 2.1A peak
    - 500mA average 3Rx/2Tx (GPRS Cl.10) / 2.1A peak
- 3V SIM interface
- Overall dimensions: 73mm x 54,5mm x 25,5mm
- Weight: 80g
- Temperature range: Storage: -25°C - +75°C, Operating: -20°C - +55°C

NETWORK SERVICES

Data

- Circuit asynchronous, transparent & non transparent modes, data rates up to 14.4 kbits/s
- GPRS Cl. 10, P channels support, CS1 to CS4

Fax

- Group3 (class2)

Short Message Service

- MT/MO/CB

Voice

Telephony and emergency call + DTMF

NOTES ON SAFETY

Do not connect the modem directly to the mains; an appropriate power adaptor must be used. For more details, please see the modem user manual, available at your local modem supplier.

General Safety

The modem is designed for and intended to be used in fixed and mobile applications. "Fixed" means that the device is physically secured at one location and is not able to be easily moved to another location. "Mobile" means that the device is designed to be used in other than fixed locations and generally in such a way that a separation distance of at least 20cm is normally maintained between the transmitter's antenna and the body of the user or nearby persons. The modem is not designed for or intended to be used in portable applications (within 20cm of the body of the user) and such uses are strictly prohibited.

It is important to follow any special regulations regarding the use of radio equipment due in particular to the possibility of radio frequency, RF, interference. Please follow the safety advice given below carefully.
- Switch OFF your GSM modem when in an aircraft. The use of cellular telephones in an aircraft may endanger the operation of the aircraft, disrupt the cellular network and is illegal. Failure to observe this instruction may lead to suspension or denial of cellular telephone services to the offender, or legal action or both.
- Switch OFF your GSM modem when at a refueling point.
- Switch OFF your GSM modem in hospitals and any other place where medical equipment may be in use.
- Respect restrictions on the use of radio equipment in fuel depots, chemical plants or where blasting operations are in progress.
- There may be a hazard associated with the operation of your GSM modem close to in adequately protected personal medical devices such as hearing aids and pacemakers. Consult the manufacturers of the medical device to determine if it is adequately protected.
- Operation of your GSM modem close to other electronic equipment may also cause interference if the equipment is inadequately protected. Observe any warning signs and manufacturers recommendations.
- In any case of operation, the antenna must be located at least 20cm away from the human body.

Vehicle Safety

- Do not use your GSM modem while driving, unless equipped with a correctly installed vehicle kit allowing "Hands-Free" Operation.
- Respect national regulations on the use of cellular telephones in vehicles. Road safety always comes first.
- If incorrectly installed in a vehicle, the operation of GSM modem telephone could interfere with the correct functioning of vehicle electronics. To avoid such problems, ensure that the installation has been performed by a qualified personnel.
Verification of the protection of vehicle electronics should form part of the installation.

- The use of an alert device to operate a vehicle's lights or horn on public roads is not permitted.

Car And Maintenance

Your GSM modem is the product of advanced engineering, design and craftsmanship and should be treated with care. The suggestion below will help you enjoy this product for many years.

- Do not expose the GSM modem to any extreme environment where the temperature or humidity is high.
- Do not attempt to disassemble the GSM modem. There are no user serviceable parts inside.
- Do not expose the GSM modem to water, rain or spilt beverages, it is not waterproof.
- Do not abuse your GSM modem by dropping, knocking, or violent shaking. Rough handling can damage it.
- Do not place the GSM modem alongside computer discs, credit or travel cards or other magnetic media. The information contained on discs or cards may be affected by the phone.

The use of third party equipment or accessories, not made or authorized by Wavecom may invalidate the warranty of GSM modem.
- Do contact an authorized Service Center in the unlikely event of a fault.

Your Responsibility

This GSM modem is under your responsibility. Please treat it with care respecting all local regulations. It is not a toy therefore keep it in a safe place at all times and out of the reach of children.
Try to remember your Unlock and PIN codes. Become familiar with and use the security features to block unauthorized use abd theft.

DISPOSING OF THE PRODUCT

This electronic product is subject to the EU Directive 2002/96/EC for Waste Electrical and Electronic Equipment (WEEE). As such, this product must not be disposed of at a municipal waste collection point. Please refer to local regulations for direction on how to dispose of this product in an environmentally friendly manner.

M2M modem SPECIFICATIONS

PRODUCT FEATURES

Dual Band GSM modem (EGSM900/1800 MHz) designed for data, fax, SMS and voice applications
Fully Type Approved
Fully compliant with ETSI GSM Phase 2 + Small MS

Output power:
Class 4 (2W @ 900 MHz)
Class 1 (1W @ 1800 MHz)
Power supply:

Input voltage: 5V-32V
- 5mA in idle mode, 140mA in communication GSM 900 @ 12V
- 5mA in idle mode, 100mA in communication GSM 1800 @ 12V
- Peak 1,7A @ 5.5V

Overall dimensions: 73 x 54 x 25mm
Weight: 82g

VOICE, DATA/FAX, SHORT MESSAGE SERVICES

Voice features:
- Telephony
- Emergency calls
- Full Rate, Enhanced Full Rate and Half Rate (FR/EFR/HR)
- Dual Tone Multi Frequency Function (DTMF)

GSM Data/Fax features:
- Data circuit asynchronous, transparent and non transparent up to 14,400 bits/s
- Automatic fax group 3 (Class 1 and Class 2)
- MNP2, V.42bis

GPRS packet Data features:
- GPRS Class 10, PBCCH support
Coding schemes: CS1 to CS4
Compliant with SMG31bis
- Embedded TCP/IP stack
Short Messages Services features:
- Text and PDU
- Point to point (MT/MO)
- Cell Broadcast

GSM SUPPLEMENTARY SERVICES

- Call Forwarding
- Call Barring
- Multiparty
- Call Waiting and Call Hold
- Calling Line Identity
- Advice of Charge
- USSD
- Closed User Group
- Explicit Call Transfer

OTHER FEATURES

- Advanced Open Software Platform: MUSE Platform Open AT
- Fixed Dialling Number
- SIM Toolkit Class 2
- SIM, network and service provider locks
- Real Time Clock
- Alarm management
- Software upgrade through Xmodem protocol
- UCS2 character set management

INTERFACES

- RS-232 and audio through mini sub-D 15-pin connector supporting:
  - Serial link autoshutdown controlled by software (AT)
  - Baud rate
  - Autobauding

AT commands interface:
- GSM 07.05 and 07.07 AT commands
- comprehensive set of enhanced AT commands

Open AT APIs:
- numerous interfaces for embedded applications
- 2x GPIOs/I2C (multiplexed) + power supply through micro-FIT 4-pin connector
- SMA antenna connector
- Sliding SIM holder (3V SIM interface)

APPROVALS

The M1306B is approved worldwide under test standards including;
Radio and Telecommunication Terminal Equipment (R&TTE), Global Certification Forum – Certification Criteria (GCF-CC), EMC, Safety and Chinese approvals

DELIVERABLES

- User guide
- Power supply cable
- Y-cable for data and audio connection (optional)
- Fixing equipment

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