





# REDUCE COST, NOT OPPORTUNITY

Benefit from Wavecom reliability in an entry-level solution that's perfect for wireless local loop and simple machine-to-machine applications. Fully compatible with the entire range of Wavecom Quik modules, the WISMO Q2400 provides complete GSM voice, SMS and data/fax functions.

Manufacturers of fixed wireless telephones can create their own user interfaces and embed them directly on the Q2400 platform, using the Wavecom Open AT software development kit. Or they can use the Q2400 in conjunction with Wavecom's unique reference design package, which includes a complete hardware design plus a feature-rich reference man/machine interface, to bring new phone products to market quickly. Like WLL application developers, system integrators can use Open AT to embed simple applications on the Q2400 platform to reduce the cost of the complete solution.

Run your applications on wireless networks virtually anywhere: the Q2400 is fully compatible with the entire Wavecom range of GSM/GPRS and CDMA modules, offering unlimited possibilities. Just plug in the right module for the right market.

# FULL GSM VOICE AND DATA FUNCTIONS

# **Robust, reliable performance**

Depend on the field-proven, customer-proven Wavecom GSM protocol stack for rock-solid, trouble-free operations on networks worldwide.

# **Open architecture**

Adapt the platform to your particular needs thanks to the open architecture and full set of interfaces.

# Valuable phone features

Benefit from hands-free audio, multi-call management, MMI interfaces such as LCD, keypad, and more.

#### Easy to use

Instantly migrate from existing designs based on other Wavecom WLL and M2M platforms onto the fully compatible Q2400.



WIRELESS SOLUTIONS FOR EVERYONE

# WLL module SPECIFICATIONS

# **PRODUCT FEATURES**

Dual Band EGSM 900/1800 MHz module designed for wireless local loop terminals and M2M applications

- Compliant with ETSI GSM Phase 2 + standard
- Class 4 (2W @ 900 MHz)
- Class 1 (1W @ 1800 MHz)

Power supply:

- 3.6 VDC (direct connection to Li-ion battery pack)
- 260 mA average current in voice communication (GSM 900, Pmax)
- 160 mA average current in voice communication (GSM 1800, Pmax)
- < 3,5 mA in idle mode</p>

#### ENVIRONMENT AND MECHANICS

Operating temperature range: -20°C to +55°C Storage temperature range: -30°C to +85°C Overall dimensions: 58 x 32 x 3,9 mm Weight: < 12g (including shielding)

# INTERFACES

Antenna: RF Pad supporting coaxial cable 60 pin board to board connector including:

- 3V SIM interface with SIM detection (5V SIM with external level shifter)
- 6 GPIOS
- 2 microphone inputs and 2 speaker outputs
- 1 SPI/I2C
- 10 input lines for 5x5 keypad
- 1 buzzer output
- 1 vibrator output
- 2 Analog to Digital Converters
- 1 serial link
- IrDA interface
- Battery charging interface

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
- SIM Toolkit release 99

# **APPROVALS**

The modules are 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

# **VOICE FEATURES**

Voice features:

- Telephony, Emergency calls
- Full Rate, Enhanced Full Rate, Half Rate (FR/EFR/HR)
- Echo Cancellation and Noise Reduction
- Full duplex handsfree

# **DATA FEATURES**

- Data circuit asynchronous, transparent and non transparent up to 14400 bits/s
  Fax group 2 (Class 1 and 2)
- Fax group 3 (Class 1 and 2)

# **MESSAGE SERVICES**

 Point to point (MT/MO) and Cell Broadcast

#### GSM SUPPLEMENTARY SERVICES

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

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