



## Wireless Standard Modem

# WISMO 218 and 228

## WISMO SERIES

### Free your product with entry level GSM/SMS/GPRS

**WISMO** is an entry level cellular modem from Wavecom which adds wireless voice and data connectivity to your product. **WISMO** enables your product to operate remotely over large geographical territories and even across international boundaries, in any country in the world where a GSM network exists. This extremely cost efficient solution provides **WWAN** connectivity in a highly compact form factor.

#### EASY TO USE - EXPRESSO

Expresso is a simple and intuitive Windows tool that rapidly enables integrators and developers to learn how to use **WISMO**\*.

Expresso provides super fast configuration of the modem in addition to supporting easy access to basic modem features.

Features supported include SMS send/receive, setting up of a GPRS connection to the Internet for web browsing, email, FTP and more.

Expresso guarantees to get you going in less than 5 minutes.

#### EASY TO USE - BUILD

**WISMO** is easily placed within your product via either manual or common automatic machine placement soldering methods.

#### NATURALLY BALANCED

**WISMO** provides the best balance between basic modem features and cost efficiency. Such a balance is made without compromising typical M2M industry requirements, including essential IPR coverage to legally protect you from patent holder claims.

#### FITS IN TINY SPACES

**WISMO** is postage stamp sized at just 25mm x 25mm x 2.8 mm, designed to fit within the most space constrained product designs for PND, PDA, HVAC, Utility Meters, POS terminals and many more applications.

#### QUALITY YOU CAN TRUST

**WISMO** benefits from Wavecom's extensive expertise in the development and manufacturing of wireless solutions, particularly in the areas of high out-of-box reliability and low field failure rates.

With more than 40 million cellular solutions sold to date<sup>†</sup>, Wavecom is the mark of quality.

#### SUPPLY CHAIN CONTINUITY

When ordering from Wavecom, you can sleep sound at night in the knowledge that your order will arrive on time. Your business success is our passion.

Smart Devices



Creative Software



Services





## DUAL BAND OR QUAD BAND? THE HIDDEN COSTS

Do you buy quad band modems when you don't actually need the transcontinental roaming capabilities that a quad band modem provides? With some suppliers, you may need to buy quad band to compensate for long lead times and delivery reliability, minimising the risk in your inventory control. However, this generates unnecessary costs in storage and product price.

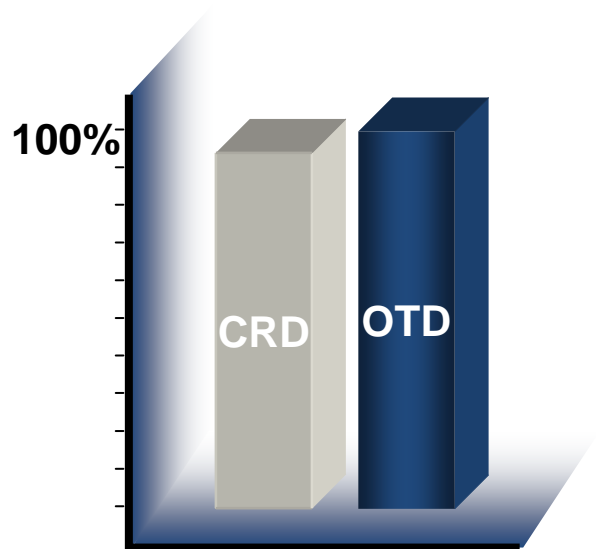
If this is the reason why you currently buy a quad band product, consider how a stable and reliable supply can help you reduce your costs.

At Wavecom, we take pride in our supply chain management and delivery performance excellence. Around 95% of all our deliveries arrive within the customer's requested delivery date, with a lead time of 4 weeks, and close to 100% of our deliveries arrive within the committed delivery date.

For customers needing even faster deliveries, we offer an express service to deliver goods within 1 week.

For you, this means that you can operate leaner JIT (Just In Time) manufacturing controls.

Wavecom is unique in offering a choice that will benefit the profitability and streamlined efficiency of your business.



Industry leading Supply Chain

<sup>1</sup>CRD (Customer Requested Delivery): actual delivery date versus customer requested delivery date. Wavecom meets around 95% of the requested delivery dates, with a lead time of 4\* weeks.

<sup>2</sup>OTD (On Time Delivery): actual delivery date versus committed delivery date. Wavecom's steady on time delivery performance is close to 100%.

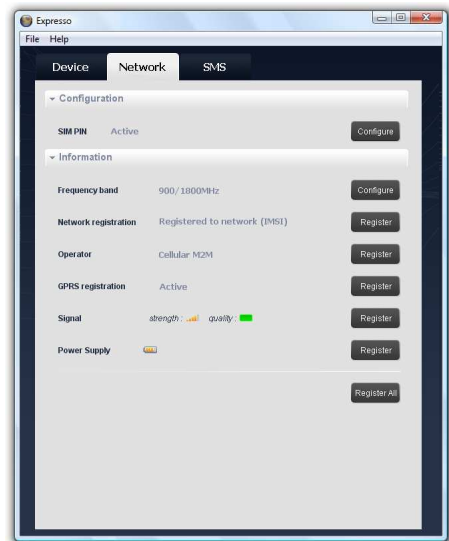
\*EXPRESS: unique express delivery service available to supply goods within 1 week.



## Ease Product Discovery with Espresso

Wavecom's Espresso "Discover & Learn" software is a unique Microsoft® Windows® application that makes it easy to get to know the WISMO family. The software enables a user to automatically discover the connected device, configure it and perform a range of standard operations such as sending an SMS or setting up a GPRS connection to the Internet. In tests, it takes no more than 5 minutes to get the WISMO up and running with Espresso. Espresso introduces new developers to the world of cellular M2M.

Espresso is exclusive to Wavecom, supports WISMO 218 and WISMO 228 out of the box and is free of charge to Wavecom customers. The intuitive GUI (Graphical User Interface) is born from a unique co-operation between Wavecom and Anyware Technologies that has enabled the application to be developed with a quality and attention to detail unrivalled in the cellular M2M modem industry.



## M2M OperatingPortal®

M2M OperatingPortal® is a generic, secure and scalable M2M services platform provided by Anyware Technologies. M2M OperatingPortal® includes:

- ↳ Complete Device Management Services (provisioning, monitoring and firmware upgrade)
- ↳ Asset Management Services (data storage, communication management, event and alarm processing, monitoring, remote control...)
- ↳ Open API for development of customized applications
- ↳ An application container hosting with :
  - A standard Device Management Application
  - A skinable standard Asset management Application





## Make the Most of Wavecom Professional Services

Take advantage of Wavecom’s certification expertise to reduce the cost of your product certification\*, and get your product through the certification process faster with our certification and design review services.

Wavecom also supplies a 3 tier offering for IMEI pre-load at our ISO9001 approved manufacturing facility. Whatever your need, we have an answer for you.

## Multi-Functional Modem

With multi-band, multi-bearer, multi-codec, TCP/IP compatibility and a range of peripheral connectivity, WISMO 218 and WISMO 228 pack a mean punch in their sleek form-factor that includes all the radio, processing, memory and software to perform inside your product.

	WISMO 218	WISMO 228
<b>Radio Modem Features</b>		
<b>Bearers</b>	GSM, CSD, SMS, FAX, GPRS class10	GSM, CSD, SMS, FAX, GPRS class10
<b>Radio Bands</b>	Dual Band 900/1800	Quad Band Band 850/900/1800/1900
<b>Approvals</b>	CE, GCF, China RTE, R&TTE	CE, GCF, China RTE, R&TTE FCC, PTCRB, AT&T
<b>Nominal Sensitivity</b>		
850/900 MHz Rx	-108 dBm	-108 dBm
1800/1900 MHz Rx	-107 dBm	-107 dBm
850/900 MHz Tx	33 dBm ±2 dB (2 W) at 25°C	33 dBm ±2 dB (2 W) at 25°C
1800/1900 MHz Tx	30 dBm ±2 dB (1 W) at 25°C	30 dBm ±2 dB (1 W) at 25°C
<b>Intellectual property rights (IPR) indemnification included</b>	√	√
<b>Audio</b>		
<b>Analogue audio</b>	1	1
<b>Codec</b>	HR, FR, EFR, AMR	HR, FR, EFR, AMR
<b>Quality</b>	VDA2A	VDA2A
<b>Echo Cancellation</b>	√	√
<b>DTMF Decoder</b>	√	√
<b>Interfaces</b>		
<b>UART</b>	1	1
<b>PWM</b>	3	3
<b>SPI</b>	1	1
<b>I2C</b>	1	1
<b>ADC</b>	1	1
<b>DAC</b>	1	1
<b>GPIO</b>	11	11
<b>TX Burst Indicator</b>	Yes	Yes
<b>RTC</b>	Yes	Yes
<b>SIM (1.8V &amp; 3V)</b>	Yes	Yes
<b>Power Consumption</b>		
<b>Power supply (Nominal 3.6V)</b>	3,2min; 4,8V max	3,2Vmin; 4,8Vmax
<b>Off Mode (Nom @ VBATT:3.6V)</b>	36 µA	36 µA
<b>Idle Mode (Paging 9)</b>	1.3 mA	1.3 mA
<b>Connected Mode</b>		
<b>900 MHz (TX Power 33 dBm at Vbatt = 3.6V)</b>	205 mA at peak	205 mA at peak
<b>1800 MHz (TX Power 30 dBm at Vbatt = 3.6V)</b>	163 mA at peak	163 mA at peak
<b>Environmental Specifications</b>		
<b>Operating / Class A</b>	-20°C to +55°C	-20°C to +55°C
<b>Operating / Class B</b>	-30°C to +75°C	-40°C to +85°C
<b>Storage</b>	-40°C to +85°C	-40°C to +85°C