### Calls – DialThru Gateway

By default, 2N® SmartGate UMTS behaves as a dial-thru gateway:

- Calls are routed to UMTS/GSM from the FXS interface.
- Incoming UMTS/GSM calls ring at the FXS interface.
- When the FXO interface is ringing, 2N® SmartGate UMTS interconnects FXO and FXS, thus enabling analogue interfaces to communicate with each other.

For more advanced call routing, you have to program the routing tables. Some distributors offer products with preprogrammed routing for planned use:

- 2N® SmartGate UMTS can route calls from the FXS interface to UMTS/GSM and FXO according to the called number, thus cutting the outgoing call costs significantly. Be sure to program the FXS routing table properly using your PC and the PCManager programming tool enclosed.
- ME Mobility Extension is applied whenever a call is coming (ringing) to the FXO interface. With ME enabled, the FXS and FXO lines are interconnected and a call is set up to the defined UMTS/GSM number. Hence, a FXO call can be answered on the FXS interface and/or UMTS/GSM network.

## Calls – PBX Internal Line Gateway

By programming a single parameter assigned to the FXO routing table, you can switch 2N® SmartGate UMTS into the PBX internal line mode:

• Calls from the FXO interface are routed to the UMTS/GSM network.

• To route incoming UMTS/GSM calls back to the FXO interface, you also have to set routing to FXO on the row for other numbers in the GSM routing table. (To make 2N® SmartGate UMTS process calls from different UMTS/GSM callers, complete the GSM routing table rows as necessary.)

## **Configuration via USB**

- To enable configuration via a PC, connect 2N® SmartGate UMTS to the PC using a USB cable and install the 2N® SmartGate PCManager tool.
- Thus you create a virtual serial port (USB serial port, FTDI) for the PCManager connection to the gateway (launch CDM20814\_Setup.exe to install the drivers).
- Select the virtual serial port number in the PCManager setup.
- Refer to the full User Manual version for details.

## **Connection to Internet, SMS**

- 2N® SmartGate UMTS can be used as a modem for PC connection to GPRS, EDGE, UMTS and HSDPA networks and thus provide a high speed Internet connection.
- Install the modem drivers from the Watcher\_Generic\_B2849.msi file before connecting 2N® SmartGate to the PC.
- When 2N® SmartGate UMTS is connected and switched on, the AirCard Watcher program is launched automatically, which helps you access the Internet or send and receive SMS.
- Be sure to set APN and other provider's settings if necessary in the connection profile before connecting to the Internet.
- Refer to the full User Manual version for details.

In the GSM network, data transfers are suspended during voice calls and do not continue until the voice call has been finished, whereas in the UMTS (3G) network, data and voice are transferred simultaneously.

### EC Declaration of Conformity

2N TELEKOMUNIKACE a.s. hereby declares that the 2N® SmartGate UMTS product is in compliance with the basic requirements and other relevant provisions of Directive 1999/5/EC. Refer to the CD-ROM enclosed or <u>www.2n.cz</u> for the full wording of the Declaration of Conformity.

# **2N® SMARTGATE UMTS GATEWAY**





- > Dramatic cost saving
- > DialThru technology gateway with ME function
- > Voice, SMS and High speed internet connection
- > FXS and FXO interfaces for PBX or phone sets
- > FSK CLIP



## 2N® SmartGate UMTS QuickStart

## Basic Functions

SMS

- Primarily, the device is intended for voice transmission between the GSM/UMTS network and connected line telephone sets.
- Detailed routing tables include a lot of settings and help cut your call costs dramatically.
- Using a PC, you can get access to the high-speed Internet (GPRS, EDGE,
- You can send SMS to one pre-defined number via a SMS input.
  The battery backed-up 2N® SmartGate UMTS version allows you to maintain your traffic even in the event of power outage.
- The 2N® SmartGate UMTS firmware can
  - be upgrade from <u>www.2n.cz</u>

Read the CD-ROM User Manual carefully to get familiar with all the 2N® SmartGate UMTS functions.

2N® SmartGate UMTS supports the 3G WCDMA/HSDPA, GSM GPRS/EDGE technologies for data connection. The connection speed and quality depend on the UMTS/GSM provider, accessible services, signal coverage and network conditions. The parameters included in the User Manual (Technical Parameters) are the maximum values; for detailed information about accessible services contact your mobile provider.

## 2N® SmartGate UMTS Installation and Connection

- Proper Location
- Install 2N® SmartGate UMTS with respect to a good UMTS/GSM signal intensity.
- Place 2N® SmartGate UMTS out of range of sensitive devices and human bodies for electromagnetic interference reasons.
- 2N® SmartGate UMTS is designed for indoor use. Do not place it near heat sources. It may not be exposed to direct solar radiation, rain, flowing water and moisture, aggressive gas, solvents etc.
- Needed Accessories

#### INCLUDED IN 2N® SMARTGATE UMTS PACKAGE

- 1 2N<sup>®</sup> SmartGate UMTS
- 1 power adapter (12V/1A DC)
- 1 antenna including supply cable (SMA)
- 1 telephone cable
- 1 USB A/B cable
- 1 SMS input connector
- 2 screws with dowels
   1 User Manual and SW CD

#### NOT INCLUDED IN 2N® SMARTGATE UMTS PACKAGE

· SIM card

- Provider's information on Internet connection (APN, etc.)
- External Antenna Connection Screw the enclosed antenna into the SMA antenna connector. Tighten the antenna connector gently with your hand, never use a wrench!
- SIM Card Installation
   Insert the SIM card into the SIM card slot on the 2N® SmartGate UMTS bottom (connector) side as shown in the figure and make sure that the security latch has clicked into position. Select the required provider and SIM card services, such as call forwarding, call barring, preferred networks, SMS centre, etc., using your mobile phone before inserting your SIM card in 2N® SmartGate UMTS.
- Connection to FXO Interface
- A device with the FXS interface can be connected to the FXO interface (e.g. a PBX internal line).

### Connection to FXS Interface

- A device with the FXO interface can be connected to the FXS interface (a standard analogue telephone, answering machine, PBX external line). 2N® SmartGate UMTS is equipped with the FSK-based CLIP function on the FXS interface and so you are advised to connect a CLIP displaying terminal device.
- Mains Supply Connection and Switch On

2N® SmartGate UMTS is 12V DC voltage powered. Connect the attached

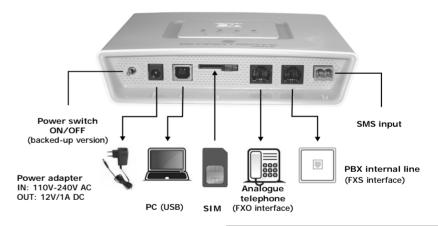
power adapter (12V/1A DC) to the power supply connector. After connection, switch on 2N® SmartGate UMTS with the power switch on the right-hand bottom side.

 Battery Supply Connection and Switch On

Insert four AA-type batteries into a compartment on the back side of the backed-up 2N® SmartGate UMTS gateway. Refer to the compartment label for proper battery placement and polarity.

 $\Delta$  Do not connect the antenna as long as the device is in operation to avoid GSM/UMTS module damage.

## Example of 2N® SmartGate UMTS Connection



LED Indicators		
Power supply	Ð	Blue light – mains supply Yellow light – battery supply
GSM UMTS	80	Blue flashing –logged out Blue light – logged in
Telephone line	S	No light – Standby Orange LED – FXS interface active Green LED – FXO interface active Flashing – line off-hook or ringing Light – call in progress Alternating LED – call FXS - FXO
Signal/ Battery indicator	Y	1 is shining – minimum 4 are shining – maximum Signal – during ready state Battery –upon off-hook on FXS line

## **PIN Secured SIM Card**

- 1. Hook off the telephone and hear the PIN tone:
- 2. Enter the PIN using DTMF and press for confirmation. Hang up the line to cancel a wrong PIN.
- 3. If you hear the busy tone after a while (a few seconds), the PIN has been entered correctly. This PIN will be entered automatically upon every power up.
- 4. If you hear the PIN tone again after a while, the PIN has not been entered correctly. Re-enter the PIN.

By entering three wrong PINs you block the SIM card. Enter the PUK code into your mobile phone to unblock the SIM card.