2N SMARTGATE GSM GATEWAY

SmartGate

41 mm

25 mm

5 mm

17 mm

Ø 10 mm

Ø 6 mm

Wireless Modules by Siemens embedded

> **Dramatic cost saving**
> **DialThru technology gateway with ME function**
> **Voice, Data and SMS transmission**
> **Analogue FAX and Data (optionally)**
> **FXS and FXO interfaces for PBX or phone sets**
> **FSK CLIP**

2N®
TELEKOMUNIKACE
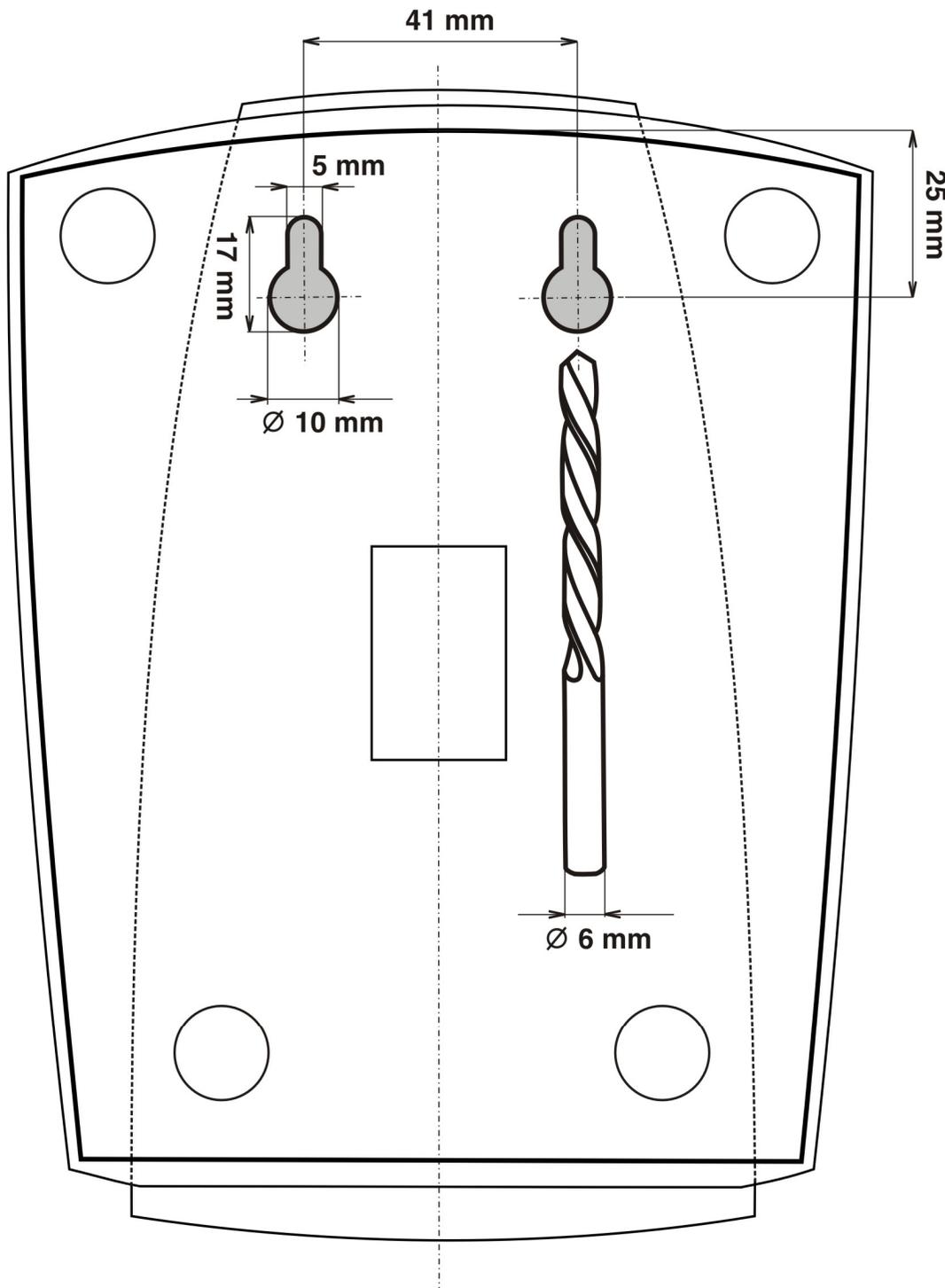
SmartGate *QuickStart*

Read the CD-ROM User Manual carefully to get familiar with all system functions.

Security Precautions

- Do not switch on SmartGate in the vicinity of medical apparatus to avoid interference. The minimum distance of the antenna and pacemakers should be 0.5 m.
- Do not switch on SmartGate aboard a plane.
- Do not switch on SmartGate near petrol stations, chemical facilities or sites where explosives are used.
- Any mobile telephone use prohibition based on RF energy radiation applies to SmartGate too.
- SmartGate may disturb the function of TV sets, radio sets and PCs.
- Warning! SmartGate contains components that can be swallowed by small children (SIM card, antenna, etc.).
- The voltage value mentioned on the power adapter may not be exceeded. If you connect SmartGate to another power supply, make sure that the voltage value is in the acceptable range.
- When your SmartGate comes to the end of its operational life, dispose of it in accordance with applicable regulations.

A SmartGate delivery contains:

SmartGate	1 pc
Antenna for direct connection	1 pc
Antenna with coax cable	1 pc
Supply adapter	1 pc
Telephone cable	2 pc
PC-connection serial cable	1 pc
SMS sending input connector	1 pc
Dowels	2 pcs
Screws	2 pcs
SW programs and User Manual on a CD-ROM	1 pc
QuickStart manual + mounting pattern	1 pc
Warranty certificate	1 pc

Basic Functions

- The primary purpose of SmartGate is to transmit voice between a GSM network and connected telecommunication devices.
- You can establish data connections (GPRS, CSD) and send/receive SMS in combination with a PC.
- You can send an SMS to a pre-programmed number using the SMS sending input.
- Models of SmartGate with fax converter can transmit fax messages using analog fax Group 3 on telephone line.

Proper Location

- SmartGate is designed for vertical mounting on suspension holes (use the mounting pattern). This position is the best for GSM signal reception.
- Install SmartGate with respect to a good GSM signal strength.
- Place SmartGate out of range of sensitive devices and human bodies for electromagnetic interference reasons.
- SmartGate is designed for indoor use. Do not place it near heat sources and on sites exposed to direct solar radiation. It may not be exposed to rain, flowing water and moisture. In addition, it may not be exposed to aggressive gas, acid vapours, solvents, etc.

External Antenna Connection

Screw the antenna into the SMA antenna connector. Tighten the antenna connector gently with your hand, never use spanner! Use antenna with coax cable if the GSM signal is poor, or in case of interference.

SIM Card Installation

Open the SIM card holder on SmartGate's back side, insert the SIM card and close the holder properly. Select the required GSM 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 SmartGate.

Telephone Lines Connection

Connect any FXO-interface equipment (standard telephone set, answering machine, PBX CO line,...) to FXS interface (Phone icon) on SmartGate. To FXO interface on SmartGate (crossed out Phone icon) connect FXS-interface equipment (internal line of PBX). SmartGate is equipped with CLIP via FSK on FXS interface and so it is advantageous to connect a terminal that is able to display the CLI.

Power Supply Connection

SmartGate is powered with 10-16V DC voltage. Where a source other than the included supply adapter is used, the voltage range and polarity shown on the SmartGate supply connector have to be maintained. Do not switch on the power supply until the antenna is connected to SmartGate to avoid the GSM module damage.

SIM Card PIN protection

1. Hook off the telephone, you can hear the PIN tone: ▬ ▬ ▬ ▬   ▬ ▬ ▬ ▬   ▬ ▬ ▬
2. Enter the PIN using the DTMF and press a ⊞ for confirmation. To cancel a wrong PIN hang up the telephone line.
3. If you hear the busy tone in a while (a few seconds), you have entered the PIN correctly. The PIN will be entered automatically upon the next power up.
4. If you hear the PIN tone again in a while, you have entered a wrong PIN. Re-enter the PIN.

Phone calls – DialThru gateway

Initial SmartGate behavior is like that:
- Calls from FXS interface are routed to GSM network.
- Incoming calls from GSM rings on FXS interface.
- In case of incoming ringing on FXO interface, both analog interfaces on SmartGate are interconnected. So ringing is transferred to FXS interface and FXO-FXS call is enabled.

For advanced calls routing you have to program Routing tables. Some local distributors may preprogram tables for usual use in your country.
- SmartGate is able to route calls according to phone number prefix. Calls from FXS interface can be routed not only to GSM network, but also to FXO interface. It is necessary to program FXS routing table for this.
- **ME – Mobility Extension** is new useful function on our gateways. If ME is activated and incoming call rings on FXO interface, SmartGate routes this call to FXS interface and simultaneously establishes call to GSM network. You can receive the call on analog line as well as on your mobile phone.

Phone calls – gateway for PBX internal line

You can switch SmartGate from DialThru gateway to gateway for PBX internal line by setting of only one parameter. You can find it on FXO routing table page.
- Calls from FXO interface are routed to GSM network.
- If incoming calls from GSM network have to be routed back to FXO interface, it is moreover necessary to program the Other CLI's row in GSM routing table. (If you want SmartGate to route incoming GSM calls according to CLI, fill in GSM routing table rows, as you need).

Analogue FAX and Data Connection (optional)

SmartGate with fax converter has ability to manage fax messages using analogue fax Group 3 and data connection using analogue modem connected to telephone line. The fax or data service must be registered with your GSM operator.

Outgoing FAX Call and Data Connection

Before destination number dial code ***01*** for fax call or ***02*** for data connection.

Incoming FAX Call and Data connection

It is recommended to activate separate fax number on your SIM card –**multinumbering scheme**. Fax messages and data connection should be routed to appropriate number.
It is possible to set fax engine in the gateway to receive the next call as fax or data call or make this setting permanent - see the manual on CD.

Indication LEDs

Power supply	• Light is on whenever SmartGate is on.
GSM network	• light = registered to GSM • flashes once in 1s = not registered, SIM card inserted • flashes once in 3s = not registered, SIM card not inserted • flashes 4 / 8 times quickly = enter your PIN / PUK
Phone line	• no light = standby Orange for FXS interface: • flashes quickly = line off-hook or ringing • light = call FXS – GSM • flashes once in 3s = data connection in progress On FAX models: • Flashes 2 times then pause = fax connection in progress; after power on signalize need of FW upgrade Green for FXO interface: • flashes quickly = line off-hook or ringing • light = call FXO – GSM Alternately orange and green: • quickly = ringing from FXO is connected to FXS interface • slowly = call FXS – FXO

The manufacturer, 2N TELEKOMUNIKACE a.s, hereby declares that the 2N SmartGate equipment is in compliance with the essential requirements and other relevant provisions of the 1999/5/EC Directive. The Declaration of Conformity is available on CD-ROM and at website www.2n.cz.