# 2N® SmartCOM *Quick Guide*

**Read the User Manual carefully to get familiar with all system functions.**

## Security Precautions

- Do not switch on 2N® SmartCOM in the vicinity of medical apparatuses to avoid interference. The minimum distance of the antenna and pacemakers should be 0.5m.
- Do not switch 2N® SmartCOM aboard a plane.
- Do not switch 2N® SmartCOM near petrol stations, chemical facilities or sites where explosives are used.
- Any mobile telephone use prohibition based on RF energy radiation applies to 2N® SmartCOM too.
- 2N® SmartCOM may disturb the function of TV sets, radio sets and PCs.
- Warning! 2N® SmartCOM contains components that can be swallowed by small children (SIM card, antenna, etc.).
- When 2N® SmartCOM comes to the end of its operational life, dispose of it in accordance with applicable regulations.
- 2N® SmartCOM is equipped with an external antenna connector. The antenna has to be located indoors for safety reasons.

## A SmartCOM delivery contains the following:

| | |
|---|---|
| 2N® SmartCOM | 1 pc |
| Antenna | 1 pc |
| Supply adapter | 1 pc |
| 8-pin terminal board | 1 pc |
| Product CD | 1 pc |

- Do not place the unit near heat sources (such as space heaters, hot air heaters, etc.) unless absolutely necessary.
- 2N® SmartCOM only works reliably under the conditions specified in the operating instructions. Any unauthorised interventions and/or changes in use and operation may result in malfunction or destruction of the product.

## Basic Functions

- 2N® SmartCOM is designed for bidirectional data transmission between serial ports and their opponents based on GPRS data transmission via the GSM network.

## Installation Conditions

- Install the GSM antenna with respect to the signal quality in the location.
- Keep 2N® SmartCOM off sensitive devices and human bodies to avoid EM interference.

## External Antenna Connection

Screw the enclosed antenna into the SMA antenna connector. Tighten the antenna connector gently with your hand, never use a tool!

## SIM Card Installation

Insert the SIM card in the hole in the upper part of 2N® SmartCOM making sure that the bevelled edge of the SIM card faces the green connector (see the figure on the front side of the product). Remember to set the relevant provider's services (PIN request, e.g.) on your mobile phone before inserting the SIM card in 2N® SmartCOM. Make sure that the provider's SIM card is intended for the GSM network supported by your 2N® SmartCOM version and that the GPRS data transmission is activated with an IP address enabling incoming connection (unless you use the 2N® SmartCOM server).

## Power Supply

2N® SmartCOM is DC supplied from a 12V/0.5A power adapter included in the delivery. The use of any other adapter may damage 2N® SmartCOM. Do not connect the power supply until you have connected the antenna to avoid the GSM module damage!

## Initialisation

Once you connect the power supply, the GSM module, inputs, outputs, serial interfaces and configuration module will get initialised. 2N® SmartCOM can be regarded as functional if the LED indicator signalling GSM connection and IP address assignment (or connection to the server in the TCP Client mode) keeps shining constantly. Refer to the LED Statuses table below for initialisation and operation details.

## LED Statuses

| No light | Device not supplied |
|---|---|
| **Three fast flashes** | Start or restart |
| **Slow blinking** | Connecting to network, starting GPRS, connecting to 2N® SmartCOM Server |
| **Very fast blinking** | Error: wrong PIN or SIM not inserted |
| **Continuous light** | Connected, IP address assigned, connected to server in TCP Client mode (flashes when transmitting data) |

## Basic 2N® SmartCOM Setup

- Insert the SIM card that supports data. Connect the antenna and then the power supply.
- 2N® SmartCOM will start with the default parameters. Use the 2N® SmartCOM Terminal Config program for basic settings. Install the program from the included CD and get connected via the serial port.
- Upon power up, the port is in the data mode and retransmits everything from the GSM input. The Terminal Config program automatically switches the port into the command mode.
- Set the basic communication parameters in the Terminal Config program for your PC serial port. The 2N® SmartCOM default parameters for the serial port are as follows:
  - Baudrate: 115,200 Bdps
  - Data bits: 8
  - Stop bits: 1
  - Parity: None
  - Flow ctrl.: None
  - No configuration access password is required by default.
- Set all parameters comfortably using forms in the Terminal Config program: GPRS APN, PIN, 2N® SmartCOM Server address and port settings.
- Also, set other communication parameters for the ports using the program tags or use all AT commands supported by the device using the Own (User-defined) AT commands tag. Refer to the CD User Manual for the list of commands supported.

- You can also set one of two (three in fact but the UDP Client mode is unavailable now) modes for 2N® SmartCOM to work in.

### TCP Client Mode

- The server receives registrations from terminals providing central administration.
- Refer to the 2N® SmartCOM User Manual for details on the server settings, management and use.
- Make sure that the 2N® SmartCOM Server address, listening port and terminal authentication password have been set correctly to make the system work properly.

### STANDALONE Mode

- To know the 2N® SmartCOM public IP address, connect via the serial port using the Terminal Config program or use an SMS.
- To switch the command mode into the data mode, use the *ato* command, or enable Autoanswer to ensure that an incoming external call switches the port into the transparent mode.
- Connect the device to be supervised to one of the available serial ports (RS232 or RS485 / M-BUS).
- Launch the Telnet application and get connected to the 2N® SmartCOM public IP address via TCP port 10000 to configure parameters as via a serial port.
- Use TCP port 10001 for data retransmitting to RS232.
- Use TCP port 10002 for data retransmitting to RS485.

## 2N® SmartCOM SMS Configuration

To know the default settings, send an SMS to the number of the SIM card inserted in 2N® SmartCOM in the following format. The default password is **password**. The terminal will send back an SMS with the required values.

### SC INFO PWD=<password> and SC CNF PWD=<password>

The SMS includes all basic parameters necessary for you to put 2N® SmartCOM in operation. To change a parameter, send a configuration SMS in the format shown below. The PWD parameter is obligatory and the other parameters are arranged as necessary. Refer to the CD User Manual for more information.

### SC CNF PWD=<password> MODE=<mode> 232LCK=<rs232 lock> APN=<new APN> DUSR=<new GPRS user name> DPWD=<new GPRS password> IPS=<new server IP address> PORTS=<new server port number> NPWD=<new password>

The MODE and 232LCK parameters are entered in a digital form. Mode 1 -TCP Client, 3 - Standalone. 232LCK 1 - on, 0 - off.

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## Declaration of Conformity

2N TELEKOMUNIKACE a.s. hereby declares that the 2N® SmartCOM product complies with all basic requirements and other relevant provisions of the 1999/5/EC directive. For the full wording of the Declaration of Conformity see www.2n.cz.