



**ecom**  
instruments

■■■■■■■■ mobile experts

## **Ex-GSM 01 EU**



**Operating Instructions**



The device ecom model Ex-GSM 01 is based on the device NOKIA mobile phone model 5140i. This mobile phone has been subjected to technical modifications by ecom instruments GmbH for use in potential explosive areas. ecom instruments GmbH takes sole responsibility for any risks and damage in connection with the modification of the mobile phone for purposes of explosion protection.

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**Note:**

The current operating instructions, EC Declaration of Conformity and the Ex-certificate are available for download from the relevant product page under **www.ecom-ex.com**; alternatively they can be requested directly from the manufacturer.

### **1. Application**

The Ex-GSM 01 is a limited energy, non-sparking, splash-, dust- and shock-proof mobile telephone designed for industrial use in potentially explosive areas of Zones 2 and 22 (Cat. 3 GD, for non-conductive dusts only) in accordance with Directive 1999/92/EC (ATEX 137) or 1994/9/EC (ATEX 95).

### **2. Safety instructions**

These operating instructions contain information and safety regulations that must be followed to ensure safe and reliable operation of the unit under the described conditions. Non-observance of the information and instructions can have dangerous consequences or may contravene applicable regulations.

Please take the time to carefully read through the owner's manual before you start using the unit.

In the event of any doubt or discrepancies (for example, due to translation or printing errors), the German version of these operating instructions shall prevail.

### **3. Errors and load restrictions**

If there is any risk that the safety or integrity of the unit has been compromised, the unit must be taken out of operation immediately and removed from the Ex-area without delay. Action must be taken to prevent the device from being accidentally placed into operation again.

The safety and reliability of the unit may be at risk if, for example:

- Any damage is visible on the housing, including internal plastic parts accessible by the user (especially the battery compartment cover).
- The unit has been subjected to excessive loads for which it is not designed
- The unit has been improperly stored
- The unit has been damaged in transit
- Labels or markings on the unit are illegible
- Malfunctions occur
- Permitted tolerances or threshold values have been exceeded

#### 4. Safety regulations

Persons using the explosion-protected Ex-GSM 01 mobile telephone must observe the standard safety regulations and read the certificate to prevent incorrect operation or misuse of the unit.

The following safety regulations must be observed in addition:

- The unit must not be opened within the Ex-area.
- After using the unit in Zone 22, the combination charging and accessory connection socket must be inspected for contamination and if required, cleaned with a brush or by blowing off with compressed air.
- In Zone 22, the unit may only be used within an atmosphere containing non-conductive dusts.
- Use only the original battery module Ex-AM GSM 01 (Li-Ion 3.7 V/820 mAh)!
- The battery module must not be changed within the Ex-area!
- The battery module may only be charged outside the Ex-area using the related original charger type LGH G01 resp. the charging ability of the CarKit CK G01!
- It must be ensured that the unit is not taken into zones 0 or 1, or zones 20 and 21!
- Only the accessories listed in the accessories list (0163EX07A) may be used within the Ex-area.
- The mobile telephone is not watertight; please be sure to keep it dry!
- If you use the mobile telephone while driving a motor vehicle, be sure to observe the respective national laws!
- The mobile telephone may not be used on an airplane!
- Turn the mobile telephone off when in the vicinity of medical devices if so requested by the respective regulations!
- Manufacturers of cardiac pacemakers recommend keeping a minimum interval of 15.3 cm (6") between a mobile telephone and a pacemaker.
- Do not turn the mobile telephone on if the use of mobile telephones is prohibited; it could result in interference or pose hazards.

#### 5. Ex-data

Type examination certificate no.:

TÜV 06 ATEX 7371 X

Ex designation:

⊕ II 3 G EEx nA nL IIC T6

⊕ II 3 D Ex tD A22 IP54 T75°C

#### Notice nL, nA:

n = not an ignition source in normal operation

L – limited energy operating device

A = non-sparking

Approved for zone 2, device group II, explosion group IIC (potentially explosive gases, vapours or mist), temperature class T6.  
Approved for zone 22, device group II, dust Ex-atmosphere, max. surface temperature (- for surfaces on which dust can accumulate) +75°C, housing protects against dust deposits and spray water.

## **6. Technical data**

Networks:	Triband GSM 900 / 1800 / 1900 MHz
Data transmission:	EDGE class 6 (up to 177.6 Kbit/s), GPRS class 10 (up to 62.4 Kbit/s)
Display:	Passive matrix display with 65,536 colors (resolution 128 x 128 pixels)
Supply:	Li-Ion rechargeable battery with 820 mAh capacity
Talk time / stand-by:	max. 5 h / max. 300 h
Charging time:	approx. 2 h
Dimensions:	106.5 x 46.8 x 23.8 mm
Weight:	approx. 100 g
CE designation	 0102,  0434
Ambient temperature Ta:	-10°C ... +50°C
Protection rating:	IP54

## **7. Functional description / operating information**

Before beginning operation, please take the time to carefully read through this owner's manual to ensure that you are familiar with all of the functions of your Ex-GSM 01 and know how to use them. Please go through the instructions on the following pages for your own safety and information!

### **PLEASE NOTE!**

The internal vibration motor has been deactivated for ex-relevant reasons.  
The integrated VGA camera of the unit has been deactivated for ex-relevant reasons.

## **7.1 Initial steps**

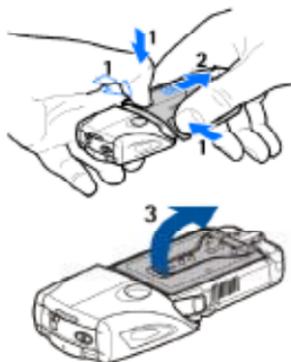
### **7.1.1 Installing the SIM card and rechargeable battery**

Before removing the battery, you must first turn the unit off and unplug it from the charger.

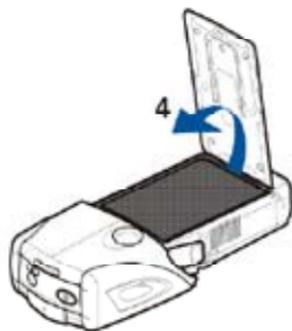
Keep all SIM cards out of the reach of small children. For availability and other information about the use of the SIM card services, please contact the distributor of your SIM card. This could be the provider, the network operator or another distributor.

This unit is designed for use with a rechargeable battery type Ex-AM GSM 01. Please be sure to only use this type of rechargeable battery. The SIM card and contact surfaces can be easily damaged if scratched or bent. Therefore, please handle the card carefully and take extra precaution when inserting or removing the card. Before installation of the SIM card, the mobile telephone must be turned off, and disconnected from all accessories before the battery is taken out.

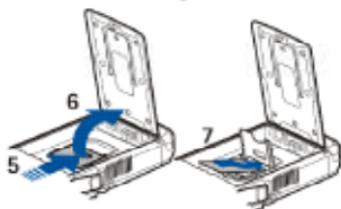
Hold the telephone with the back side up, and press the notches on both sides of the lower cover (1). Pull out the lower casing, in order to detach it (2).



Carefully lift up the cover of the battery (3).



Remove the battery from the compartment (4).



Push the cover of the SIM card holder toward the lower end of the telephone, until it is released (5). Open the cover of the SIM card holder (6). Insert the SIM card into the holder. Make sure that the bevelled edge of the SIM card is on the left and the side with the gold contacts is pointing downward (7).



Close the cover of the SIM card holder (8). Push the cover of the SIM card holder toward the upper end of the telephone until it engages (9). Align the contacts of the battery to the gold contacts and insert it into the telephone. With the contacts entering first, push the battery into the battery compartment (10). Close the battery cover (11). Place the telephone in the lower cover, and push the cover forward while doing so, until it engages (12).

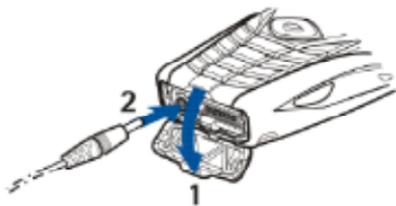
### **7.1.2 Charging the battery**

**Warning:** Use only the batteries, chargers and accessories approved for use with this model by ecom instruments GmbH. Using other types may result in the forfeiture of the certification or valid warranty or guarantee and could be hazardous.

Check the model number of the charger before using it in conjunction with your telephone. This unit can be used with charger types LGH G01 or Carkit CK G01. **Please ensure that the unit is only charged outside of the Ex-area!**

When disconnecting the cable from the accessories, be sure to pull on the plug and not the cable.

1. Open the lower flap of the mobile telephone.
2. Connect the charger to a power socket.
3. Plug the charger connection into the telephone at the bottom end.



If the battery is completely discharged, it may take a few minutes before the LED can be seen and/or before calls can be made. The charging time depends on the specific charger and battery being used.

### 7.1.3 Turning the telephone on and off

**Warning:** Do not turn the telephone on if the use of mobile telephones is prohibited; it could result in interference or pose hazards.

Hold down the On/Off button. When asked to enter the PIN or UPIN code, please enter it here (displayed as \*\*\*\*), and select OK.

Turn the telephone off before replacing the battery or SIM card. Before removing the battery, wait until the background lighting has gone out.

Your unit has an internal antenna.

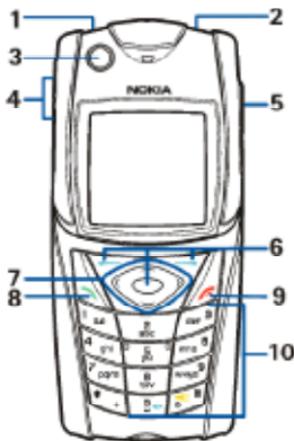
**Note:** As with any other mobile telephone, you should avoid touching the antenna of the unit when the unit is turned on. Touching the antenna compromises the quality of the connection and may result in the unit operating with a higher transmission power than normally required. By not touching the antenna when operating the unit, the antenna capacity and service life of the battery are at their optimum levels.



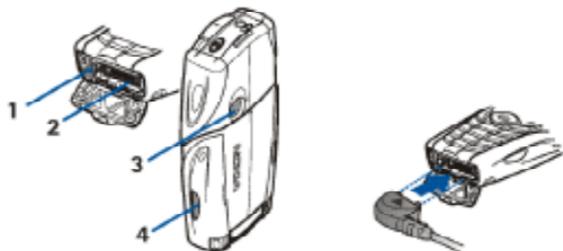
## 7.2 Your mobile telephone

### 7.2.1 Buttons and components

- Flashlight (1). To turn it on, hold down the # symbol in the output display.
- On/Off button for turning the telephone on and off (2).
- Water level for aligning the telephone when using the compass and flashlight (3).
- Using the volume buttons, you can adjust the volume for the handset, a loudspeaker or a headset that may be connected (4).
- PTT button for Push-to-talk (5).
- Left selection button, middle selection button and right selection button (6). The functions for these buttons depend on the text that can be seen at that point in time in the display above the buttons.
- Four-way arrow key for scrolling through the menu or moving the cursor when entering text (7).
- Call button (8) for selecting a telephone number or answering a call.



- End button (9) for ending a call or a function.
- The 0–9 keys are used for entering numbers and characters (10).
- The \* and # keys are used for different purposes in different operations.



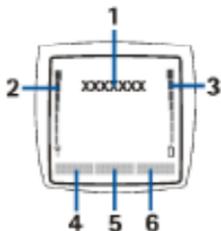
- Connection for the charger (1)
- Pop-Port™ connection, e.g. for headset and data cable (2)
- Camera lens (3) – Caution: Camera is deactivated!
- Infrared connection (4)

### 7.2.2 Initial display

If the telephone is ready for operation and you have not entered any characters, the telephone is in the initial display mode.

#### Display

- Name of network or provider logo (1)
- Signal strength of the mobile wireless network at the present position (2)
- Charge status of the battery (3)
- Left selection button is assigned to *Favorit.* (4)
- The function of the middle selection button is the *Menu* (5)
- The right selection button is assigned to *Audio* (6) or fast access to another function that you have selected.



#### Graphic display

- ☑ You have received one or more short messages or picture messages.
- 📞 The telephone registered a call in your absence.
- 🔒 The keypad is locked.
- 🔕 The telephone does not ring during an incoming call or an incoming short message, if the call signal and message signal are set to Silent.
- 🔔 The alarm is set to On.
- 📶 This symbol is displayed if the package data connection mode Always

online is selected and the package data service is available.

- A package data connection is established.
- A package data connection is interrupted, if for example an incoming or outgoing call is taking place.
- This display is on continuously if an infrared connection has been established.

### 7.2.3 Keypad lock

To block the keypad from unintentional operation of the keys, select *Menu*, and press the “\*” button within 3.5 seconds.

To cancel the keypad lock, select *Release*, and press the “\*” button. If the *Security keypad lock* option is set to *On*, enter the security code when the respective request appears.

To receive a call when the keypad lock is active, press the button used for making a call. When you end or reject an incoming call, the keypad is locked again automatically.

## 7.3 Call functions

### 7.3.1 Making calls

1. Enter the telephone number including the area code. For international calls, press “+” two times for the international area code (the “+” sign replaces the international access code) and then enter the country area code, the city code (without the initial 0 in some cases) and the telephone number.
2. To call the number, press the button used for making a call [the Call key].
3. To end the call or cut off the attempted call, press the button for ending a call.

To call by name, search the address book for the desired name or the desired telephone number. Press the call button to call the number.

To display a list of a maximum of 20 last selected numbers, press the button for making a call in the initial display one time. To call a number, select this number or a name and press the button for making a call.

### 7.3.2 Answering or refusing a call

If you want to accept an incoming call, press the Call button.

To end the call, press the button for ending a call.

To refuse an incoming call, press the button for ending a call.  
To switch the ring tone to silent, press *Silent*. You can then either accept or refuse the call.

### 7.3.3 Options during the call

Many of the options that you can use during a call are network services. You can obtain information about availability from your network operator or provider.

Select *Option* during a call and then one of the following functions:  
Call options are *Microphone off* or *Microphone on*, *Address book*, *Menu*, *Record*, *Lock keypad*, *Automatic volume on*, *loud speaker* or *Telephone*.

Options for network services are *Accept* and *Refuse*, *Hold or Accept*, *New call*, *Accept in Conf.*, *End call*, *End call*, *End all calls* and the following:

*DTMF send* for sending DTMF tones.

*Two-way splitting* to change between the active call and call on hold.

*Forward* to connect a call on hold with an active call, while disconnecting your connection to the two calls.

*Conference* to set up a telephone conference with up to five participants

*Private call* for a private discussion during a telephone conference

Warning: Do not hold the unit up to your ear if the loud speaker is being used, since the volume may become very loud.

### 7.4 Text input

To enter text (e.g. for short messages), you can use the traditional text input or the predictive text input. When using the traditional text input, press a number key (1 to 9) until the desired character is displayed. With automatic text input, you can enter a letter by pressing a key one time.

When writing the text, predictive text input is indicated by  and the traditional text input by  on the upper left of the display.  ,  or  next to the text input symbol signifies upper or lower case.

To change the upper or lower case writing and the text input mode, press the „#“ button.  indicates the numbers mode. To change from the letter to the number mode, hold down the “#” button and select Number mode.

### 7.4.1 Settings

To change the language, select the *Option > Input language*. Predictive text input is only available for the specified languages.

Select the *Option > Dictionary* on for predictive text input or *Dictionary off* for the traditional text input.

### 7.4.2 Predictive text input

Predictive text input is based on an integrated dictionary, which you can expand by adding your own words.

1. Begin inputting a word by pressing the keys **2** to **9**. Press each key just one time for each letter. After each keystroke, another word is displayed.
2. When you have completed entering the word and the word is written correctly, confirm it by pressing the **0** key to add a space or by pressing the arrow key. Pressing the arrow keys moves the cursor. If the word is not written correctly, press **\*** several times, or select the *Option > Match*. When the desired word is displayed, confirm it. If a question mark (?) is displayed after the word, there is no corresponding entry in the dictionary. To add the word to the dictionary, select *Spell*. Write the word (with the traditional text input method) and select *Save*.
3. Begin writing the next word.

### 7.4.3 Traditional text input

Press a number key (**1** to **9**) until the desired character is displayed. Not all of the characters that are available via this key are shown on the number key. The specific characters that are available depend on the input language that was set.

If the next letter to be input uses the same key as the current one, wait a moment until the cursor is displayed again. You can also press one of the arrow keys and then enter the letters.

The most frequently used punctuation marks and special characters are entered using the **1** key.

## **7.5 Messages**

The message services can only be used if they are supported by your network or your provider.

### **7.5.1 Short message (SMS)**

With the Short Message Service (SMS), you can send and receive extra long messages linked to each other, which consist of several normal short messages (network service) and may include pictures.

Before you can send short messages or picture messages or e-mail messages, you must save the number of the short message central office.

You can obtain information on the availability and on the requirements for use of the SMS e-mail service from your provider.

Note: The unit supports the sending of text messages which exceed the normal limit for an individual message. As a result, longer messages are sent in two or more messages. Your provider might charge the respective fees for this service. Characters with accents or other markings as well as characters from certain languages (e.g. Chinese) require more space. The number of characters that can be sent in a single message is therefore reduced.

At the top of the display you will find a notice of the message length, which indicates the number of characters still available. "8 (2)", for example, means that you can still add 8 characters, and the text will be sent in two messages.

### **7.5.2 E-mail messages**

The e-mail application allows you to access your compatible e-mail account via your telephone, if you are not in the office or not at home, for example. This e-mail application is not the same as the SMS e-mail function. The telephone supports e-mail servers with the protocols POP3 and IMAP4. Before you can send and retrieve e-mail, you must do the following:

- Request a new e-mail account or use the current account.  
Ask your provider about the availability of your e-mail account.
- You can obtain information about the settings required for e-mail from your e-mail provider. You may receive the settings as a configuration message.

To activate the e-mail settings, select *Menu > Messages > Message setting > E-mail messages.*

This application does not support key tones.

### **Composing and sending e-mails**

1. Select *Menu > Messages > E-mail > Create E-Mail.*
2. Enter the e-mail address of the recipient, a subject and the message. To attach a file to your e-mail, select *Option > Attachments* and the desired file from the *Gallery.*
3. Select *Send options > Send now.*

### **Downloading e-mails**

1. To retrieve the e-mail application, select *Menu > Messages > E-mail.*
2. To download e-mails that were sent to your e-mail account, select *Receive.* To download new e-mail and send e-mail which is saved in the outgoing folder, select *Option > Send and receive.*  
To first download the headers of the new e-mails sent to your account, select *Option > Check new e-mail.* Then mark the e-mails you want to download, and select *Option > Receive.*
3. Select the new e-mail in the Incoming folder. To display the e-mail later, select *Back.*

### **Incoming and other folders**

E-mail downloaded from your e-mail account is saved to on your telephone in the *Incoming* folder. The following folders are included among the *Other folders*: *Drafts* for saving incomplete e-mails, *Archive* for managing and saving e-mails, *Outgoing* for saving e-mails not yet sent and *Sent*. *Objects* for saving from sent e-mails. For managing the folders and the e-mail contained therein, select *Option > Manage folders.*

### **7.6 Address book**

You can save names and telephone numbers in the telephone memory or in the SIM card memory.

Address book entries with numbers and text messages can be saved in the telephone memory. You can also save photos for a certain number of names.

### **7.6.1 Search by name**

Select *Menu* > *Address book* > *Name* > *Option* > *Search*. Scroll through the list of names or enter the first letter of the name you are searching for.

### **7.6.2 Saving, copying and deleting entries**

Names and telephone numbers are stored in the respective memory being used. Select *Menu* > *Address book* > *Name* > *Option* > *New entry*. Enter the name and telephone number.

To copy an entry, select *Option* > *Copy*.

To delete the entire address book entries and the associated details from the telephone memory from the telephone memory or SIM card memory, select *Menu* > *Address book* > *Delete all addresses* > *From telephone memory* or *From SIM card*. Confirm this process using the security code.

To delete an address book entry, search for it and then select *Option* > *Delete participant*.

### **7.6.3 Business card**

You can send the personal information of a person as a business card to a compatible unit or receive it from a compatible unit, which supports the vCard Standard.

To send a business card, search for the address book entry whose information you would like to send and select *Input details* > *Option* > *Send business card* > *Via multimedia, via SMS* or *Via infrared*.

If you have received a business card, select *Show* > *Save*, to save it in your telephone. To delete the pending business card, select *End* > *Yes*.

### **7.6.4 Speed dial**

To assign a telephone number to a speed dial key, select *Menu* > *Address book* > *Speed dial*, and scroll to the desired speed dial number.

Select *Assign* or *Option* > *Change*, if a telephone number is already assigned to this key. Select *Search* and then search first for the name and then the number, that you want to assign. If the speed dial function is deactivated, you will be asked if you want to activate this function.

## 7.7 Settings

### 7.7.1 Profiles

The telephone has various setting modes, so-called “Profiles”, which allow you to adjust the telephone rings for certain events and environments.

Select *Menu > Settings > Profiles*.

Scroll to the desired profile and select it.

To activate the desired profile, select *Activate*.

To activate a profile for a specific time period, a maximum of 24 hours, select *Time setting* and indicate the time at which the profile should end. When the time indicated for the profile has elapsed, the previous profile, for which no time setting was indicated, becomes active again.

Select *Change* to adjust the profile. Select the setting that is to be changed and make the desired changes.

### 7.7.2 Themes

A theme contains a number of elements for adjusting your telephone, such as background picture, a screen saver, a color scheme and a ring tone. Select *Menu > Settings > Themes*. Then choose *Select theme*, to select a theme for your telephone. In the gallery you will find a list of folders. Open the Themes folder and select a theme.

### 7.7.3 Rings/sounds

You can change the settings of the selected active profile. Select *Menu > Settings > Ring tones and signals*. Select the desired settings for which you would like to make changes.

*Call signal, Ring tone, Ring tone volume, Push-to-talk settings, Message signal, Chat signal, key tones, warning tones and call signal for*. You can find the same settings in the Profiles menu.

To set the telephone so that it only rings when calling telephone numbers assigned to a certain caller group, select *Call signal for*. Scroll to the desired Caller group or to All calls, and select *Mark..*

**Caution:** The vibration alarm is deactivated for reasons related to explosion protection!

#### **7.7.4 Display**

Select *Menu > Settings > Display* and one of the following options:  
*Background*, to add a background image to the display in the initial display. To select, activate or deactivate the background image, chose *Select background > On* or *Off*. To download additional background images, select *Graphic downloads*.

*Screen saver > On*, to activate the screen saver. To set a time period after which the screen saver is activated, select *Delay*. To select a graphic for the screen saver, select *Picture*. Then select a picture or a graphic from the gallery. To download additional images for the screen saver, select *Graphic downloads*.

*Energy saving mode > On*, to reduce the battery load. A digital clock is displayed if no telephone functions are being used for a certain time period.

*Color palette*, to change the color of certain display components (e.g. menu background, status bar and load indicator).

*Font color in Standby*, to select the text color for the initial display.

*Provider logo*, to display or hide the provider logo on your telephone. If you have not saved the provider logo, the Menu is dimmed out. You can obtain more information about the availability of a provider logo from your network operator or provider.

*Display contrast*, to set the contrast of the telephone display.

#### **7.7.5 Date and time**

Select *Menu > Settings > Time and Date* and one of the following options:

*Clock*, to set the telephone so that the clock is displayed in the initial display, to set the time and to select the time zone and the time format.

*Date*, to set the telephone so that the date is displayed in the initial display, to set the date and to select the date format and the separating symbol.

*Automatic Date/time*, to set the telephone so that the time and date are automatically adjusted according to the current time zone (network service).

### 7.7.6 Connections

You can connect the telephone to compatible devices via infrared. You can also arrange the settings for GPRS dial-in connections.

#### Infrared

The telephone can be configured for sending and receiving data via its infrared connection (IR). To use an IR connection, the other device must be IrDA-compatible. You can send data to a compatible telephone or data device (such as a computer) via the IR connection of your telephone or you can receive data from them.

**Note:** Do not aim the IR beam (infrared beam) toward the eyes of other persons and avoid allowing your IR beam to disturb other IR devices. The unit is a Class 1 laser product.

When sending and receiving data, make sure that the IR connections of the sending and receiving units point toward each other and that there are no obstacles between the units.

To activate the IR connection of your telephone for receiving data, select *Menu > Settings > Connections > Infrared*.

To deactivate the IR connection, select *Menu > Settings > Connections > Infrared*. When the telephone displays the message Deactivate infrared? Select **Yes**.

If data transmission is not started within two minutes after activating the IR connection, the connection has been broken and must be re-established.

#### Package data (EGPRS)

EGPRS (General Packet Radio Service – Package data) is a network service, which mobile telephones can use to send and receive data via IP networks. EGPRS allows for wireless access to data networks such as the Internet.

Applications that can use the package data are MMS, Browser sessions, e-mail, remote SyncML, downloading Java applications and PC dial-in.

To determine how you would like to use this service, select *Menu > Settings > Connections > Package data > Package data connection*.

Select *As required*, to set up the package data connection when it is needed by a program. It will be disconnected when the program is ended.

Select *Always online* to set the telephone so that a connection to a package data network is automatically established when the phone is turned on.

### **Modem settings**

You can connect the telephone to a compatible PC via infrared or a data cable (DC G01) and use the telephone as a modem to establish a package data connection to a PC.

To specify the connection settings for the PC, select *Menu > Settings > Connections > Package data > Settings for package data > Active access point*, activate the desired access point and then select *Change active access point*. Select a name for the access point and enter a nickname for the currently selected access point. Select *Package data access point* and enter the name of the access point (APN, Access Point Name), to establish a connection with an EGPRS network.

### **7.7.7 Making calls**

Select *Menu > Settings > Calls* and one of the following options:

*Automat. Volume control*, to set the telephone so that the loud speaker volume is automatically adjusted to the background noise.

*Call diversion*, to redirect incoming calls (network service). If the functions for call blocking are active, you will not be able to redirect calls under some circumstances.

*Accept call with any key > On*, in order to accept incoming calls by quickly pressing any key (excluding the end key or the left and right selection keys).

*Automat. Redialing > On*, so that after an unsuccessful call attempt, the telephone tries up to ten times to establish a connection to the desired telephone number.

*Speed dial > On*, to activate the Speed dial. To select, hold down the respective number key.

*Call waiting > Activate*, to request that you be informed by the network of an incoming call during an active call (network service).

*Show cost/length of time > On*, to briefly show the approximate length of time and cost of the call after calling (network service).

*Send own number* (network service) > *Yes, No or depending on network*

*Line for outgoing calls* (network service), to use Line 1 or Line 2 for calling, provided it is supported by your SIM card.

### **7.7.8 Telephone**

Select *Menu > Settings > Telephone* and one of the following options:

*Language settings* to specify the language for the display and the write functions.

*Memory status*, to show the memory load from the gallery, messages and programs.

*Automatic keypad lock*, to set the keys of your telephone so that they will be locked after a specified period of time, if the telephone is in the initial display and none of the telephone functions have been used. Select *On*, and set a time period between 5 seconds and 60 minutes.

*Security keypad lock*, to set the telephone so that you will be asked to enter a security code when canceling the keypad lock. Enter the code, and select *On*. If the keypad lock is activated, emergency calls can possibly still be made to the official emergency number programmed into your unit.

*Network information > On*, to receive information from the network provider depending on the current wireless cell (network service).

*Greeting*, to enter the greeting text, which is briefly displayed when the telephone is turned on.

*Operator selection > automatic*, to set the telephone so that it automatically selects one of the networks available in your area. *Using Manual*, you can select a network which has a Roaming agreement with your national network provider.

*Help texts*, to specify whether help texts are to be displayed on the telephone.

*Start melody*, to select whether the telephone will play a start melody when it is turned on.

### **7.7.9 Security**

When security functions which restrict the calls (such as call blocking, calls only to closed user groups and telephone number restrictions) are used, emergency calls can possibly still be made to the official emergency number programmed into your unit.

Select *Menu > Settings > Security* and one of the following options:

*PIN code query*, so that whenever you turn on the telephone, you are asked to enter the PIN or UPIN code. Some SIM cards do not allow the Code query to be shut off.

*Call blocking (network service)*, to limit incoming and outgoing calls on your telephone. A blocking password is required.

*Telephone number restriction*, to limit the outgoing calls to certain telephone numbers, provided this function is supported by your SIM card.

*Closed user group (network service)*, to specify a group of persons you can call and whose calls you will accept.

*Security level > Telephone*, so that the telephone asks you to enter the security code when inserting a new SIM card. Select *Memory*, so that you will be asked to enter the security code when the memory of the SIM card is selected and you would like to change the memory currently being used.

*Access codes*, to set the PIN or UPIN code being used or to change the security code, PIN code, UPIN code, PIN2 code and blocking password.

*Used code*, to select whether the PIN code or the UPIN code should be active.

*Inquire about PIN2 code*, to select whether entering the PIN2 codes is necessary for certain telephone functions which are protected by this code.

### **7.7.10 Re-establishing the factory settings**

To re-establish certain menu settings to their original values, select *Menu > Settings > Re-establish factory settings*. Enter the security code. The will ensure that the entered or downloaded data such as: the names and telephone numbers stored in the *Address book* are not deleted.

### **7.8 Push-to-talk**

Push-to-talk (PTT) over the mobile wireless network is a two-way data service, which is available via a GSM/GPRS mobile wireless network. PTT enables direct voice communication. Connection setup is handled by pressing the PTT key.

Using PPT, you can conduct calls with one person or a group of persons who have compatible units. If the connection is established, the person or group does not need to additionally accept the call. The subscribers should confirm receipt where applicable, since there is no other type of confirmation as to whether the recipients have listened to the call.

You can obtain information about the availability and cost of this service from your network operator or provider, where you can also subscribe to this service. Roaming services may be more strictly limited than for normal calls.

Before using the PTT service, you must specify the required PTT service settings.

During a connection to the PTT service, you can continue to use the other functions of the telephone. PTT over the mobile wireless network is not dependent on traditional voice telephony. Because of this, many of the associated services (e.g. voice mailbox) are not available.

#### **7.8.1 Push-to-talk menu**

Select *Menu > Push-to-talk*

- To establish or break the connection to the PTT service, *select Activate PTT or Deactivate PTT*.
- To display the call back requests received, select call back inquiries.
- To display the list of PTT groups, select the group list.
- To display the list of dialog partners to whom you have added the PPT address received from the provider, select the list of calling parties [participants].
- To create a new PTT group on the telephone, select the group to add.

- To specify the PTT settings to be used, select the PTT settings.
- To specify the settings required for the PTT connection, select *Config.settings*.
- To open the browser and establish a connection to the PTT network portal of the provider, select Internet.

## 7.8.2 Push-to-talk calls

Set the loud speaker or handset operation for PTT communications on the telephone.

**Warning:** Do not hold the unit up to your ear if the loud speaker is being used, since the volume may become very loud.

When PTT service is activated, you can make or receive dialed calls, group calls or individual calls. Individual calls are calls with only one person.

### Using PTT calling

If you would like to make a PTT call, you can select several PTT contacts from the address book. The recipients receive a call signal and must accept the call in order to participate. An outgoing call creates a temporary group of participants, which only exists for the duration of the respective call. When the call is ended, this group is deleted.

Select *Menu > Push-to-talk > List of participants* and mark the desired entries for the outgoing call.

The symbol next to the list entry indicates the current log-on status. , , or  indicates whether the status can be achieved, cannot be achieved or is unknown.  indicates that the log-on status is not available. The log-on status is only available for subscribed participants. To change the subscribed entries, select *Option* and the available address book options: *Subscribe contact* or *Cancel contact*. If one or more entries are already marked, select *Subscribe marked* or *Cancel marked*.

Press the PTT button briefly to start the outgoing call. The marked address book entries are retrieved by the PTT service and the member dialog partners are shown in the display. Hold down the PTT button to speak with the member dialog partners. Release the PTT button to hear the reply.

Press the end key to end the outgoing call.

## **Making a group call**

Press the PTT button to make a call to the standard group. A tone signal indicates that access has been granted and the telephone displays your nickname and your group name. To make a call to a group other than the standard group, select the *Group list* option in the PTT menu, scroll to the desired group and press the PTT button.

Hold down the PTT button for as long as you continue to talk. Hold the telephone out in front of you so that you can see the display. When you are finished talking, release the PTT button. The first person to press the PTT button is the one who can speak. When one person is finished speaking, the next person to push the PTT button can then speak.

## **Making an individual call**

- To make an individual call from the address book, to which you have added the PTT address, select *List of participants*. Scroll to an entry and press the PTT button. You can also select your dialog partner from the address book.
- To start an individual call from the list of PTT groups, select *Group list* and scroll to the desired group. Select *Option > Active participants*, scroll to the desired dialog partner and press the PTT button.
- To make an individual call from the list of your received call back requests, select *Call back requests*. Scroll to the desired nickname and press the PTT button.

## **Receiving a PTT call**

A short signal tone informs you of an incoming group or individual call. When a group call is being received, the group name and the nickname of the caller are displayed. When an individual call is being received from a person whose information you have saved in the address book, the saved name (if available) will be displayed, otherwise only the nickname of the caller will be displayed.

You can accept or reject an incoming individual call if you have set the telephone for notifying you of individual calls.

If you press the PTT button to answer a group while another group member is speaking, a wait tone will sound and the message *Wait queue* will appear on the display while you press the PTT button. Hold down the PTT button and wait until the other person is finished speaking. Then, you can speak.

### 7.8.3 Call back requests

If you do not receive an answer to an individual call, you can send the respective person a call back request.

If you receive a call back request from another person, the message “call back request received” appears in the initial display. If the call back request comes from a person who is not in your address book, you can save the name in your address book.

#### **Sending a call back request**

You can send the following types of call back requests:

- To send a call back request from the address book in the Push-to-talk menu, select *List of participants*. Scroll to an entry and select *Option > Send call back request..*
- To send a call back request from the address book, scroll to the desired entry. Then select *Option > Entry details*, scroll to the PTT address and select the *Option > Send call back request..*
- To send a call back request from the group list of the PTT menu, select *Group list* and scroll to the desired group. Select *Option > Active participants*, scroll to the desired entry and select the *Option > Send call back request..*
- To send a call back request from the list of call back requests, select *List of participants* in the Push-to-talk menu. Scroll to an entry and select *Option > Send call back request..*

#### **Answering a call back request**

1. To open the call back requests, select *Show*. The list of the nicknames of the persons from whom you received call back requests is displayed.
2. To make an individual call, press the PTT button.
3. To send a call back request to the sender, select *Option > Send call back request..*

Select Delete to delete the call back request.

### 7.8.4 Setting up groups

When you initiate a group call, you can be heard by all of the members of the group at the same time. Each group member is identified by a nickname, which is displayed as the caller identification. Group members can select a specific nickname for each group.

The groups are registered via a URL address. A user registers the group URL in the network by initially joining the group meeting.

There are three types of PTT groups:

- Provided groups are closed groups to whom only the participants selected by the provider are admitted.
- Ad hoc groups are groups which the user himself can create. You can create your own group and invite members to join it.
- Ad hoc groups can also be comprised of members from a provided group. A company could maintain a closed group, for example, and additionally set up other internal groups for specific corporate functions.

### **Adding a group**

Select *Menu > Push-to-talk > Add group*. Select one of the following options:

- **Managed**, to add a new group. To specify the security level of the group, select *Public group* or *Private group*. When *Private group* is selected, the telephone automatically creates an encrypted portion of the group address, which is not visible to the members when they receive an invitation to the group. Only the person who creates the private group can invite additional members to this group. Enter the name of the group. Select *Standard*, *Monitor* or *Inactive*. The telephone shows that the group and its status are saved. *Standard* and *Monitor* are active groups. When you activate the PTT button to place a group call, the standard group is called up, unless you scroll to another group on another entry. To send an invitation to the group, select *Yes* when requested to do so by the telephone. You can send the invitation as a short message or via IR.  
The members whom you invite to public groups can themselves invite other members to the group.
- **Manual**, to join an existing group. Enter the group address. Select *Standard*, *Monitor* or *Inactive*. The telephone shows that the group and its status are saved. *Standard* and *Monitor* are active groups. When you activate the PTT button to place a group call, the standard group is called up, unless you scroll to another group or another entry.

### **Receiving an invitation**

1. If you receive an invitation to a group via a short message, the message *Group invitation received.: ...* is displayed.

2. To display the nickname of the inviting party and the group address (if it does not pertain to a private group), select *Show*.
3. To add the group to your telephone, select *Save*. To specify the status of the group, select *Standard*, *Monitor* or *Inactive*. To decline the invitation, select *End > Yes* or *Show > Delete > Yes*.

### 7.8.5 PTT settings

There are two types of PTT settings: Settings for connecting to the service and a setting for use.

You can obtain the settings for connecting to the service from your network operator or provider. You can manually enter the settings.

To specify the settings for connecting to the service, select *Menu > Push-to-talk > Config. settings*. Select one of the following options:

*Configuration* for selecting a provider, *Standard* or *My configuration* for PTT service. The configurations which the PTT service supports will be displayed.

*Account*, to select a PPT service account in the active configuration settings.

*PTT user name*, *Standard nickname*, *PTT password*, *Domain* and *Server address*

To edit the PTT setting for use, select *Menu > Push-to-talk > PTT settings*.

If you wish to allow the receipt of incoming individual calls, select *Calls between two > On*. If you only want to place individual calls, but not receive them, select *Off*. The provider may provide services that overwrite these settings. To set the telephone so that you are first notified of incoming individual calls by a ring tone, select *Notify*.

To activate the monitored groups, select *Monitored groups > On*. To set the telephone so that it automatically establishes the connection to the PTT service when turned on, select *PTT Status when turning on > Yes*.

To suppress disclosure of your PTT address in groups and individual calls, select *Send my PTT address > No*.

## **7.9 Organizer**

### **7.9.1 Alarm**

The telephone can be set so that it sets off the alarm function at a specific time of day. Select *Menu > Organizer > Alarm*.

To set the alarm, select *Alarm time*, and enter the alarm time. To change an alarm time already specified, select *On*. To set the telephone so that the alarm goes off on specific weekdays, select *Weekday repeat*.

### **7.9.2 Calendar**

Select *Menu > Organizer > Calendar*.

The current date is identified by a border. If there are any entries for this day, the day will be displayed in bold text. To display the entries for the day, select *Show*. To display an entire week, select *Option > View week*. To delete all entries in the calendar, select the month or week view and then the *Option > Delete all entries*..

Additional options available for the *View day* are *New entry*, *Delete*, *Edit*, *Move* or *Repeat* a notice; *Copying* a notice to another date; *Send entry* as a short message or multimedia message via IR or to the calendar of another compatible telephone. You can specify the settings for the date and time under *Settings*. Using the *Automatically delete entries* option, you can specify that all entries be automatically deleted after a specific period of time.

### **7.9.3 Task list**

To save notes regarding tasks that you need to complete, select *Menu > Organizer > Task list*.

If there is no entry yet, you can create an entry by selecting *New*. Otherwise, select *Option > New*. Make the entry, and select *Save...* Select the priority, deadline and signal type for the entry.

To display a note, scroll to it and select *Show*.

You can delete a selected entry or all entries that you have marked as completed. You can sort the entries by priority or deadline, as a short message or multimedia message or send it to another telephone or save it as a calendar entry, and open the calendar.

When displaying an entry, you also have the option to edit the deadline or the priority or to mark the task as completed.

#### **7.9.4 Notes**

If you would like to use this application for composing and sending notes, select *Menu > Organizer > Notes*. If there is no entry yet, you can create an entry by selecting *Make a note*. Otherwise, select *Option > New note*. Enter the note, and select *Save*.

You also have options for deleting and editing notes. While you edit a note, you can end Text editor without saving changes. You can send the note as a short message or a multimedia message or via IR to compatible units. If the note is too long to send as a short message, the telephone will ask you to delete the respective number of characters from the note.

#### **7.9.5 Calculator**

Using the calculator in your telephone, you can add, subtract, multiply, and divide numbers, calculate percentages, figure square roots and convert currencies.

**Note:** This calculator has only a limited level of precision and is designed for simple calculations.

Select *Menu > Organizer > Calculator*. When "0 is displayed, enter the first number of the calculation. Press # to enter a decimal point. Select *Option > Add, Subtract, Multiply, Divide, Square, Square root or change sign*. Enter the second number. To find the sum, select *Sum*. Repeat these entries as often as required. To start a new calculation, hold down *Delete*.

To calculate an exchange rate, select *Menu > Organizer > Calculator*. To save the exchange rate, select *Option > Specify rate*. Select one of the displayed options: Enter the exchange rate, press the # key to enter a decimal point, and select OK. The exchange rate will remain stored until you enter another rate. To carry out the currency conversion, enter the amount that is to be converted and then select *Option > In my currency or In foreign currency*.

**Note:** When you change the base currency, you must enter the new rates, since all previously specified exchange rates are set to zero.

## 7.9.6 Synchronization

Using the synchronization function, you can save the data in your address book to a remote Internet server (network service) or a compatible PC. After you have saved the data to the remote Internet server, start synchronization from your telephone to synchronize this data with your telephone. To synchronize the data from the address book, calendar and notes of the telephone with the respective data of the compatible PC, start synchronization from the PC. The data from your SIM card will not be synchronized.

Please note that synchronization will be terminated if you answer a call during synchronization. You must then restart the synchronization process.

### Synchronizing via the telephone

Before starting synchronization on the telephone, you must proceed as follows:

- Register with a synchronization service.  
You can obtain more information about this from your provider.
- Request the synchronization settings from your network operator or provider.

Start the synchronization process from your telephone as follows:

1. Select the connection settings you need for synchronization.
2. Select *Menu > Organizer > Synchroniz. > Server synchronization > Synchronize data*. Mark the data to be synchronized.
3. Select *Menu > Organizer > Synchroniz. > Server synchronization > Synchronize*. Following confirmation, the marked data of the active set will be synchronized.

The first synchronization or the resumption of an interrupted synchronization can take up to 30 minutes if you have save a large number of address book or calendar entries.

### Synchronization settings

You may receive the configuration settings required for synchronization as a configuration message from your network operator or provider.

1. Select *Menu > Organizer > Synchroniz. > Server synchronization > Synchronization settings* and one of the following options:  
*Configuration*, to display only the configurations that support the synchronization. Select a provider and then *Standard* or *My configuration* for the synchronization.

*Account*, to select a synchronization service account from the active configuration settings.

2. Select PC synchronization settings to enter the user name and password for the synchronization instigated by the server. Specify the settings for user name and password.

The user name and password for the telephone and PC must be identical.

### **Synchronizing from a compatible PC**

To synchronize the address book, calendar and notes from a compatible PC, use your IR connection or a data cable. In addition, a suitable PC Suite (PC software) for your telephone must be installed on the PC. Start synchronization from the PC using the PC Suite.

#### **7.10 Computer connection**

If your telephone is connected to a compatible PC via an infrared connection or a data cable (DC G01), you can send or receive e-mails and access the Internet. You can use the telephone with a number of applications for computer connection and data communications.

##### **7.10.1 PC Suite**

Using a suitable PC Suite, you can synchronize address book, calendar and task entries as well as notes between your telephone and a compatible PC or a remote Internet server (network service).

##### **7.10.2 GPRS, HSCSD and CSD**

You can use Package Data Services, High-Speed Circuit Switched Data (HSCSD) and Circuit Switched Data (CSD, GSM data) on your telephone. (You can obtain information about availability and subscribing to the data services from your network operator or provider).

When using HSCSD services, the battery on your telephone is discharged more quickly than during normal speech and data calls. In some cases, you need to connect the mobile telephone to a charger during longer data transmissions (Warning: connection to a charger is only permitted outside of the Ex-area.)

### **7.10.3 Data communications applications**

Information on the use of data communications applications can be found in the documentation of the respective application. You should not place or receive any calls while it is connected to a PC. This could disrupt the performance. For better power during data calls, place the telephone on a solid surface with the keypad facing downward. You should not move the telephone during a data communication, which means you should not hold it in your hand.

### **8. Accessories**

Only the accessories indicated in the Accessories List (0163EX07A) may be used with the Ex-GSM 01 inside of the Ex-area. You must make sure that prohibited accessories are removed before entering the Ex-area.

### **9. Battery**

#### **9.1 Battery replacement**

The battery module Ex-AM GSM 01 for the Ex-GSM 01 may only be replaced outside of the Ex-area. Only battery modules approved by the manufacturer may be used. Other battery modules may not be brought into the Ex-area.

#### **9.2 General information**

We recommend that you charge and/or discharge a new Ex-AM GSM 01 battery module two to three times; only then does the battery module reach its full capacity.

After the battery module is fully charged, disconnect the charger from the network and from the unit. Overcharging the battery module reduces its service life. When not used, the battery module discharges over time. The battery module can be charged and discharged several hundred times, but over the course of time it will wear out. When the talk and standby times are significantly shorter than usual, replace the battery module.

#### **9.3 Safety instructions**

Damaged battery modules and chargers must no longer be used and should be sent to econ instruments GmbH for checking.

#### **Caution:**

Extreme temperatures can have a negative effect on the charging of your Ex-AM GSM 01 battery module.

Do not throw the battery module into a fire!

Do not short circuit the battery module!

Dispose of the battery module in compliance with local provisions.

Do not throw the battery module away with the normal household trash.

### **10. Information on certification (SAR)**

THIS UNIT COMPLIES WITH THE INTERNATIONAL GUIDELINES FOR SHIELDING ELECTROMAGNETIC RADIATION.

Your mobile unit is a radio receiving and transmitting unit. It was designed and manufactured so as not to exceed the limits recommended by international body of rules and regulations (ICNIRP) for the output of high frequencies. These limits constitute an integral component of comprehensive guidelines and stipulate the thresholds allowed for the impact of high frequency emissions on the general population. These guidelines were developed by independent scientific institutes by means of thorough and regular evaluation of scientific studies. They encompass a large margin of safety, in order to ensure the safety of all persons regardless of age and general state of health.

The limits for the impact of mobile devices is based on a unit of measurement which is called the Specific Absorption Rate (SAR). The SAR limit documented in the international guidelines is 2.0 watts/kilogram (W/Kg)\*. SAR tests are carried out on the basis of standard operating positions, with the unit being operated at the highest allowable transmission power in all tested frequency bands. Although the SAR is determined at the highest permissible transmission power, the actual SAR values may be considerably below the maximum value when operating the unit. This occurs because the unit is designed to work with different transmission powers, in order to always use only the transmission power required for access to the mobile wireless network. As a general rule, the closer you are to the base station, the lower the required transmission power of the unit. The highest SAR value for this unit model when tested for use on the ear is 0.77 W/Kg.

The SAR limits may vary depending on the national guidelines and test requirements as well as the frequency band. The use of accessories can affect the SAR values.

\* The SAR limit for mobile units used by the general public is 2.0 W/kg, as the average value per 20 grams of body mass. The guidelines embody a large margin of safety for the additional protection of persons and to take into account possible errors of measurement. The SAR limits may vary depending on the national guidelines and the frequency band.

### **11. Repairs**

Repair work is subject to the nationally valid regulations and directives. Repairs have to be carried out at ecom instruments GmbH to ensure that it is inspected for safety and reliability.

### **12. Disposal**

Electrical devices and „historic“ electrical devices of ecom instruments GmbH are transported to us for the obligatory disposal at our cost and are disposed free of charge in accordance with the European Directive 2002/96/EC and the German Electrical and Electronic Equipment Law of 16 March 2005. The costs of transporting the equipment to ecom instruments GmbH are to be borne by the sender.

### **13. Maintenance**

Your mobile telephone was developed and manufactured with great care and should for this reason also be treated carefully. By observing the information outlined below, you will prevent early forfeiture of the warranty on your unit and you will enjoy many years of pleasure in using it.

- Be sure to keep the unit dry. Precipitation, moisture and all types of liquids and wet areas may contain minerals, which can result in electronic circuits becoming corroded. If the unit gets wet, remove the battery and let the unit dry out completely before reinserting the battery.
- Do not keep the unit in hot surroundings. High temperatures can shorten the service life of electronic devices, damage batteries and warp certain plastics or even cause them to melt.
- Do not keep the unit in cold surroundings. When the unit then returns to its normal temperature, moisture can build up on the inside and damage the electronic circuitry.
- Do not attempt to open the unit in a way that is different from that described in these instructions.
- Do not drop the unit or allow it to get hit or bumped and do not shake it. Electronic circuitry and small mechanical parts within the unit can be damaged from rough handling.
- Do not use any strong chemicals, cleaning solutions or strong cleansers to clean the unit.
- Do not paint the unit. The paint can cause the movable parts to stick together and thus interfere with proper operation.
- Do not use the charger outside.
- Make backup copies of all important information that you want to keep (e.g. address book and calendar entries), before you drop your unit off at a service center.

All of the above tips also apply for your unit, battery, charger and all accessories. If your unit does not function properly, send it to the manufacturer.

#### **14. Service & Maintenance**

We recommended having the functions and the measures provided for explosion protection checked by the manufacturer every two years.

#### **15. Warranty and liability**

Under the general terms and conditions of business, ecom instruments GmbH offers a two-year warranty for functioning and materials on this product when used under the specified operating and maintenance conditions. All wearing parts and rechargeable batteries are exempt from this. A six-month manufacturer's warranty applies to rechargeable battery modules.

This warranty does not extend to products that have been used improperly, altered, neglected, damaged by accident or subjected to abnormal operating conditions or improper handling.

In the event of a warranty claim, the faulty device should be sent in. We reserve the right to re-calibrate, repair or replace the device.

The above warranty terms represent the sole rights of the purchaser to compensation and apply exclusively and in place of all other contractual or statutory warranty obligations. ecom instruments GmbH does not accept liability for specific, direct, indirect, incidental or consequential damages or losses, including the loss of data, regardless of whether they are caused by breach of warranty, lawful or unlawful actions, actions in good faith or other actions.

If in certain countries the restriction of statutory warranty and the exclusion or restriction of incidental or consequential damages is unlawful, then it may be possible that the above restrictions and exclusions do not apply for all purchasers. If any clause in these warranty terms is found to be invalid or unenforceable by a competent court, then such a judgement shall not affect the validity or enforceability of any other clause contained in these warranty terms.

## ***16. EC Declaration of Conformity***

Further details relating to the declaration of conformity can be found at the following Internet address:

**<http://www.ecom-ex.com>** in the Download area.

## 17. Type Examination Certificate

### Type examination certificate

- (1)  
(2) Equipment and Protected Systems Intended for Use in Potentially Explosive Atmospheres - Directive 94/9/EC  
(3) Type examination certificate number.

### TÜV 06 ATEX 7371 X

- (4) **Equipment:** Mobile phone Ex-GSM 01  
(5) **Manufacturer:** ecom instruments GmbH  
(6) **Address:** D-97959 Assamstadt  
Industriestraße 2

- (7) The design of this equipment and its various approved embodiments are defined in the attachment to this type examination certificate.  
(8) The TÜV CERT certifying body for explosion protection products of the TÜV Rheinland Industrie Service GmbH, notified body no. 0035 in accordance with Article 9 of the EC Council Directive dated March 23, 1994 (94/9/EC), certifies that this equipment has been found to conform with the essential health and safety requirements for the design and construction of equipment and protected systems for proper intended use in potentially explosive areas in accordance with Appendix II of the directive.  
The results of the test are documented in the confidential test report no.: 194/Ex 371.00/06.  
(9) The essential health and safety requirements are met by virtue of conformity with

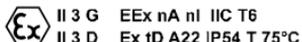
**EN 60079-0: 2004**

**EN 60079-15: 2003**

**prEN 61241-0: 2004**

**EN 61241-1: 2004**

- (10) If the certification number is followed by an "X", then this indicates that special conditions exist for the safe operation of the equipment. These special conditions are contained in the attachment to this certificate.  
(11) This type examination certificate refers only to the design and testing of the specified equipment according to the Directive 94/9/EC. Further requirements contained in this directive apply for the manufacture and marketing of this equipment. These requirements are not covered by this certification.



TUV Rheinland Industrie Service GmbH  
TUV CERT certifying body for explosion protection  
Am Grauen Stein 1  
D-51101 Cologne

Cologne, July 26, 2006

(13)

Attachment to the

(14)

## Type examination certificate

### TÜV 06 ATEX 7371 X

(15) Object

#### 15.1 Object and type

The Ex-GSM 01 is a handheld electrical mobile phone which, together with the headset type HS-01E, is suitable for industrial use in potential explosive areas of Zones 2 and 22.

#### 15.2 Description of the equipment

The operating device has limited power, or to be precise, is non-sparking with the IP protection rating IP 54.

It consists of an external plastic housing (removable cover) and an internal housing to which the IP protection rating applies.

The internal vibration motor and the VGA camera of the standard equipment have been deactivated.

The accessories approved for Zones 2 and 22 are listed in the document 0163 Ex 07 A.

Further accessories are available for use outside the Ex-area.

For all external connections there is a combination charging and accessory connection socket, which is covered when not in use.

#### 15.3 Parameters

##### 15.3.1 Technical data

Ambient temperature range:  $-10\text{ °C} \leq T_a \leq +50\text{ °C}$

Housing protection rating: IP54

#### Electrical data

Nominal voltage 3.7V

(16) Test report no. 194/Ex 371.00.06

(17) Special conditions

- Use in Zone 22 is limited to non-conductive dust.
- The equipment must only be operated in the Ex-area with the tested integrated rechargeable battery type Ex-AM GSM 01 from Ecom. Only the CC G01 may be used as a removable cover.
- The safety regulations in the manufacturer's operating instructions must be observed.
- The internal plastic parts accessible to the user (especially the battery compartment cover) must be checked for damage on a recurring basis.

(18) Essential health and safety requirements

No additional requirements

TÜV CERT certifying body

Cologne, July 26, 2006

Dipl.-Ing. Klaus Wettingfeld,

*Kommunikation  
Mobile Computing  
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WEEE-Reg.-Nr. DE 934 99306

0164AL01 A00 07/06 Änderungen vorbehalten! Subject to change without notice!

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