

Ergophone

Ergonomic Emergency Telephones.

Innovative, comfortable and sustainable.

Ergophone S 510 radio

Ergophone S 510 IP radio



Design for all

The “Ergophone S 510 radio/S 510 IP radio” is designed to take into account the physical, sensory and intellectual capabilities of people more than the average phone.

Understanding

The Ergophone’s intuitive and user-friendly operating system promotes the pleasure of phoning. Standard functions are maintained rather than replaced by completely new concepts.

Grasping

The motor skills of hands play an especially large role when making calls. Extra-large keys with a clear push-point and smooth sliders allow for easy operation.

Seeing

The phone’s operating elements are a clear contrast to the surface of the phone and easily identifiable. The display is large, backlit and glare-free. Large numbers and letters facilitate reading numbers and names.

Hearing

The Ergophone can be set extra loud and has a crystal-clear sound. Calls are indicated via a bright flashlight in addition to the ringing sound. Hearing aids can be magnetically coupled, so that conversation can be heard loud and clear.



Ergonomics

Compact, thin and modern in design, ergonomically uncompromising in use: The Ergophone combines intelligent technology with simple operation.

Handset can be easily held.

Handset to hearing aid compatibility.

Thanks to the built-in motion detector, the keypad and display backlighting switches on automatically.

Loudspeaker, ringtone and handset volumes can be easily adjusted via slide switches.

Extra-large, high-contrast and illuminated display.

Visual call indication with bright flashlight.

Illuminated emergency key.

Keypad lead adapter (aid for dialling).

Simple and rapid dialling via speed dialling keys with name plates.



Emergency communications

Just one quick and flexible emergency communication service ensures needs-based assistance.

Emergency call

Via different call triggers (emergency call key, cord pull switch, radio pendant etc.) emergency calls can be sent to programmed telephone numbers.

An emergency call is accepted by pressing the 5 key on the receiver phone. In the case of a bad connection, the recipient can switch from hands-free operation to loudspeaker or listening mode by using the number keys.

The person seeking help can communicate with the recipient even from a few meters away from the phone thanks to the excellent audibility of the device.

Incoming calls are processed almost simultaneously, one after the other. No emergency call is missed.

Alternatively, the emergency call can be sent via the PBX to a server, which takes over the alarm management.

Vital sign function

The vital sign function serves to monitor the presence and the activity of the user. The user has to press the vital sign function key regularly at the agreed time in order to prevent the telephone from issuing an automatic emergency call.

Auto answer mode

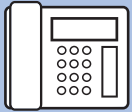
If the ergonomic phone of the person seeking help is switched to auto answer mode, the phone rings once after it is called and switches to listening mode or hands-free mode without having to be operated by the person seeking help.



Expiry of calls

Well thought-out processes guarantee maximum security.

Emergency call



Person seeking help triggers an emergency call. →



Phone of the nurse rings.

Nurse picks up and hears the emergency announcement. She presses key 5 to accept the call. The emergency announcement stops.

Conversation with the person seeking help. Nurse controls the conversation via numeric keys:

- ④ Listening in: nurse hears.
- ⑥ Announcement: nurse speaks.
- ⑤ Hands-free: listening and speaking.
- ⑧ Nurse finishes the call.

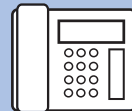
Ergonomic phone switches to hands-free.

Ergonomic phone hangs up without audible busy tones. ←

Auto answer mode via CLIP



Nurse calls the person seeking help. →



Phone rings once, recognizes the caller's number and switches to listening in or hands-free mode automatically.

Nurse controls the conversation via number keys (see above).

Radio emergency call

Up to 12 radio call transmitters have access to the Ergophone. The advanced system is flexible - wherever reliable security is needed.

The peace of mind of security

Carefree quality of life for peaceful time in your own four walls with the Ergophone radio emergency call function.

Radio emergency call triggers

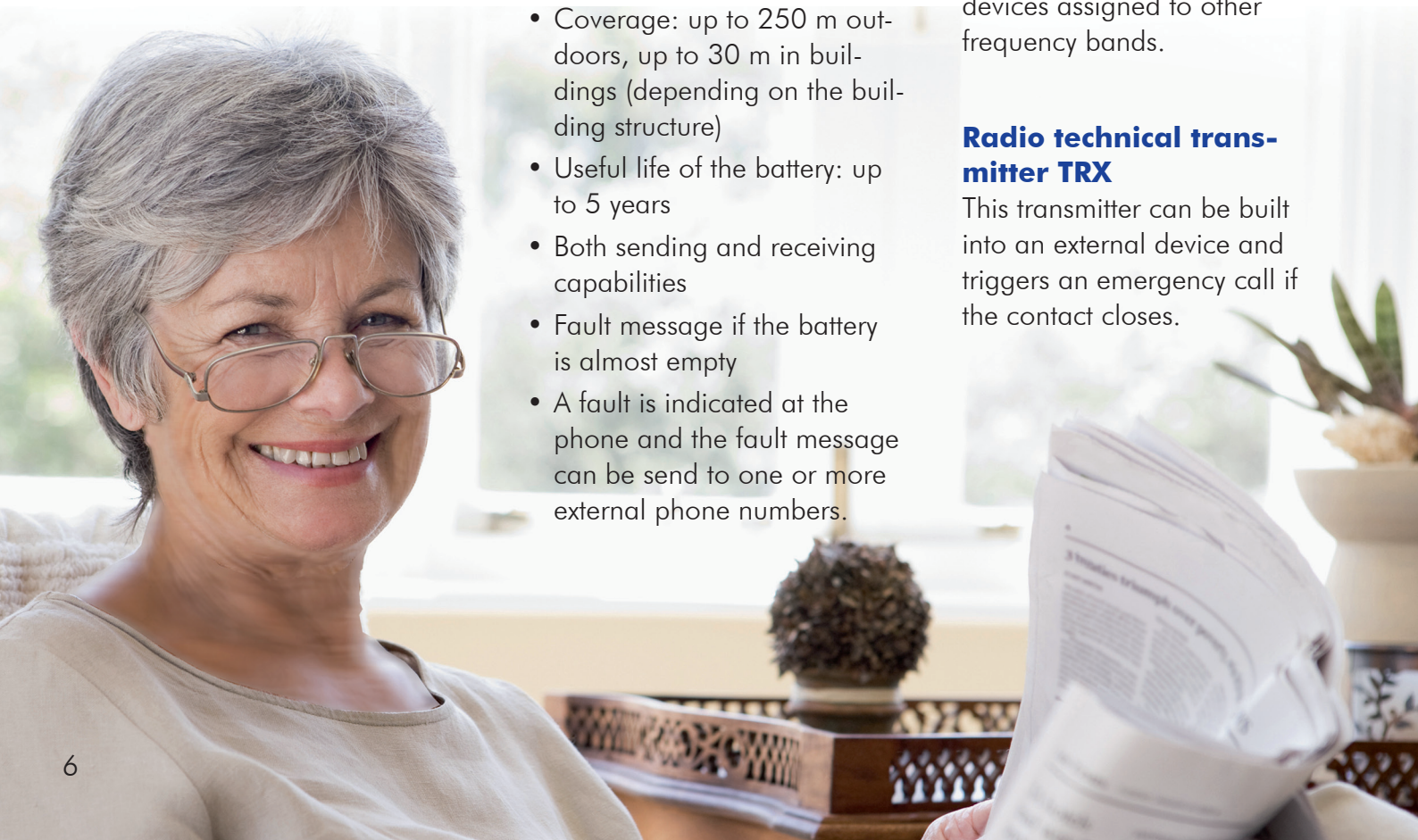
- European Social Alarm Frequency 869,2 MHz
- Jet-proof and dust-proof (Protection class IP 65)
- Coverage: up to 250 m outdoors, up to 30 m in buildings (depending on the building structure)
- Useful life of the battery: up to 5 years
- Both sending and receiving capabilities
- Fault message if the battery is almost empty
- A fault is indicated at the phone and the fault message can be send to one or more external phone numbers.

European Social Alarm Frequency

Home emergency applications may only be operated on this frequency. Thus, there are no interferences with radio devices assigned to other frequency bands.

Radio technical transmitter TRX

This transmitter can be built into an external device and triggers an emergency call if the contact closes.



Safety in the residential environment

The bidirectional radio call transmitters are installed quickly, easily and ready to use. Each of them contains a transceiver (TRX), which is able to transmit and to receive.

Radio smoke detector TRX
and/or
Radio thermal detector TRX



The phone receives the emergency call from the radio transmitter, sends an acknowledgment of receipt and dials stored phone numbers automatically.



Radio tile TRX



Radio pendant TRX



Radio cord pull switch TRX



Radio sensor-mat TRX



Wired emergency call

The phone offers connections for wireline cord pull switches and pear switches. Connections that you can rely on.

Independent living

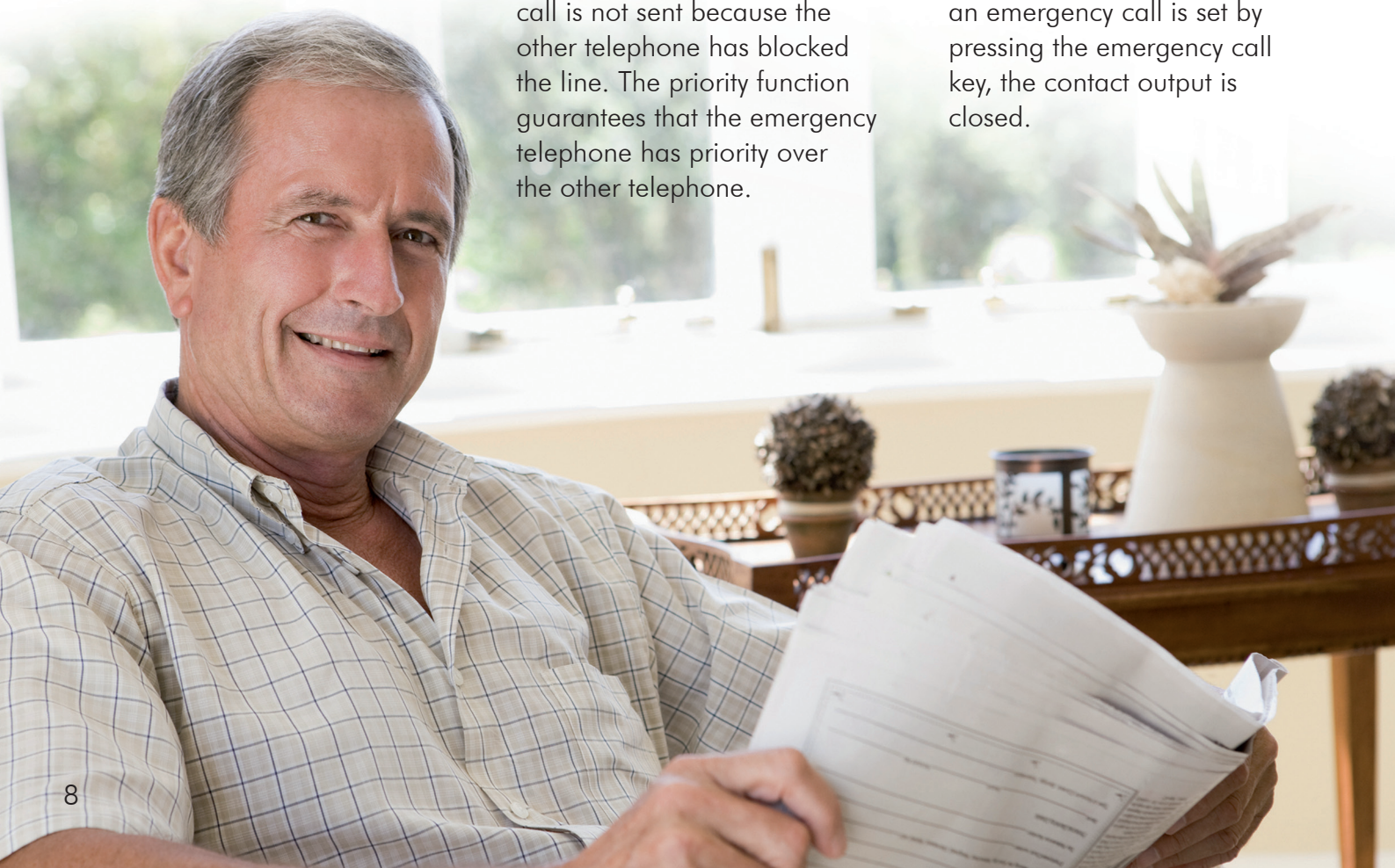
Have the reassurance of knowing that you are able to get help quickly in any situation.

Emergency call priority function

If two telephones are connected to one c/o line, it is possible that an emergency call is not sent because the other telephone has blocked the line. The priority function guarantees that the emergency telephone has priority over the other telephone.

Control of additional devices

Via the contact output additional devices e.g. a corridor lamp can be controlled. If an emergency call is set by pressing the emergency call key, the contact output is closed.



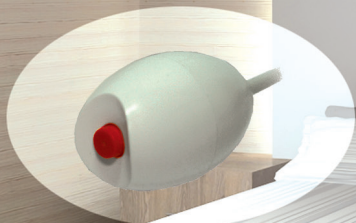
Secure transmission

In the case of home renovations or new buildings, cables can be laid for cord pull switches or pear switches in bathroom and bedroom. This is an alternative to the radio system.

The phone receives the emergency calls from the transmitters and dials stored phone numbers automatically.

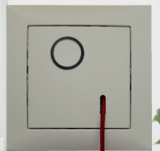
Pear switch

A commercially available pear switch can be connected to the western socket on the back of the phone.



Cord pull switch

As many cord pull switches as desired can be connected to the contact input.



Technical monitoring

The smart technology of the phone detects impending problems and actual faults. These are displayed visually and audibly by the phone and sent automatically to external numbers.

Fault message sending to a phone number

If the phone has detected a fault automatically, it dials the number of a service technician. The technician hears the announcement and recognizes the call as a fault message.

Fault message displaying at the phone

A detected fault is signaled visually on the phone display and audibly by warning tones. In the device's service menu, the exact cause of the fault can be read under the menu option „Information“.

Types of fault:

- Power supply failure*
- Failure of the phone network*/LAN
- Battery is not inserted into the phone or must be changed*
- Battery in the radio transmitter is almost empty
- Radio call transmitter out of range or defective.

* refers to the analog phone.

Test calls sending to a phone number

To test the functionality of the phone, regular automatic test calls to a specific number can be made at a specified time.

Documentation of presence

The nursing staff can log in and out on the phone. The presence- and absence-times are transmitted directly from the phone to the alarm server for further processing.

Log in/out via key

The nursing staff can log in and out via a key. For this purpose, a speed-dial key is programmed as a log-in/out-key and the phone number of the server is stored together with special dial codes in the phone.



Alternatively: Log in/out via iButton

Customized versions of the phone can be equipped with an iButton contact-unit. If the iButton touches the contact surface of the unit, so the presence or absence time is transmitted to the server.



Alternatively: Log in/out via RFID-chip

Customized versions of the phone can be equipped with an RFID-reader. Via an RFID-chip, the data will be transmitted quickly and safe.



Permissions

The distress and safety functions of the phone are PIN protected against unauthorized or accidental adjustment of the programming.

PIN-protection

The user can set the important phone features (speed dialling, phonebook, abbreviated dialling, tone and volume adjustments) even beyond the simple menu navigation.

Emergency call features, dialling restrictions and monitoring functions are protected via a Personal Identification Number (PIN) against unauthorized access.

Protection against incorrect dialling

The wide-ranging communication capabilities of the phone require a conscious action of the user. However, certain functions of the phone can be locked for those who are unable to perform the features correctly.

Set priorities

All dialling restrictions allow the emergency call if this function has been set-up. Exception numbers can be specified (e.g., the telephone numbers for the police and fire brigade), which can always be dialled if a dialling restriction is set.



Dialling restrictions

The dialling of phone numbers and the signaling of incoming calls can be restricted or released in a different way.

Direct call	The phone is restricted for dialling*. Only one stored number can be dialled by pressing a number key.
Automatic direct call	The phone is restricted for dialling*. Only one stored number can be dialled by picking up the handset.
Dialling restriction of selected phone numbers	The dialling of individual numbers (e. g. 0900 numbers) or number ranges is locked*. The restricted numbers have to be stored in the phone.
Full dialling restriction	Basically no numbers can be dialled*.
Speed dialling keys can be used	Only the speed dialling keys can be used. All other keys are restricted for dialling*.
VIP list/forbidden number list	You can store up to 9 phone numbers in the VIP-list for ring-tones. Your phone will only ring if there is an incoming call from one of the stored numbers. In the forbidden number list for ringtones, up to 9 numbers can be stored. If one of these numbers comes in, the phone does not ring.

*) Exception numbers and emergency call numbers can be dialled

VoIP

The “Ergophone S 510 IP radio” becomes the control center for the exchange of information between telephones, emergency call servers and home automation electronics.

User Interface

- 1 SIP account
- IP-address mode: DHCP client, static IP-address

Telephone features

- Speed dialling
- Abbreviated dialling
- Phonebook
- Call list
- Ringing indication via flash-light

Quick configuration of the phone

The initialization of the phone takes places via a DHCP server.

The configuration of the phone can be set up via menu or web browser. The phone menu is divided in a user-level and administrator-level (PIN protected).

Automatic/manual firmware update.

Controlling light and shutters from the bed

The connection to an HTTP server opens a wide range of monitoring and control options. Thus, the device status can be monitored. Emergency calls can be answered, messages can be displayed and faults can be analyzed. The HTTP server provides the interface for building technologies, so that the room- and reading lights can be switched on from bed.



Controlling and monitoring

The figure shows the integration of the IP phone into the computer network and the room electronics.



HTTP Server

XML-Interface:

- Monitoring
- Controlling
- Information



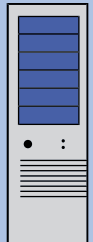
DHCP Server

Initialisation

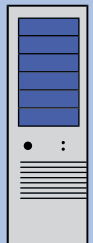


FTP Server

- Config. upload
- Update download
- Config. download



SIP Server



Building technology

Controlling of light and shutters via the phone

Ergophone S 510 radio

Overview of the features of the analog comfort telephone. Special versions of the phone have an extended range of functions and can be used as an emergency call system.

Extra large display

- LCD graphic display, 240 x 64 pixels, illuminated
- Display messages in 5 languages adjustable
- Indication of call duration, date and time
- Brightness of display adjustable

Extra large keys

- Large ergonomic keys
- Illumination of display and keypad by movement detector
- Key „5“ with orientation light, if keypad illumination off

Telephone features

- Dialling with offline call preparation
- Automatic disconnection of the line by engaged tone recognition
- Redialling from the call list
- Easy menu guidance (suppression of functions reserved to authorized persons. Activation via PIN code).
- Call list of incoming and outgoing calls (20 entries). Missed calls are signaled via LED and cleartext.
- Call pick-up via radio pendant TRX (transmitter activates hands-free mode at the phone)
- Indication of the last incoming number (CLIP)¹
- Phonebook for 50 entries (name and number)
- Call list entries can be stored in the phonebook
- 7 speed dialling keys with name plates
- Service key (only programmable with PIN code)
- 10 memories (abbreviated dialling)

- Hands-free mode
- On hook dialling
- Direct call² and automatic direct call²
- Full dialling restriction²
- Dialling restriction of selected phone numbers (5 barring numbers)²
- Dialling restriction excluding speed dialling numbers²
- Keypad lead adapter (aid for dialling)

Audio features

- 10 ringing melodies adjustable
- Volume control by shifting ringer. Extra loud, if desired.
- Full ringer off
- VIP-list/forbidden number list for ringtones (each 9 entries)
- Volume control for loudspeaker and handset via slide switches. Extra loud, if desired.
- Key tone (on/off)
- Handset to hearing aid compatible

Visual displays

- Ringing indication via flashlight and via display
- LED for missed calls/fault messages (on/off)

Safety and care functions

- Emergency call function (separate emergency key with reassurance-LED, 9 emergency call numbers can be stored, standard-announcement, individually announcement recording, automatic switch to hands-free mode after acknowledgement via key 5, automatic hang up, special emergency call parameters programmable)³

- Radio emergency call operation (European Social Alarm Frequency 869,2 MHz). Up to 19 radio call transmitters can be registered.³
- Auto answer mode (after calling the phone switches into monitoring mode). Activation via „number of rings“ or CLIP-numbers¹ or special call.
- Vital sign function (confirmation of presence)
- Fault messages if the power supply fails, if the telephone line fails, if the battery of the phone or of the radio transmitter is almost empty. Indicated at the phone or via dialling of stored numbers with fault message announcement.
- Test call with test call announcement (automatic call to a stored phone number at a specified time)
- Log in/out of the nursing staff on the phone
- Battery for phone operation during a power failure

Basic settings

- Personal identification number (PIN) programmable
- Dialling mode: tone
- Exception numbers programmable
- Connection to a PABX possible (programmable signal key flash and CO-line access code)
- Headset mode
- CLIP mode¹ (rated CLIP or DTMF-CLIP) switchable
- Date/time/movement-detector/illumination, each on/off switchable
- Speed dialling keys can be assigned to other functions
- Optional: Wall mounting using a separate wall holder

Configuration/software-updates

- Configuration via phone-menu/web-browser and transfer to other phones via SD card
- Software-update via SD card
- Reset
- Checkout: All non-PIN-protected functions are set to the factory setting.

Special versions with extensions to an emergency call system

Contact input, pear switch connection, contact output, priority function

Components for expansion as an radio emergency call system

Radio pendant TRX with cord or bracelet, radio smoke detector TRX, radio thermal detector TRX, technical radio transmitter TRX, radio cord pull switch TRX, radio tile TRX, radio sensor mat TRX

¹) Function must be offered and activated by the network operator.

²) Exception numbers and emergency call numbers can be dialled.

³) In case of telephone network failures or radio interferences call recipients can not be reached.

Ergophone S 510 IP radio

Overview of the features of the IP telephone. Special versions of the phone have an extended range of functions and can be used as an emergency call system.

Extra large display

- LCD graphic display, 240 x 64 pixels, illuminated
- Display messages in 5 languages adjustable
- Indication of date and time
- Brightness of display adjustable

Extra large keys

- Large ergonomic keys
- Illumination of display and keypad by movement detector
- Key „5“ with orientation light, if keypad illumination off

Telephone features

- Dialling with offline call preparation
- Redialling from the call list
- Easy menu guidance (suppression of functions reserved to authorized persons, activation via PIN)
- Call list of incoming and outgoing calls (20 entries). Missed calls are signaled via LED and cleartext.
- Access to voice-mail systems
- Call pick-up via radio pendant (transmitter activates hands-free mode at the phone)
- Phonebook for 50 entries (name and number)
- Call list entries can be stored in the phonebook
- 7 speed dialling keys with name plates
- 10 memories (abbreviated dialling)
- Hands-free mode
- On hook dialling
- Direct call¹ and automatic direct call¹
- Full dialling restriction¹

- Dialling restriction excluding speed dialling numbers¹
- Dialling restriction of selected phone numbers (5 barring numbers)¹
- Keypad lead adapter (aid for dialling)

Audio features

- 10 ringing melodies adjustable
- Volume control by shifting ringer. Extra loud, if desired.
- Full ringer off
- VIP-list/forbidden number list for ringtones (each 9 entries)
- Volume control by shifting for loudspeaker and handset via slide switches. Extra loud, if desired.
- Key tone (on/off)
- Handset to hearing aid compatible
- Audio-Codecs: G.711 (PCMA, PCMU) und G.722. Speex, iLBC, gsm, L16

Visual displays

- Ringing indication via flashlight (on/off)
- Ringing indication via display
- LED for special applications

Safety and care functions

- Emergency call function (emergency calls to servers and/or to call numbers, for each call trigger up to 9 phone numbers and one announcement are assignable individually, separate emergency call key with reassurance-LED, automatic hang up, special emergency call parameters programmable)²



- Radio emergency call operation (European Social Alarm Frequency 869,2 MHz). Up to 12 radio call transmitters can be registered.²
- Auto answer mode (after calling the phone switches into monitoring mode) Activation by time or CLIP-number.
- Vital sign function (confirmation of presence)
- Fault messages (if the registra or the LAN is failed or the DHCP server could not be reached or if the pendant's batterie is nearly empty or if the daily message do not appear) indicated at the phone
- Automatic fault message to a server or to a service technician
- Test call with test call announcement (automatic call to a stored phone number at a specified time)

Basic settings

- Personal identification number (PIN) programmable
- Exception numbers programmable
- Date/time/movement-detector/illumination, each on/off switchable
- DTMF dialling
- Optional: Wall mounting using a separate wall holder

Administration/Configuration

- Auto-provision via FTP/WEBDAV
- Configuration via browser/phone/auto-provision
- Trace package and system log export
- Backup via config-server
- Automatic/manual firmware update

Network features

- 1 SIP-account
- SIP v2 (RFC3261)/SIP protocol (UDP, TCP, TLS)
- IPv4
- DTMF: RFC2833, SIP Info
- IP-assignment
- TFTP/DHCP-client
- HTTP-server
- Optional WLAN connection via adapter

Special versions with extensions to an emergency call system

- Contact input
- Pear switch connection
- Contact output

Components for expansion as a radio emergency call system

Radio pendant TRX with cord or bracelet, radio smoke detector TRX, radio thermal detector TRX, technical radio transmitter TRX, radio cord pull switch TRX, radio tie TRX, radio sensor mat TRX

The phone includes open source software Linux/GNU. You can request further support via „info@ergophone.de“.

¹⁾ Exception numbers and emergency call numbers can be dialled.

²⁾ In case of network failures or radio interferences call recipients can not be reached.

Communication solutions for hospitals and carehomes. Innovative, comfortable and sustainable.

For care homes, assisted living and private:

- Ergonomic emergency telephones
- Emergency call systems

For hospitals:

- Multifunctional desk telephones
- Multifunctional patient terminals

Technologies:

- Analog
- VoIP



Ergophone Tiptel GmbH

Halskestr. 1
40880 Ratingen
Germany
Phone: +49 (0)2102-428-0
www.ergophone-tiptel.com

Location Cölbe
Zimmermannstr. 12
35091 Cölbe, Germany
Phone: +49 (0)6421-402-0
www.ergophone.de

Rev. 12, Sept. 2023
Product color similarly to the illustrations.
Subject to modifications.

