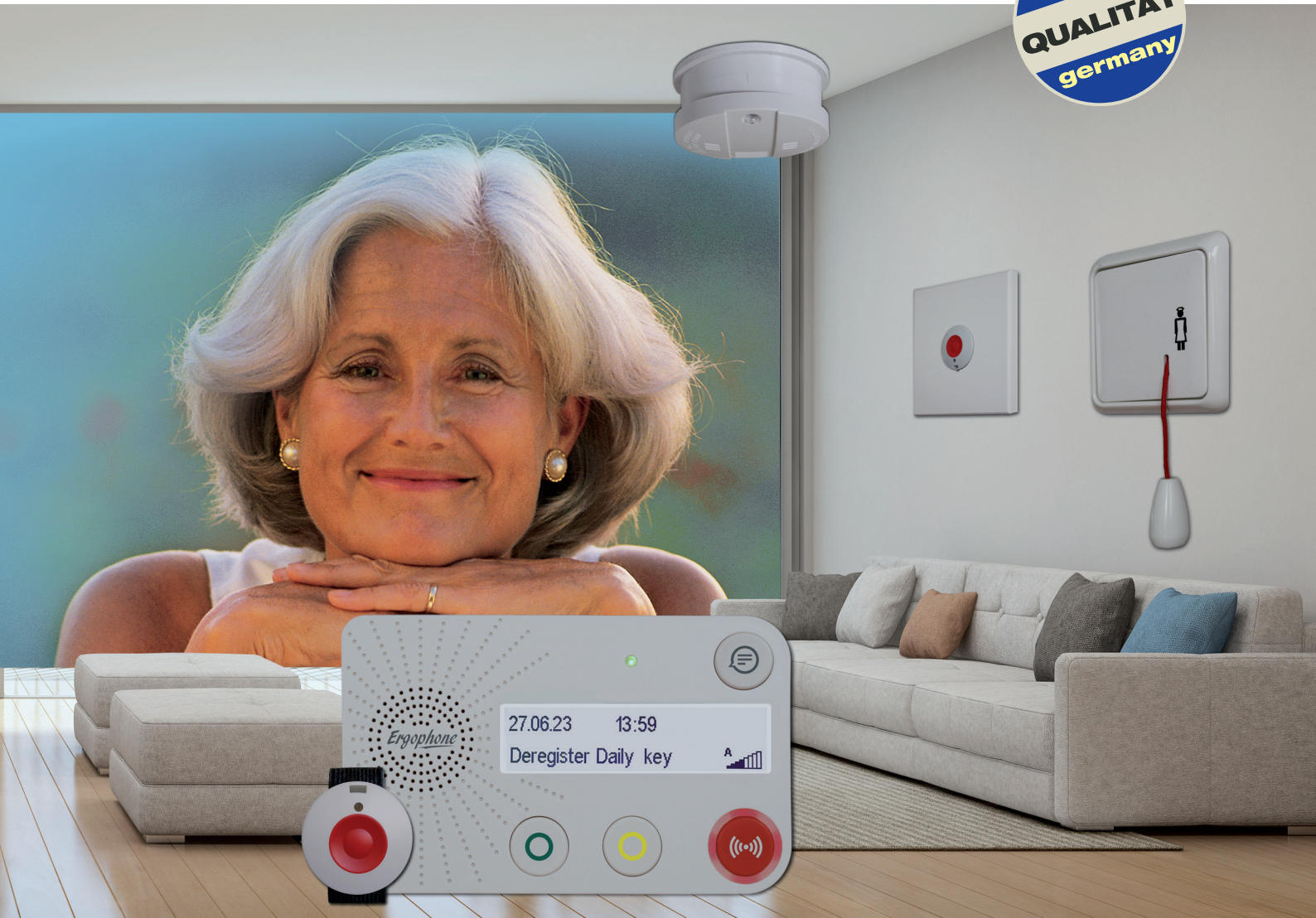


# Ergophone

## Ergonomic carephone Ergophone H 200



**protects you and your living environment**

## Highlights

A new view of telecare



### Mobile operation

Ergophone relies on mobile radio (LTE/4G) and ensures availability by an external antenna. A telephone connection is not necessary. The customer only provides the power supply for the pre-configured device: plug in, test, done.

### Optical support

Ergophone's unique display solution revolutionizes usability and brings significant benefits to the user and the installer.

### Network-Integration

Configurations and updates of the Ergophone carephone run automatically in the background via the mobile network in the service provider's IP network. Installers benefit from the time savings and can concentrate on their actual tasks.

## Transmission technology: mobile radio communication

### Fast and secure connections

#### LTE/4G standard

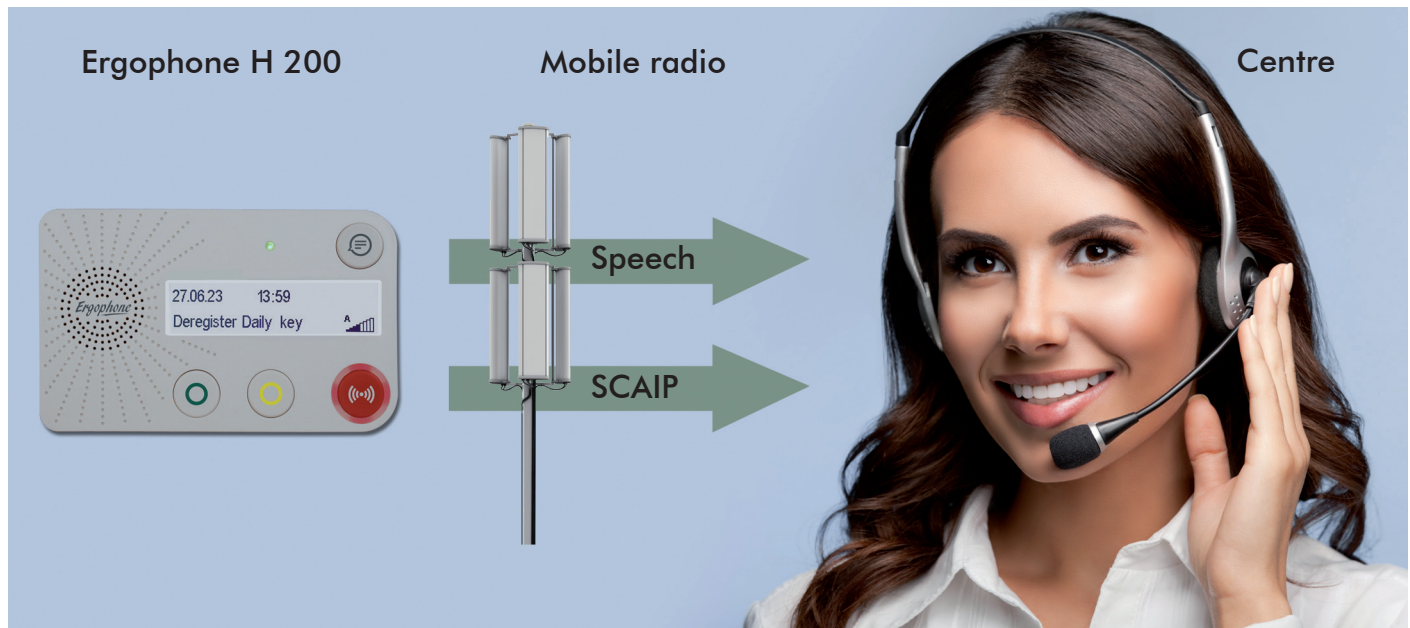
Ergophone 200 uses the fourth generation mobile radio standard. The mobile phone field strength and the mobile phone standard used are displayed in the setup menu. In addition, the field strength is always visible in the bars in the idle state display.

#### SCAIP protocol

Ergophone uses the standardized digital transmission protocol SCAIP. This ensures a differentiated and secure exchange of information between the carephone and the service centre. The data is protected by encryption at the SIP level.

#### Voice over LTE

The technology „Voice over LTE“ enables telephoning in the mobile radio standard LTE. VoLTE offers faster call set-up and significantly improved voice quality.



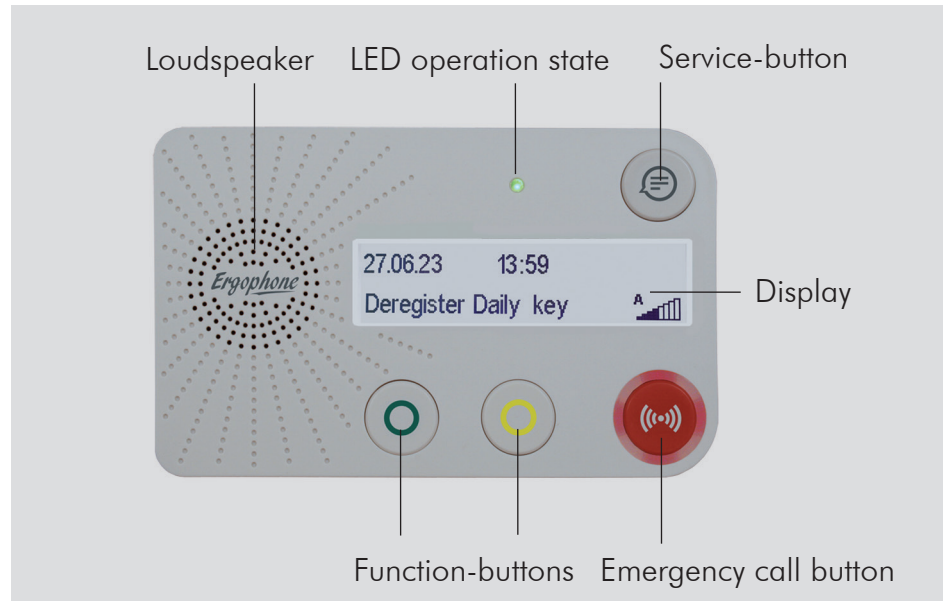


## Ergonomics

### The design of the device sets new standards

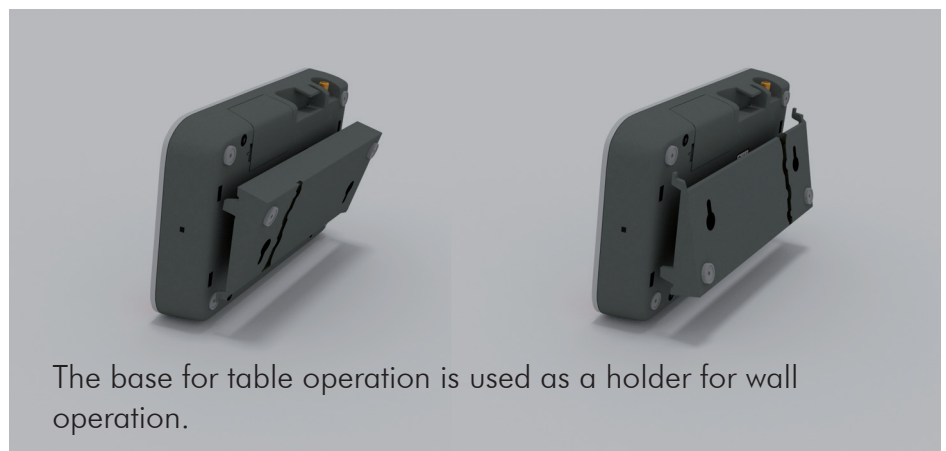
#### Easy to use

Optimal button contrast and clear division of operating elements form the basis for easy operation. The function buttons are self-explanatory thanks to the display in plain text. After a button has been pressed, the display lights up and guides the user with helpful status messages.



#### A choice of positions

The user can choose between three positions: flat table operation, inclined table operation or wall mounting. The supplied plastic holder is used for wall mounting and alternatively forms the base for inclined table operation.



The base for table operation is used as a holder for wall operation.

## Simply plain text

### Convincing operation concept with display

#### Operation

Users of conventional care-phones must remember the meaning of the buttons or consult instructions during operating procedures such as call cancellation, muting or logging off. The operating concept of Ergophone, however, supports the user and shows in plain text, which button he or she has to press. This is easy and effective.



*Example: The user recognises the remaining pre-alarm time and can cancel the call by pressing the green button.*

#### Commissioning

The softkey-guided setup menu provides the technician with all the necessary test functions and settings during commissioning. Mobile radio field strength and the range of the pendant are quickly determined.

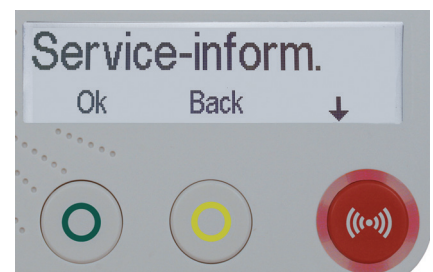
The mobile radio field strength is always visible as a bar graph when the unit is in idle mode.



*If the technician presses the OK button, he or she is taken to the functions of the submenu.*

#### Fault indication

Even experts cannot remember the meaning of the many LED flash patterns for indicating faults in conventional care-phones. The fault display on the Ergophone H 200 looks quite different: In plain text, the user/installer can immediately identify the type of fault.



*In addition, there is an overview of the error messages in the „Service information“ menu.*

## Support functions

### Ergophone H 200 - I'm your sunshine



#### Emergency call

Ergophone H 200 is for your safety. Emergency calls can be triggered via the red emergency call button on the phone or via the radio pendant. After the service-centre has accepted the call, the phone switches to hands-free mode. Thanks to the excellent acoustics of the Ergophone H 200, the emergency caller can communicate clearly with the person being called, even at a distance from the device.

#### Vital sign function

The resident regularly presses the yellow daily key to indicate that he or she is well. Optionally, the person's activity can also be registered via a motion detector.

#### Service call

Many telecare providers offer their customers further services and help in everyday life. Agreements relating to this are carried out via the service call. If the resident presses the service call button, the service centre already knows that it is a service call.

#### Auto answer mode

The called carephone automatically switches to hands-free mode after a call, without having to be operated.



## Radio pendant Ergophone TRX-S

Reliable radio connection with visual confirmation

### Features

- Non-slip button with a clear pressing point
- Dust-tight and water-tight according to protection class IP67
- Hygienic, easy to clean
- European social alarm frequency 869,2 MHz
- Bidirectional transceiver (TRX)
- 2-color LED to indicate a triggered call (red) and acknowledgment of receipt (green)
- Battery- and transmission path-monitoring
- Battery life: up to 5 years at normal use (emergency call trigger once a day and one test call weekly)
- Coverage: up to 30 m in buildings (depending of the building structure), up to 250 m outdoors

### Functional design

The radio pendant is handy small with a diameter of about 4 cm. The opening for the cord loop fits seamlessly into the design and allows the user to wear the pendant as a medallion. A cord with safety lock and a bracelet are included in the delivery.



The TRX-S radio pendant can be worn on a wristband or around the neck by means of a cord.

### Social Alarm Frequency

Only telecare applications may be operated on this frequency, so there is no interference with radio devices associated with other frequency bands.

Ergophone



## Variable und effective configuration via web browser

### Configuration via PC

The carephone is connected to a PC via the micro USB interface and configured via the web-based configuration interface.

On site in the user's home, the device is merely connected to the mains and tested (mobile field strength and range of the radio pendant).

### Automatic configuration

Completed or modified configuration files can be placed on a configuration server by the service provider. The carephone automatically requests and installs them. Thus, the device can also be configured remotely.

### Manual and automatic updates

Update files can be loaded locally via a PC or a USB stick. Automatic updates are transmitted via the mobile radio connection. The carephone checks at defined time intervals whether new software is available and installs it if necessary.

*Browser based configuration program of Ergophone H 200*

The screenshot displays the 'Network Services' configuration page of the Ergophone H 200. The interface is organized into two main columns. The left column contains 'Network Time (NTP)' and 'Auto Update' sections. The right column contains the 'Auto Configuration' section. The top navigation bar includes 'General', 'System', 'Phone', and 'Alarms', with 'System' being the active tab. Below this, a secondary navigation bar lists 'Settings', 'Network Services', 'Cellular Radio', 'Error Messages', 'Security', and 'Administration', with 'Network Services' being the active sub-tab. The 'Network Time (NTP)' section has three server entries: 'NTP-Server: 1' with 'time.windows.com', 'NTP-Server: 2' with 'ptbtime1.ptb.de', and 'NTP-Server: 3' with 'atom.uhr.de'. The 'Auto Update' section shows 'Modus' set to 'Off', 'Address' as '0.0.0.0', and 'Username' as an empty field. The 'Auto Configuration' section shows 'Download Mode' as 'Off', 'Address' as '0.0.0.0', 'Username' as an empty field, 'Password' as '\*\*\*\*', 'Time Interval (minutes)' as '24', 'Active from' as '00:00', and 'Active until' as '24:00'.

<b>Network Time (NTP)</b>	
NTP-Server: 1	<input type="text" value="time.windows.com"/>
NTP-Server: 2	<input type="text" value="ptbtime1.ptb.de"/>
NTP-Server: 3	<input type="text" value="atom.uhr.de"/>
<b>Auto Update</b>	
Modus:	<input type="text" value="Off"/>
Address:	<input type="text" value="0.0.0.0"/>
Username:	<input type="text"/>
<b>Auto Configuration</b>	
Download Mode:	<input type="text" value="Off"/>
Address:	<input type="text" value="0.0.0.0"/>
Username:	<input type="text"/>
Password:	<input type="text" value="****"/>
Time Interval (minutes):	<input type="text" value="24"/>
Active from:	<input type="text" value="00:00"/>
Active until:	<input type="text" value="24:00"/>



## System-monitoring

### Complete detection and reporting of faults

#### Emergency power supply via battery

The phone contains a rechargeable battery, which ensures the functionality of the phone for 24 hours in case of power failure.

#### System-monitoring

- Monitoring the power supply from the mains
- Battery monitoring (message if the battery is nearly empty or defective)
- Monitoring the battery power in the radio pendant
- Monitoring the radio connection for interference signals
- Monitoring the bidirectional radio path (in the absence of the radio daily message, the pendant is either out of range or defective)
- Monitoring of the mobile network

#### Report of faults to the service centre

If the carephone has itself detected a fault, the fault type is automatically transmitted to the service centre.

If the mobile network fails, this is also detected by the service centre by the absence of the regular control call (heartbeat interval).

#### Fault messages on the phone

The carephone optically signals a detected fault via the display in plain text and acoustically via voice prompts or warning tones. In addition, the operating LED flashes red. The audible warnings continue until the service centre has been reached - but they can also be muted by pressing a button on the phone.



*Warning tones can be switched off at night via the night mode.*

## Safety in the living environment

### Radio accessories for individual requirements



#### Radio-smoke detector TRX

The detector is suitable for indoor use and works photo electronically.



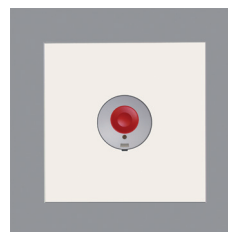
#### Radio thermal detector TRX

An alarm is triggered as soon as the room temperature exceeds 60°C.



#### Radio cord pull switch TRX

The switch forwards calls via radio to the care-phone.



#### Radio tile TRX-S

The tile consists of a plastic plate (hard PVC) and an integrated radio pendant TRX-S.



#### Radio technical transmitter TRX

The detector is installed in external devices and triggers a message when the contact is closed.



#### Radio CareMat® TRX

The pressure-sensitive wireless sensor mat is available in three sizes and in the colours yellow and grey.

## Arrangements for re-use

If required: replacement of the complete housing

### Smart housing concept

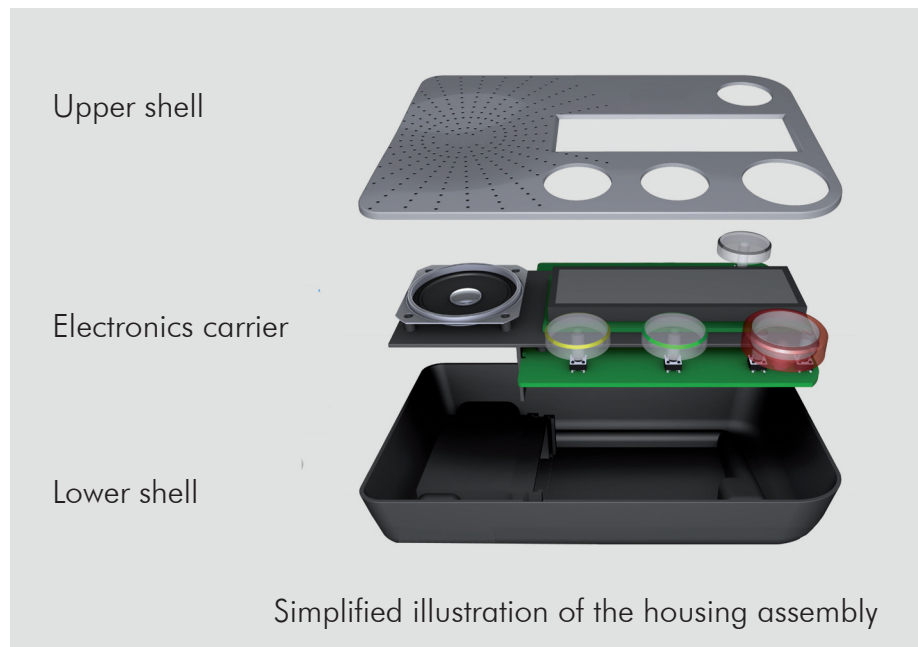
The entire electronics of the Ergophone H 200 are mounted on a carrier. The upper and lower shell and, where necessary, the buttons can thus be exchanged so easily and quickly. Seen from the outside, the device looks new. The service provider saves considerable costs by reusing the electronics. The electronics have a longer life and cause less waste.

### Maintenance menu in plain text

Before the device is returned, it is reset to the factory settings via the maintenance menu and switched off. In this state, the carephone can be transported and stored.

### Quality „Made in Germany“

The carephone was developed in Germany and is also manufactured here. The functionality of the device is based on the requirements of the standard DIN EN 50134.



## Features

### Emergency call

- Large call button with red LED light ring
- Plain text display, LED-signalisation and voice announcement during emergency call process
- Hands-free with excellent voice quality
- Standardized digital SCAIP protocol for secure data connection to the service centre
- 10 targets (IP-address/call number)

### Service call

- Call button for easy contacting of the service centre
- Plain text display during service call

### Vital sign function

- Yellow daily button for confirmation of activity
- Green function button to log in and out
- Button labelling in plain text
- Optional: Motion detector for activity confirmation
- Optional: Burglary protection (project-specific)

### Connections

- 2 SIM card slots (lockable)
- DIN socket for plug-in power supply unit for voltage supply
- Micro-USB port for programming via PC or to transfer data via stick
- Internal USB socket for optional IP, WLAN or Blue-tooth applications
- Connection for an external mobile radio antenna

### Housing

- Two table positions (flat or inclined) or wall mounting
- Insensitive to dirt, easy to clean surface
- Replaceable housing

### Radio transmitter

- Connection of up to 12 radio transmitters possible
- Different Ergophone radio components can be registered: e.g. radio smoke detector, radio cord pull switch or radio sensor mat
- Simple assignment of the transmitters

### Administration/Configuration

- Local configuration via the web-based configuration program
- Fast „on-site commissioning“ via menu in the device (menu navigation via display)
- Local backup of the configuration
- Automatic configuration
- Configuration via USB-stick
- Local update via PC or USB-stick or mobile radio connection
- Maintenance menu in the device (set carephone to factory settings and switch off)

### Safety

- External antenna for secure mobile reception
- Permanent display of the current mobile radio field strength in the display



## Features

- Test of the mobile radio field strength and the range of the radio components via test-mode in the menu
- Test-mode for radio transmitter on site (e.g. for radio smoke detectors)
- Monitoring of power supply, battery power, mobile radio connection, radio transmission path and battery status of the radio transmitters
- Plain text display of faults in the display, optional voice announcement or warning tones
- Overview of the faults in the „Service-Info“-menu
- Emergency power supply via integrated rechargeable battery (at least 24 hours)
- Connection security to the service centre through adjustable TLS encryption

### Comfort

- Ergonomic operating elements
- Large display (240 x 64 pixels), white backlit, contrast adjustable
- Display of the emergency call sequence in plain text reassures the user
- Button labelling in plain text (button function must not be learned)
- Helpful status messages in plain text
- Acceptance of external calls via the radio pendant (optionally configurable)
- Privacy protection: External calls can be suppressed
- Auto answer mode (after calling, the phone switches into hands-free mode automatically)
- Fault messages in plain text
- Acoustic fault messages can be muted

- Individual display messages configurable
- Day/night switching (acoustic warning messages are suppressed at night, the illumination is dimmed)
- Setup, information and maintenance menu can be called up on the device

### Radio pendant Ergophone TRX-S

- Non-slip button with a clear pressing point
- Dust-tight and protected against temporary submersion in water according to protection class IP67
- Hygienic, easy to clean
- European Social Alarm frequency 869,2 MHz
- Bidirectional transceiver (TRX)
- 2-color LED to indicate a triggered call (red) and acknowledgment of receipt (green)
- Battery- and transmission path-monitoring
- Battery life: up to 5 years under normal use
- Coverage: up to 30 m in buildings (depending of the building structure), up to 250 m outdoors
- Cord and stretch bracelet included

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

## Technical Data

### Carephone Ergophone H 200

Connectivity	Mobile radio communication
Mobile radio-standard	LTE (VoLTE-4G) with fallback level to 2G
Emergency protocol	SCAIP
Number of targets	10 IP addresses / call numbers
Number of radio transmitter	12
Radio receiver	Class 1 according to EN 330220-1 V3.1.1 / EN 300220-3-1 V2.1.1
Radio frequency	869, 2375 MHz
Radio-based signal transmission 869,2 MHz	According to DIN EN 50134-2
Dimensions	About 195 x 120 x 33 mm (W x D x H)
Weight	About 520 g (with battery pack)
Housing material	PC/ABS
Power supply	Mains operation, emergency power battery
Power consumption in standby mode	Mains operation: 90 mA - 230 mA ,Battery operation: 14 mA (idle)
AC Adapter	Protection class 2, DC 5V 2A, AC: 100-240V, 50/60Hz, 0,6A
Ringing device	Variable ringing signal, adjustable volume (7-levels) and melody (3 melodies)
Speakerphone	Duplex
Loudspeaker volume / range	5-levels / up to 5 m range
User guidance	Display, voice prompts and LEDs
Display	LCD graphics module 240 x 64 pixels
Available languages	DE, GB, FR, IT, NL, more in case of need
Battery pack	3,7V, NI-MH 3000 mA
Battery operating time	24 hours
Operation temperature	+5 - +40°C
Storage temperature	-5 - +70°C

## Technical Data

### Radio pendant Ergophone TRX-S

Dimensions	About 42 x 13 mm (D x H)
Weight	About 12 g (without cord)
Housing material	Polycarbonate
Protection class	IP67
Transmitter power consumption	Quiescent current: 1.2 $\mu$ A, current in active state: 24 mA (3x60 ms every 6 hours)
Transmitter stability	(0°C - 40°C): < 2.4 kHz
Transmitter antenna	Integrated loop
Transmitter radiated power	316 $\mu$ W
Neck cord	Light grey with safety lock
Battery	Button cell 3 V Lithium CR2032
Battery life	Up to 5 years at normal use (emergency call trigger once a day and a test call weekly)
Radio coverage	Up to 30 m in buildings (depending of the building structure), up to 250 m outdoors
Radio frequency	European Social Alarm frequency 869,2 MHz
Operation temperature	+5 - +40°C
Storage temperature	-5 - +70°C

## Communication solutions for hospitals and care

Ergonomics, high-quality and future-proof

### For care homes and assisted living:

- Ergonomic emergency call telephones
- Telephone emergency call systems



### For home care:

- Carephone
- Telephone emergency call systems



### For hospitals:

- Multifunctional desktop-telephones
- Multifunctional patient-terminals



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Rev. 07, June 2024  
Product color similarly to the illustrations.  
Subject to modifications.

