



Wireless communication

System overview

Clino Call DECTplus is a cordless communication solution that can be extended significantly both with respect to its expansion options as well as its functions. The system can be connected with telecommunications systems through analog interfaces or via Ethernet / Voice over IP (SIP), thereby extending these with mobile alarm functionality and cordless DECT telephony. The Clino Call DECTplus System is connected to the nurse call system via a standardized (ESPA) interface: Calls are signaled immediately after transmission and shown in the displays of the mobile devices – even during an ongoing telephone call. The nursing staff can immediately recognize the priorities of the incoming call messages thanks to the assignment of differing ringing tones.

Clino Call DECTplus provides the nursing staff with a mobile system that is optimized to the requirements of nursing care with highly robust, moisture-protected terminal devices with or without a color display. Alternatively, inexpensive terminal devices are also available for office applications.

Control centers for up to 250 base stations

At the core of the system is a central unit, which is modular and scalable in design. It consists of 19" control center housing(s) featuring an integrated power supply unit and 9 slots for plug-in boards, CPU board without or with an Up-Link Port for optional expansion, control units for 8 base stations, PABX interface boards for 8 or 16 analog telephone ports, as well as a VoIP/SIP interface. An additional power supply can be installed if more than 4 control units are used for the base stations and/or for an additional power supply unit. The central control unit controls the assignment of the calls and data signals in the entire transmitter and receiver network and thereby regulates communication between up to 500 mobile devices, the telecommunications system and the (call) system, which is connected via the CPU board

For smaller applications, the Basic central control unit is available. This provides the possibility to connect 150 mobile DECT terminal devices and 8 base stations in the basic configuration. Two free plug-in boards enable adaptation on a project-specific basis, as well as to analog and VoIP telecommunications systems.

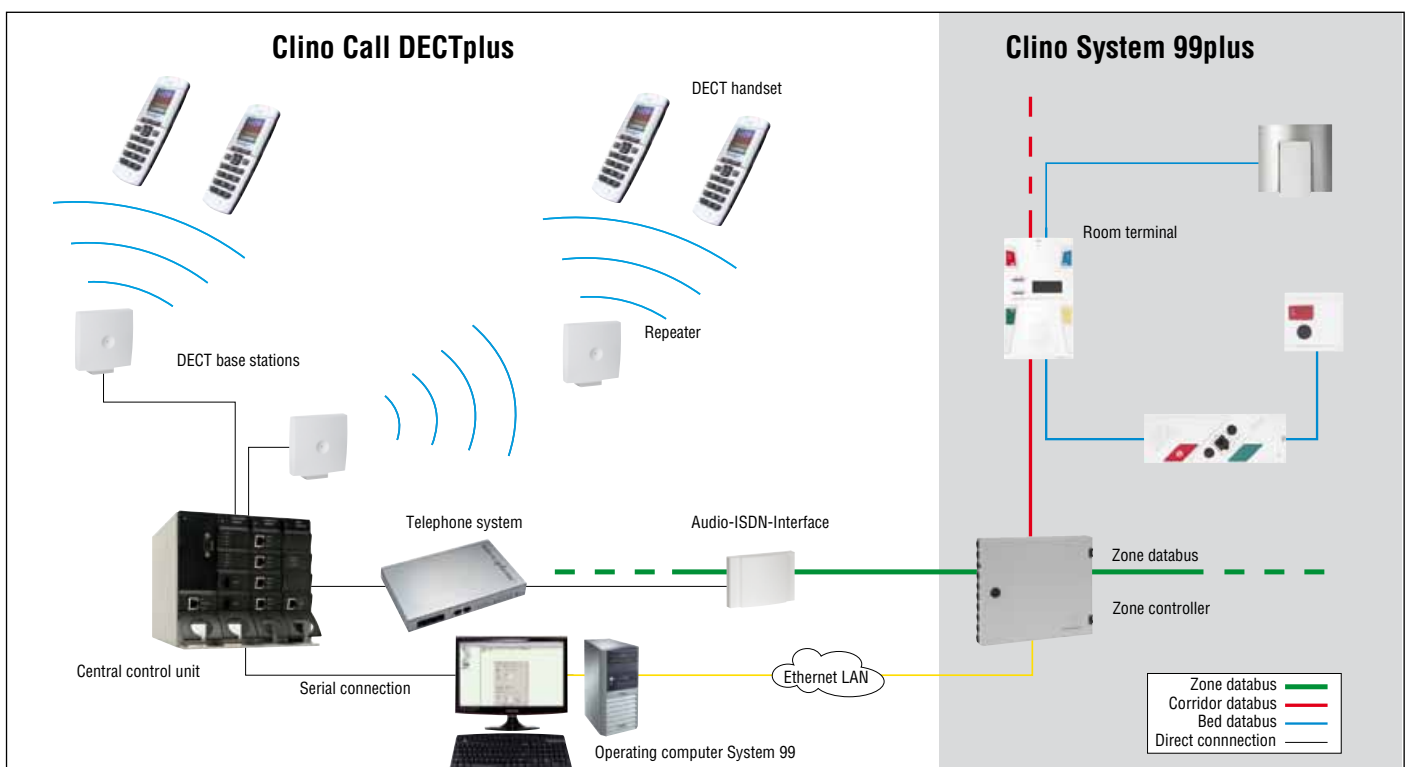
The modular and scalable structure of the system guarantees the optimum size in all cases – from a small-sized care facility to a clinic campus at all times. Clino Call DECTplus combines flexibility and suitability for daily use with the highest level of functional reliability. The transfer of data with Clino Call DECTplus takes place in a secured mode. The function as well as the central unit and the interface to the nurse call system are permanently monitored as well as being signaled and logged in case of a malfunction. Mobile devices used for Nursing applications are subject to special safety requirements. They are characterized by an attractive design and extremely robust construction: The rubberized surface dampens impacts and the IP64-moisture protection prevents the ingress of moisture in the rough and tumble of everyday nursing care as well as during cleaning.

A further safety aspect provides for the protection of the nursing staff, for example in case of attacks or other emergency situations. Clino Call DECTplus Model D5 Series Alarm terminal devices have the capability of triggering an alarm, both deliberately (via an alarm button) or automatically (via a breaker contact or a motion detector). The position of a person can be determined through the localization function and the location of the incident displayed on a building plan.

Investment secured over the long term

Through its integration capability, and its modular system structure, Clino Call DECTplus offers the highest level of investment security. The system offers standard interfaces to all telecommunication systems, so that usage is ensured over the long-term. This applies to conventional telephone systems with analog connections as well as to state-of-the-art Voice over IP systems based on the SIP Standard.

During expansion of existing Clino Call DECT systems, the replacement of the existing base stations, mobile devices and repeaters can be dispensed with, as only the central unit needs to be replaced.



790D150

Central control unit Clino Call DECTplus



Features

- Maximum 8 plug-in boards for base stations and DECT telephones
- Includes 1 power supply for powering plug-in boards
- Additional power supply required, if more than 4 "Control Unit Base Stations" plug-in boards are used
- Redundancy option with additional power supply
- Networking of max. 8 central control units
- Transmission of SMS text messages to DECT telephones via RS 232
- VoIP-ready
- 4 HE plug-in slot heights

Basic unit for individual Clino Call DECTplus system plug-in boards. Mounted in 19" cabinet or with optional wall bracket.

Technical Data

| | |
|---------------------|---|
| Power supply | 230 V AC +/-10%, 250 VA |
| Current consumption | max. 9,48 A @ 19 V DC |
| Frequency range | 1880 ... 1900 MHz |
| Ambient temperature | 0 °C ... 40 °C |
| Weight | approx. 5.34 kg without power supply (max. 12 kg with power supply units) |
| Version | for installation in rack housing |
| Dimensions | W: 422 mm H: 177 mm D: 330 mm |
| Approval | TBR6(DECT RF), TBR22(GAP), EMC ETS300329, CE |



Central control unit, Clino Call DECTplus
System documentation
System software for set-up and configuration

Accessories

| | |
|---------|---|
| 790D001 | Connecting lead 5 m PC/Clino |
| 790D155 | or 790D156 CPU board for central control unit 19" |
| 790D160 | Control unit base stations (8) |
| 790D170 | or 790D175 PABX interface card (8 a/b or 16 a/b) |
| 790D177 | PABX interface card VoIP/SIP |
| 790D180 | Power supply for central control unit 19" |
| 790D185 | Wall mounting kit for central control unit 19" |

790D15B

Central control unit Basic Clino Call DECTplus



Features

- 1 small central control unit housing with back-plane
- 1 power supply to power the plug-in boards
- Max. Installation of 1 CPU board and 3 additional plug-in boards
- TBR6(DECT RF), TBR22(GAP), EMC ETS300329, CE

Central control unit optimized for small to medium-sized systems as a basic housing for the telecommunications system to DECT/GAP standard, to extend a telephone system with analog extension users and/or VoIP users. Already fitted with CPU board (without LINK communication interface) and 1 plug-in board for administration of up to 8 DECT base stations. The modular central control unit system can be upgraded to meet customer requirements with 2 additional plug-in boards for administration of DECT base stations and extension users (a/b and VoIP/SIP).

Up to 150 DECT telephones can be administered from the Basic Clino Call DECTplus central control unit.

Technical Data

| | |
|---------------------|--|
| Power supply | 230 V AC +/-10%, 250 VA |
| Current consumption | max. 3,16 A @ 18,1 V DC |
| Frequency range | 1880 ... 1900 MHz |
| Ambient temperature | -10 °C ... 40 °C |
| Weight | approx. 1.16 kg (without power supply) |
| Version | Station housing |
| Dimensions | W: 194 mm H: 177 mm D: 330 mm |



Central control unit, Basic Clino Call DECTplus
System documentation
System software for set-up and configuration

790D155



Features

Inputs/outputs:

- Serial interface RS232
- LINK communication interface
- ETH-LAN interface
- Status LEDs

CPU card for central control unit 19"

With processor unit and serial interface as well as ETH connection. With interface to network several central control units.

- 1 serial interface (RS 232) for configuration of central control unit via a system PC, message transmission (paging)
- Communication management between DECT phones registered in system and PABX control of voice and data signals between individual base stations in entire transmission network

Technical Data

| | |
|---------------------|-------------------|
| Power supply | via control unit |
| Frequency range | 1880 ... 1900 MHz |
| Ambient temperature | 0 °C ... 40 °C |

Accessories

583486 Cat 5 Patch Cable, 1 m

790D156



CPU card for central control unit 19"

Same as Part No. 790D155, but no expandability.

Accessories

583486 Cat 5 Patch Cable, 1 m

790D160



Features

Inputs/outputs:

- Interface for 8 base stations
- Terminals: RJ45
- Integrated power unit for base stations
- Status LEDs


Base station interface card (8)

Central control unit plug-in board for control of 8 cabled base stations (per board).

- For 1-8 base stations, with LED status indicators
- Voltage supply of base stations, max. cable length 1.000 m (TP CAT4, min. 0.8 mm)
- Additional power supply required for more than 4 plug-in boards. Connection type: RJ 45 (cable not included)

Technical Data

| | |
|---------------------|--------------------------|
| Power supply | via central control unit |
| Frequency range | 1880 ... 1900 MHz |
| Ambient temperature | 0 °C ... 40 °C |

 An additional power supply to the central control unit is required for more than 4 base station control units.

Accessories

583486 Cat 5 Patch Cable, 1 m

790D170



PABX-interface card (16 a/b)

Central control unit plug-in board for administration of 16 DECT telephones (per board).

Technical Data

| | |
|---------------------|--------------------------|
| Power supply | via central control unit |
| Ambient temperature | 0 °C ... 40 °C |

Accessories

583486 Cat 5 Patch Cable, 1 m

Features

- For 1-16 DECT telephones, with LED status indicator
- Supports clip function via "Clip FSK Bell"
- Connection to analog a/b substation connectors of telecommunication installation, max. cable length of 1.000 m (TP CAT4, min. 0.8 mm)
- Connection type: RJ 45 (cable not included)

790D175



PABX-interface card (8 a/b)

Same as Part No. 790D170 but for max. 8 DECT telephones.

Accessories

583486 Cat 5 Patch Cable, 1 m

790D177



PABX-Interface Karte VoIP/SIP

Plug-in board for the central control unit for administration of up to 32 simultaneous speech channels for DECT devices via the VoIP/SIP interface of the telecommunications system. The PABX interface board VoIP/SIP and the CPU board for the central control unit are connected to the telecommunications system by separate ETH-LAN interfaces. The plug-in board is integrated into the Clino Call DECTplus central control unit and handles the communication and the control of the voice and data signals between the connected telecommunications system and cordless DECT telephones. Different performance features such as "Query" or "CLIP" take place via the basic range of functions defined in the SIP protocol.

Compatibility with telecommunications systems on request.

Technical Data

| | |
|---------------------|------------------------------|
| Power supply | via central control unit |
| Ambient temperature | 0 °C ... 40 °C |
| Dimensions | W: 45 mm H: 140 mm D: 200 mm |

Accessories

583486 Cat 5 Patch Cable, 1 m

Features

Inputs/outputs and features:

- VoIP/SIP interface for 32 speech channels
- Voice Codecs supported (SIP):
- G.711 A-law / μ -law
- G.726 (32kbps - 4 bit ADPCM)
- ETH-LAN interface
- Status LEDs

790D001

Connection cable - serial (spare part)



Optional unit for alternative wall mounting of central control unit.

790D180

PABX-interface card (8 a/b)



Same as Part No. 790D170 but for max. 8 DECT telephones.

Features

- Required for redundancy
- Required for use of more than 4 control units

790D185

Wall mounting kit for CCU 19"

Optional unit for alternative wall mounting of central control unit.

790D157

Link cable for CPU card 790D155



Used in systems with multiple central control units for the connection of CPU cards. Required for use of more than 2 central control units.

790D159

Patchpanel 12 x CAT5 auf LSA-plus



Compact RJ 45 patch panel with 12 x CAT5 sockets and LSA-plus connection terminals. Used for wiring the plug-in boards for the central control unit (e.g. for wall mounting), to connect the base stations and users of the telecommunications system (a/b or VoIP) with the central control unit. Suitable for wall mounting.

Technical Data

| | |
|---------------------|---------------------------------|
| Ambient temperature | 0 °C ... 40 °C |
| Color | Light gray, similar to RAL 7035 |

Features

Inputs/outputs:

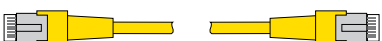
- 12 x RJ45 sockets, shielded
- 12 x LSA-plus connections
- Cat 6 / Class E to ISO/IEC11801 (9/2002) and EN50173

Accessories

583486 Cat 5 Patch Cable, 1 m

583486

Cat 5 Patch Cable, 1 m yellow (Ethernet)



790D130

DECT base stations



Features

- 1 base station for up to 4 concurrent speech channels

For the transmission of speech and data signals (up to 4 concurrent speech channels) between a control unit and the mobile devices.

The base station data transmission and power supply is carried out via a two-wire connection (twisted wire-pair) from the base stations' control card (maximum distance 1.000 m). Maximum transmission range up to 50 m in the building (depending on structural conditions, layout and materials) and up to 300 m outdoors. The base station is wired via the supplied connection box.

Technical Data

| | |
|---------------------|--|
| Operating voltage | 48 V DC (via central control unit) 48 V DC |
| Power consumption | 1.5 W |
| Ambient temperature | 0 °C ... 40 °C |
| Weight | approx. 200 g |
| Version | wall mounting (inside) |
| Dimensions | W: 150 mm H: 160 mm D: 36 mm (including antenna) |



DECT base station including connector cable (2 m) and connection box

790D131

DECT base station for humid environments



Features

- 1 base station for up to 4 concurrent speech channels

Housing waterproof (IP 54). Otherwise the design is identical to basis station 790D130.

Technical Data

| | |
|---------------------|--|
| Operating voltage | 48 V DC (via central control unit) 48 V DC |
| Power consumption | 1.5 W |
| Ambient temperature | 0 °C ... 40 °C |
| Weight | approx. 200 g |
| Version | wall mounting (outside) |
| Dimensions | W: 150 mm H: 160 mm D: 36 mm (including antenna) |



DECT base station for humid environments, connection cable (2 m), connection box and protective housing (IP 54)

790D140

DECT repeater



Features

- 1 repeater for up to 2 concurrent speech channels including power supply unit

Repeater for speech and data signal transmission (a maximum of two parallel speech channels) between a base station and the mobile devices.

A repeater can be used to increase the transmission range of a base station by up to 50%. Wireless data transmission to the assigned base station (overlapping wireless range). Configuration is made via a programming unit or a DECT telephone.

Technical Data

| | |
|---------------------|--|
| Power consumption | 1.5 W |
| Ambient temperature | 0 °C ... 40 °C |
| Weight | approx. 200 g |
| Version | wall mounting (inside) |
| Dimensions | W: 150 mm H: 160 mm D: 36 mm (including antenna) |

790D14A

Programming unit for DECT repeater



Features

- 1 programming unit for configuration of the DECT repeater

For DECT repeater configuration. The allocation of the system numbers (ARI) of the central control unit and the ID number of the accompanying DECT base station is carried out via a configuration tool. Connection to PC serial interface card (RS232).



As an alternative, the DECT repeater can be configured by using a DECT telephone.



Programming unit including adapter and software

790D500



Features

- DECT telephone incl. battery and clip
- Impact-resistant housing
- Headphone port
- Auxiliary loudspeaker
- 7-line color display
- Keypad and control keys
- Memory for 10 text messages (32 characters each)
- Address book (200 entries with 1000 numbers)
- Call list
- 13 menu languages
- Vibration device
- Different call signals
- Approvals/certifications: TBR6(DECT RF), TBR22(GAP), EMC ETS300329, CE

DECT telephone series D5, Basic

Robust DECT device, optimized for use in care facilities. The impact-resistant housing with all-round rubber seal has an antimicrobial surface and is resistant to disinfectants. This dust-proof and spray water protected device (protection rating IP65) is designed for tough everyday work. Its long talk and standby times mean that it is always ready for use even during long shifts. As a mobile device that conforms to the DECT/GAP standard, it can be used as a cordless telephone; when connected to the nurse call system, it can be used to transmit data signals from system messages (calls, alarms, technical messages, faults). Incoming messages are shown on the high-quality color display and an acoustic signal is emitted according to the predefined priority. Also includes a vibration device to alert the user to messages in any situation. Message memory for up to 10 messages, which can be retrieved and deleted. Fitted with a 7-line illuminated color display, numerical and function keys, plus a fixing clip and a high-quality Li-ion battery. Extremely simple menu navigation thanks to intuitive operation in 13 different local languages via the function keys. A large address book with up to 200 entries (1000 telephone numbers) is provided.

Can be used as a cordless telephone with an optional set of headphones (with microphone) or in hands-free mode via the integral loudspeaker.

Technical Data

| | |
|-----------------|---------------------------------|
| Frequency range | 1880 ... 1900 MHz |
| Screen diagonal | 4.5 cm |
| Weight | approx. 0.14 kg (incl. battery) |
| Dimensions | W: 53 mm H: 152 mm D: 27 mm |



The service life of a battery depends on how often the battery is charged (max. approx. 500 charge cycles). At 2 charges per day, this means approx. 12 months. To maximize the battery life, the battery must always be fully charged. Do not start charging until the battery display is nearly empty (ca. 20 %). If the standby time becomes too short, the battery should be replaced.

Accessories

- 790D501 Battery for DECT telephone series D5
- 790D503 Leather case for DECT telephone series D5
- 790D510 Charging cradle for DECT telephone series D5

790D520



DECT telephone series D5, Alarm

As part no. 790D500, with additional alarm button and enhanced memory for up to 20 text messages (> 150 characters). A pre-programmed number is automatically dialed when the alarm button is activated. Ready to display messages in different colors and with special symbols (planning for future firmware in the central control unit, functional support for the nurse call system required).

790D510



Charging cradle for DECT telephone series D5

For charging the DECT telephone series D5, fitted with high-quality charging contacts and therefore suitable for long-term use. The charging electronics are specially designed for the batteries in this device series: continuous monitoring of the battery temperature during charging optimizes battery life. The charging process is shown on the DECT telephone display.



Single charging cradle, plug-in power supply (as 790D410)

790D503

Leather case for DECT telephone series D5



Leather case with viewing window to protect the DECT telephone series D5 from damage and dirt. The DECT telephone series D5 must be removed from the leather case for charging.

790D501

Battery for DECT telephone series D5



Battery to replace the original battery in the DECT telephone series D5.

i The service life of a battery depends on how often the battery is charged (max. approx. 500 charge cycles). At 2 charges per day, this means approx. 12 months. To maximize the battery life, the battery must always be fully charged. Do not start charging until the battery display is nearly empty (e.g. 20%). If the standby time becomes too short, the battery should be replaced.

790D600

DECT telephone series D6, Office



DECT device ready for everyday office use, with long talk and standby times. As a mobile device that conforms to the DECT/GAP standard, it can be used as a cordless telephone; when connected to the nurse call system, it can be used to receive system messages (message memory for up to 10 messages). Includes a vibration device to alert the user to calls in any situation. It also has an illuminated color display, numerical and function keys, and a high-quality Li-ion battery. Extremely simple menu navigation thanks to intuitive operation in 12 different local languages via the function keys. A large address book with up to 200 entries (1000 telephone numbers) is provided. Cordless telephone conversations via an optional headset (with microphone).

Features

- DECT telephone incl. battery
- Headphone port
- Color display
- Keypad and control keys
- Memory for 10 text messages (32 characters each)
- Address book (200 entries with 1000 numbers)
- Call list
- 12 menu languages
- Vibration device
- Different call signals
- TBR6(DECT RF), TBR22(GAP), EMC ETS300329, CE

Technical Data

| | |
|-----------------|--------------------------------|
| Frequency range | 1880 ... 1900 MHz |
| Screen diagonal | 4.5 cm |
| Weight | approx. 0.11 kg (incl.battery) |
| Dimensions | W: 48 mm H: 146 mm D: 19 mm |

i The service life of a battery depends on how often the battery is charged (max. approx. 500 charge cycles). At 2 charges per day, this means approx. 12 months. To maximize the battery life, the battery must always be fully charged. Do not start charging until the battery display is nearly empty (ca. 20 %). If the standby time becomes too short, the battery should be replaced.

790D610

Charging cradle for DECT telephone series D6



For charging the DECT telephone series D6, fitted with high-quality charging contacts and therefore suitable for long-term use. The charging electronics are specially designed for the batteries in this device series: continuous monitoring of the battery temperature during charging optimizes battery life. The charging process is shown on the DECT telephone display.

790D601

Battery for DECT telephone series D6



Battery to replace the original battery in the DECT telephone series D6.



The service life of a battery depends on how often the battery is charged (max. approx. 500 charge cycles). At 2 charges per day, this means approx. 12 months. To maximize the battery life, the battery must always be fully charged. Do not start charging until the battery display is nearly empty (e.g. 20%). If the standby time becomes too short, the battery should be replaced.

790D400

DECT telephone "Office"



Features

- 1 DECT mobile device with battery
- Headphone connection
- 3-line display
- Keyboard
- Side control buttons and integrated transmitting/receiving antenna
- Menu navigation (German):
- 14 text messages
- 40 telephone book entries
- 2 different user profiles (5 volume levels, 9 call sounds + on/off for each, automatic call answering, etc.)
- Microphone deactivation
- Keyboard lock (manual)
- Battery charge indicator

Cordless device used as a mobile telephone in accordance with the DECT/GAP standard for transmitting speech and data signals.. The mobile unit is operated and configured via keyboard. Incoming text messages (during calls as well) are indicated on the backlit 36-character display and are subsequently stored within the system. The terminal device is charged in a charging cradle. Equipped with 4-line illuminated display, number and function keys, integrated lobes for belt clip, battery and integrated antenna.

Technical Data

| | |
|---------------------|---|
| Power supply | battery: 3.6 V DC NiMH, 650 mAh |
| Ambient temperature | 0 °C ... 40 °C |
| Type of protection | IP 64 |
| Weight | approx. 121 g (including battery) |
| Dimensions | W: 48 mm H: 143 mm D: 26 mm (including antenna) |
| Approval | TBR6(DECT RF), TBR22(GAP), EMC ETS 300329, CE |




Scope of delivery without charging unit!

790D410

Single charging cradle for DECT telephone 790D4xx



Charging cradle for charging a mobile device. The charging electronics are specially tailored to the batteries of the mobile device. The charging capacity is shown on the terminal unit display during the charging process. Charging time: max. 4h


 Single charging cradle, wall power supply

790D403

Leather case for DECT telephone 790D4xx



Leather case to protect against damage and dirt. The leather case has openings for keyboard and display.


 Leather case incl. retaining clip

790D301

Spare battery for DECT telephones 790D3xx and 790D4xx



Spare battery as a replacement for the original battery in the mobile device.

 The service life of a battery depends on how often the battery is charged (max. approx. 500 charge cycles). At 2 charges per day, this means approx. 12 months. To maximize the battery life, the battery must always be fully charged. Do not start charging until the battery display is nearly empty (e.g. 20%). If the standby time becomes too short, the battery should be replaced.

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