

DATA SHEET



Ascom d83 DECT Handset

Features

- Variants: Talker, Messenger, Protector, and Protector Lite
- Enhanced DECT security Step A and Step B
- GAP/CAP compliant DECT handset
- Cleanable, IP65
- Easy registration
- Shared phone
- Two multifunction buttons and programmable keys
- Push-to-talk (PTT)¹
- Android compatible and Bluetooth headset support
- Bluetooth 5.1²

Messaging

- Mini messaging (12 characters)³
- Interactive messaging inc. message acknowledgement and advanced messaging queueing¹

- Multicast/broadcast messaging
- Voicemail

Alarm⁴

- Push-button alarm
- Man-down and No-movement alarm
- Pull-cord alarm
- Acoustic Location Signal (ALS)
- Automatic call after alarm

Location

- Base station location
- DECT beacon location¹
- IR and LF location¹
- BLE location^{1 2}
- Poll location¹

1. Not applicable to Talker.

2. Not applicable to Protector Lite.

3. Applies to Talker only.

4. Applies to Protector and Protector Lite only.

Technical Specifications

Overview

Dimensions (l × w × d):	150 × 64 × 23 mm
Weight:	175 g, including battery and clip
Material:	Case: PC/ABS Keypad: PC Clip: PA
Color:	Handset: gray and black Front plate: black
Display:	40 × 50 mm (2.4 in.), TFT display Multiple colors with high resolution, 262K individual colors 240 × 320 pixels LCD, with white LED backlight
Menu and message languages:	Arabic, Czech, Danish, Dutch, English, Finnish, Flemish, French, German, Greek, Hungarian, Italian, Norwegian, Polish, Portuguese (Brazilian), Portuguese (European), Russian, Simplified Chinese, Slovak, Spanish, Swedish and Turkish + one downloadable
Clip:	Standard (hinge-type) or swivel-type, or no clip

Indication

Indicator:	Multicolor LED (Messenger and Protector) and red or green LED (Talker) on top for visual indication of incoming call or message The LED may also be used for visual indication of normal function
Vibrator:	Incoming call, alarm, and message

Connectors

Multi-purpose connector:	With USB for fast software download, configuration, and battery charging
Headset connector:	Standard 3.5 mm, screw enforced 3.5 mm

Audio

Ring signal:	Maximum sound level 105 dBA @ 10 cm Adjustable in 8 steps
Earpiece:	Adjustable in 8 steps of 3 dB each
Loudspeaker:	Duplex loudspeaking function
Voice codecs:	G.722.2, G.726

Specifications are subject to change without notice

Battery and Charging

Type:	Li-ion 3.7 V 920 mAh
Speech time ⁵ :	Messenger and Protector: Up to 16 h (Bluetooth disabled and location features enabled) Up to 18 h (Bluetooth disabled and location features disabled) Up to 10 h (with Bluetooth headset in use and location features enabled) Up to 12 h (with Bluetooth headset in use and location features disabled) Talker: Up to 12 h (with Bluetooth headset in use) Up to 18 h (Bluetooth disabled) Protector Lite: Up to 16 h (location features enabled) Up to 18 h (location features disabled)
Stand-by time ⁵ :	Messenger, Protector, and Protector Lite: Up to 120 h (Black screen saver activated and location features disabled) Up to 60 h (Black screen saver activated and location features enabled) Talker: Up to 120 h (black screen saver activated)
Charging time ^{5 6} :	Approx. 3 hours in CR3 charging rack, DC3 desktop charger, and CR4 battery pack charger Approx. 5 hours using 3.5 mm charger (for use in EU only)

Phonebook

Central phonebook:	Maximum 40 characters in a name and 20 digits in a number
Company phonebook:	Maximum 24 characters in a name and 24 digits in a number (1 number per name) 1,000 entries
Local phonebook:	48 character name 24 digit work number 24 digit mobile phone number 24 digit other number 250 entries Selectable ringtones per contact⁷

5. Based on optimal conditions (no roaming or handover and black display).

6. Not following environmental conditions can prolong charging time.

7. Ringtones shall be set using the handset's settings.

Specifications are subject to change without notice

Telephony

Indication:	14 ring signals, illuminated display, LED, and vibrator
Answer call:	Button press or auto answer
Call list storage capacity:	50 calls (received, dialled and missed) with time stamp

Messaging

Storage capacity:	Messenger and Protector, and Protector Lite: 30 received/sent messages (up to 20,000 characters)
	Talker: 0
Maximum message length:	Messenger and Protector, and Protector Lite: Up to 1,500 characters from handset, depending on language and system settings
	Talker: Mini messaging 12 characters to handset
Multicast groups per handset:	The handset can be a member in maximum 8 different messaging groups
Message character encoding:	SMS Standard Latin-1 UTF-8

Alarm (Protector and Protector Lite only)

Alarm features:	Push-button alarm (a dedicated alarm button with the ability to send different alarm types) Man-down and No-movement alarm Acoustic Location Signal (ALS) Automatic call after alarm
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Bluetooth (not applicable to Protector Lite)

Bluetooth radio spectrum:	ISM 2.4000–2.4835 GHz
Output power:	Class 2, maximum 3 dBm
Supported version:	5.1
Supported profiles:	Headset and handsfree
BLE beacon protocol:	iBeacon

Specifications are subject to change without notice

Bluetooth Headsets (not applicable to Protector Lite)

List of verified headsets:

Jabra EVOLVE 65 MS Stereo
 Jabra EVOLVE 75
 Jabra MOTION UC+ MS
 Jabra STEALTH
 Jabra SUPREME UC MS
 Peltor WS Headset XP (MT H7 WS5)
 Plantronics B825-M Voyager Focus
 Plantronics BackBeat GO 2
 Plantronics Blackwire 710
 Plantronics Explorer 500 Bluetooth Headset Black
 Plantronics M70
 Plantronics M90
 Plantronics Voyager 5200 BT Headset EU
 Plantronics Voyager Edge
 Plantronics Voyager Legend UC

Radio

Automatic DECT protocol detection:

Automatic detection and configuration for US DECT and EU DECT at first registration

Frequency range:

1880–1900 MHz: Europe, Africa, Middle East, Australia, New Zealand and parts of Asia
 1900–1906 MHz: Thailand
 1910–1920 MHz: Brazil
 1910–1930 MHz: Latin America
 1920–1930 MHz: US

Modulation:

GFSK

Channel spacing:

1.728 MHz

Antenna:

2 integral antennas for antenna diversity

Sensitivity:

–93 dBm

Dynamic output power:

EU/LA/BR: 10 mW (maximum average power)
 US: 4 mW (maximum average power)

Specifications are subject to change without notice

Additional Features

List of features:	High quality voice Centralized management Easy access to PBX services Easy replacement of a handset Programmable headset button Programmable handset restrictions Site survey tool Customizable sounds Customizable menus Easily replaceable battery Mute button and Sound off key Clear message ⁸ and call lists in charger 180 degrees rotation of message ⁸ and call information
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Accessories

CR4-AAAD	Battery pack charger
CR3-AAAD CR3-ABAD	Charging rack
DC3-AABD DC3-AAAD	Desktop charger
DP1-AAAD	Desktop programmer
P/N: 660672	3.5 mm charger (EU)
P/N: 660642	Standard clip
P/N: 660644	Swivel clip
P/N: 660646	No clip cover plate
P/N: 660645	Carrying case
P/N: 660201	Security string
P/N: 660639	Battery pack
P/N: 60647, 660648, 660649, 660650, 660651	Colored front plates (10 pcs)
P/N: 660653	Cover plug kit for pull cord alarm (10pcs) ⁹
P/N: 660275	Pull cord ⁹
P/N: 660508	Headset with microphone on boom

8. Not applicable to Talker

9. Applies to Protector and Protector Lite only.

P/N: 660515	3.5 mm headset adapter for microphone on boom
P/N: 660677	Peltor hearing protection headset
P/N: 660673	3.5 mm cable for Peltor headset
P/N: 660652	Headset connector plug kit (10 pcs)
Environmental	
Operating temperature:	-10 °C to +55 °C (+14 °F to +131 °F)
Storage temperature ¹⁰ :	-20 °C to +60 °C (-4 °F to +140 °F)
Charging temperature:	+5 °C to +40 °C (+41 °F to +104 °F)
Immunity to electromagnetic fields:	10 V/m (EN 61000-4-3)
Immunity to ESD:	8 kV contact discharge and 15 kV air discharge (EN 61000-4-2)
Enclosure protection:	IP65, IEC EN 60529
Free fall test ¹¹ :	IEC 60068-2-31, procedure 1, dropped 12 times, specification extended to 2 m IEC 60068-2-31, procedure 2, dropped 1,000 times from 0.5 m
Chemical resistance test:	3% Hydrochloric Acid M-alcohol (85% methylated ethanol) 60% Chlorhexidin 0.5 mg/ml
Accelerated Life Testing	
Multi-purpose connector:	With USB for fast software download, configuration and battery charging
Climate stress:	Handset exposed to quick temperature and humidity changes Temperature: -40 °C to +75 °C Humidity: 0% to 90%
Drop test:	Handset dropped 30 times from 1.2 m (6 times each loop for 5 loops)
Vibration test:	Handset exposed to 30 Hz vibrations for a duration of 2.5 h
Chemical stress:	Handset exposed to Oleic Acid
Keypad actuation test:	Keys pressed 15,000 times with a force of 13 N
Squeeze test:	Handset squeezed 1,000 times with a force of 130 N

10. Storing batteries at high temperature dramatically reduces its capacity. For example storage around +60 °C reduces capacity with 20% in less than a month, permanently.

11. IEC60068-2-31 supersedes IEC60068-2-32 and requirements are equivalent in free fall test.

Specifications are subject to change without notice

Compliance to Regulations and Standards

Bluetooth marking:



Compliance to European Regulations and Standards

Product marking:



IP65

Directives and regulations:

Directive 2014/53/EU (RED)
 Directive 2015/863 (RoHS) amending 2011/65/EU
 Directive 2012/19/EU (WEEE)
 Regulation (EC) 1907/2006 (REACH)
 Battery Regulation (EU) 2023/1542
 Packaging and packaging waste regulation 2025/40

Radio:

EN 301406, TBR22

Bluetooth:

EN 300328, EN 301489-17

SAR (Specific Absorption Rate):

EN 50360, 0.074 W/kg (10 gram) and EN 50566, 0.084 W/kg (10 gram)

Safety:

EN 62368-1

EMC:

EN 301489-6, EN 301489-1

Compliance to US Regulations and Standards (not applicable to Protector Lite)

Product marking:



FCC ID: BXZDH8

HAC

IP65

SAR (Specific Absorption Rate):

FCC 47 CFR § 2.1093 (d) and IEEE Std. 1528
 Body Worn 0.191 W/kg (1 gram) (DECT + BT + BLE)
 Left Head 0.178 W/kg (1 gram) (DECT + BT + BLE)

Safety:

UL 62368-1

EMC/Radio:

FCC Part 15 D, FCC Part 15 C (Bluetooth) and FCC Part 15 B

Hearing aid:

47 CFR Part 68

Specifications are subject to change without notice

Compliance to Canadian Regulations and Standards (not applicable to Protector Lite)

Product marking:	 C US IC: 3724B-DH8 IP65
SAR (Specific Absorption Rate):	RSS-102, Issue 5 Body Worn 0.191 W/kg (1 gram) (DECT + BT + BLE) Left Head 0.178 W/kg (1 gram) (DECT + BT + BLE)
Safety:	CAN/CSA-C22.2 NO. 62368-1
EMC/Radio:	RSS-213 and RSS-247 (Bluetooth)
Hearing aid:	CS-03 Part V, Issue 9, Amendment 1

Compliance to Australian and New Zealand Regulations and Standards

Product marking:	 R-NZ IP65
SAR (Specific Absorption Rate):	EN 50360, 0.074 W/kg (10 gram) and EN 50566, 0.084 W/kg (10 gram)
Safety:	AS/NZS 62368-1
EMC/Radio:	Radiocommunications Act 1992 Telecommunications Act 1997
Audio:	AS/CA S004
Bluetooth:	EN 300328, EN 301489-17

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