

Ascom d81 DECT Handset, Messenger

Features

Messaging

- Priority handling of calls and messages
- Advanced messaging queueing
- Color messaging
- 180 degrees rotation of message/call information
- Interactive messaging
- Broadcast/Multicast messaging
- Message acknowledgement
- Sending/receiving messages (SMS)
- Voice mail

Location

- Base station location
- DECT location¹
- LF Location²
- Poll location

General

- Tough industrial handset
- IP65 classified design
- Easy registration
- Headset connector
- Wide temperature range, -10 to 55 °C
- Loud volume
- Customizable sounds
- Color display
- Enhanced DECT security Step A (ETSI EN 300 444, N.35)
- GAP/CAP compliant DECT handset
- Dynamic output power
- Shared phone¹
- Upgradeable by license
- 18 default languages + 1 customizable

- Application controlled telephony
- Automation calls
- Automatic group calls
- Push to talk (PTT)
- Personalized menu
- Advanced user profiles
- System profiles
- Procedure call
- Programmable handset restrictions
- Programmable soft keys / hot keys
- Programmable headset button
- Bluetooth and handsfree as standard
- Bluetooth barcode reader support¹



1. License dependent feature
2. Factory option

Technical Specifications

Physical

Dimensions (l × w × d):

142 × 56 × 25 mm

Weight:

170 g (battery and clip included)

Material:

Case: PC/ABS, Key pad: PC, Clip: PA

Color:

Handset: Gray/Dark Gray
Front plates: Steel Gray (standard), Dark Gray, Turquoise, Green, and Orange.

Display (w × h):

28 × 35 mm, CSTN display

Clip:

Hinge-type (standard) or swivel-type

Battery

| | |
|-----------------------------------|--|
| Type: | Li-Ion |
| Speech time: | 18 h (Bluetooth disabled/Location features disabled) 12 h (with Bluetooth headset in use/Location features disabled) 16 h (Bluetooth disabled/LF location enabled) 10 h (with Bluetooth headset in use/LF location enabled) |
| Stand-by time: | 120 h (Black screen saver activated/Location features disabled) 60 h (Black screen saver activated/LF location enabled) |
| Charge time: | 2 hours - 90% charged; 3 hours - fully charged. |
| Discharge/charge cycles: | >=80% capacity left after 400 full charge/discharge cycles. |
| Storage temperature: ¹ | 0°C to +20°C. Cool and dry place. Charged to 40% (3.7V). Even when stored under optimal conditions the battery capacity will decrease over time |

1. Note that storing Li-Ion batteries at high temperature dramatically reduces its capacity. For example storage around +60°C reduces capacity with 20% in less than a month, permanently.

Connectors

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| Multi-purpose connector: | For battery charging, software download, connection of headset, and configuration. |
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User interfaceAudio

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| Display (w × h): | Multiple colors with high resolution, more than 65000 individual colors. 128 × 160 pixel LCD with white LED backlighting. |
| Indicator: | LED on top for visual indication of incoming call/message. The LED may also be used for visual indication of normal function. |
| Vibrator: | Incoming call/message |
| Buttons/Keypad: | - Soft keys (3) - Hook off key - On-hook and Power On/Off on the same key - Four-way navigation key - Numerical keys - Volume up/down buttons - Sound off key/Mute button |
| Ring signal: | Adjustable in 8 steps |
| Earpiece: | Adjustable in 8 steps |
| Maximum sound ring signal level: | 100 dBspl @ 10 cm |
| Loudspeaker: | Duplex loudspeaking function |

Settings

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| Menu and message languages: | 18 (Czech, Danish, German, Greek, English, Spanish, French, Italian, Magyar, Dutch, Norwegian, Polish, Portuguese (Brazilian), Russian, Slovakian, Finnish, Swedish, Turkish) + 1 customizable |
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NOTE: The full set of message languages are supported only if UTF-8 character encoding is used. Other character encodings have limited language support.

Specifications are subject to change without notice.

Central Phonebook

Maximum name and number length: 40 characters in a name and 20 digits in a number

Company Phonebook

Maximum name and number length: 24 characters in a name and 24 digits in a number (1 number per name).

Entries: 1000

Local Phonebook

Contacts:

- 48 character name
- 24 digit work number
- 24 digit mobile phone number
- 24 digit other number
- Selectable ring tones per contact

Entries: 250

Telephony

Indication: 14 ring signals, flashing LED and vibrator

Answer call: Button press or auto answer

Call list storage capacity: 25 calls (received, dialled and missed) with time stamp

Messaging

Maximum message length: Up to 140 characters from handset, depending on language and system settings.

Storage capacity: 30 received/sent messages (> 20 000 characters)

Maximum number of 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

Radio

Receiver sensitivity: -93 dBm

Automatic DECT protocol detection: Automatic detection and configuration for US DECT and EU DECT at first registration.

Frequency range:

- 1880-1895 MHz
 - 1880-1900 MHz
 - 1900-1906 MHz
 - 1910-1930 MHz
 - 1920-1930 MHz
- Taiwan
Europe, Africa, Middle East, Australia, New Zealand, and parts of Asia.
Thailand
South America
North America

Modulation: GFSK

Channel spacing: 1.728 MHz

Antenna: Integral

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

Bluetooth

Bluetooth radio spectrum: ISM 2.4000-2.4835 MHz

Specifications are subject to change without notice.

Environmental

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| Operating temperature: | -10°C to +55°C (+14°F to +131°F) |
| Storage temperature: | -20°C to +60°C (-4°F to +140°F) |
| Charging temperature: | +5°C to +40°C (+41°F to +104°F) |
| Enclosure protection: | IP65, IEC EN60529 |
| Immunity to electromagnetic fields: | 10V/m EN61000-4-3 |
| Immunity to ESD: | 8 kV contact discharge and 10 kV air discharge (EN61000-4-2) |

Accelerated Life Testing

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| Climate stress | Handset exposed for quick temperature changes (-40° C to 75° C) 25 times. Handset dwelt on each temperature during 40 minutes. |
| Drop test | Handset dropped 30 times from 1,2 metres |
| Vibration test | Handset exposed for vibrations during 2,5 hours |
| Chemical stress | Handset exposed for Oleic Acid |
| Keypad actuation test | Keys pressed 15 000 times with a force of 13N |
| Squeeze test | Handset squeezed 1 000 times with a force of 130N. |
| Free fall test, standard product | IEC 60068-2-32, procedure 1, dropped 12 times, specification extended to 2 metres. IEC 68-2-32, procedure 2, dropped 1 000 times from 0,5 metre. |
| Chemical Resistance Test | 3% Hydrochloric Acid M-alcohol (85% methylated ethanol) 60% Chlorhexidin 0.5mg/ml |
| Keypad Abrasion Test | 20 NB 0500-B |

Additional Features

- High quality voice
- Easy access to PBX services
- Easy replacement of handset
- Easy replaceable battery
- Mute button / Sound off key
- Local, central, and company phonebook
- Site survey tool
- Loudspeaking function
- Vibrator
- Clear call lists in charger
- Call list with the last 25 calls
- Site survey tool
- Centralized management

Accessories

- Hinge-type/Swivel-type clip
- Cover plate for no clip
- Security cord
- Leather casing, incl. swivel-type clip
- Desktop charger, Basic
- Desktop charger, Advanced
- Battery pack charger
- Charging rack
- Front plates (5 colors)
- Headset with microphone on boom¹
- Headset adaptor for Mic on boom
- Peltor hearing protection headset
- ATEX/IECEX-classified headset adaptor for standard and ATEX-classified Peltor headsets

1. Requires the headset adaptor for Mic on boom which is ordered separately.

Specifications are subject to change without notice.

Verified Bluetooth Headsets and Bluetooth Barcode Readers




Bluetooth Headsets:

- 3M Peltor WS XP
- Jabra EVOLVE 65
- Jabra MOTION
- Jabra STEALTH
- Jabra SUPREME
- Plantronics BlackBeat GO 2
- Plantronics Blackwire 710
- Plantronics M70
- Plantronics M90
- Plantronics ML20
- Plantronics Voyager Edge
- Plantronics Voyager Legend
- Voyager 5200 BT Headset EU
- B825-M Voyager Focus
- Explorer 500 Bluetooth Headset Black


Bluetooth Barcode Readers:

- Baracoda ScanWear BSW-L
- Baracoda Roadrunners BRR-L
- Baracoda Pencil2
- Opticon OPL-2724


Compliance to European Regulations and Standards

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|---------------------------------|--|
| EU directives: | 2014/53/EU (RED) and 2011/65/EU (RoHS) |
| Product marking: |    BT QD: B016451 |
| Radio: | EN 301 406, TBR22 |
| Bluetooth: | EN 300 328, EN 301489-17 |
| SAR (Specific Absorption Rate): | EN 50360, 0.137 W/kg (10 gram) EN 50566:2013 |
| Safety: | EN60950-1 |
| EMC: | EN301489- 6, EN 301 489-1 |

Compliance to US Regulations and Standards



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|---------------------------------|--|
| Product marking: | FCC ID: BXZDH5BL,  BT QD: B016451 US: 9FVW4NANDH5 HAC |
| SAR (Specific Absorption Rate): | FCC/OET Bulletin 65 Supplement C and IEEE Std. 1528 / ANSI/IEEE Std. C95.1 Normal operation 0.013 W/kg (1 gram) Body worn operation 0.016 W/kg (1 gram) |
| Safety: | UL 60950-1 |
| EMC/Radio: | FCC Part 15 D, and FCC Part 15 C |
| Hearing Aid: | 47 CFR Part 68, Subpart D and TIA-968-A |

Compliance to Canadian Regulations and Standards

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|---------------------------------|---|
| Product marking: | IC: 3724B-DH5BL,  BT QD: B016451 |
| EMC/Radio: | RSS-213 and RSS-210 (Bluetooth), ICES-003 |
| SAR (Specific Absorption Rate): | IEEE Std C95.3 Normal operation 0.013 W/kg (1 gram) Body worn operation 0.016 W/kg (1 gram) |
| Safety: | CSA 60950-1 |
| Hearing aid: | CS-03 |

Specifications are subject to change without notice.

Compliance to Australian Regulations and Standards

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|---------------------------------|--|
| Product marking: |   BT ID: B016451 |
| Radio: | EN301406 |
| Bluetooth: | EN 300 328-2, EN 301489-17, AUS/NZS-4771 |
| SAR (Specific Absorption Rate): | EN 50360, 0.137 W/kg (10 gram) EN 50566:2013 |
| Safety: | AUS/NZS 60950-1 |
| EMC: | EN301489- 6, EN 301 489-1 |
| DECT: | AS/ACIF S004 |

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