

## Ascom d81 DECT Handset, Protector

### Features

#### Alarm

- Push button alarm, with ability to send different alarm types
- Pull cord alarm<sup>1,2</sup>
- Man-down/No-movement alarm<sup>2</sup>
- Acoustic Location Signal (ALS)
- Automatic call after alarm

#### Location

- Base station location
- DECT location<sup>1</sup>
- LF location<sup>2</sup>
- Poll location

#### Messaging

- Priority handling of calls and messages
- Advanced messaging queueing
- Color messaging
- 180 degrees rotation of message/call information
- Interactive messaging
- Broadcast/Multicast messaging

#### General

- Tough industrial handset
- IP65 classified design
- Easy registration
- Headset connector
- Wide temperature range, -10°C to +55°C
- Loud volume
- Customizable sounds
- Color display
- Enhanced DECT security Step A and Step B (ETSI EN 300 444, N.35, N.36)
- GAP/CAP compliant DECT handset

- Dynamic output power
- Shared phone<sup>1</sup>
- 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 headset button
- Bluetooth and handsfree as standard
- Bluetooth barcode reader support<sup>1</sup>



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 h - 90% charged; 3 h - fully charged.
Discharge/charge cycles:	≥80% capacity left after 400 full charge/discharge cycles.
Storage temperature: <sup>1</sup>	0°C to +20°C. Cool and dry place. Charged to 40% (3.7 V). 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

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

### User interface

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

Specifications are subject to change without notice.

Buttons/Keypad:	<ul style="list-style-type: none"> <li>• Soft keys (3)</li> <li>• On-hook and Power On/Off on the same key</li> <li>• Four-way navigation key</li> <li>• Numerical keys</li> <li>• Volume up/down buttons</li> <li>• Sound off key/Mute button</li> </ul>
-----------------	---

### Audio

Ring signal:	Maximum sound level 100 dB <sub>A</sub> SPL @ 10 cm Adjustable in 8 steps
Earpiece:	Volume adjustable in 8 steps
Loudspeaker:	Duplex loud speaking function

### Central Phone book

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

### Company Phone book

Maximum name and number length:	24 characters in a name and 24 digits in a number (1 number per name).
Entries:	1000

### Local Phone book

Contacts:	<ul style="list-style-type: none"> <li>• 48 character name</li> <li>• 24 digit work number</li> <li>• 24 digit mobile phone number</li> <li>• 24 digit other number</li> <li>• Selectable ring tones per contact</li> </ul>
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

Specifications are subject to change without notice.

**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	Taiwan
• 1880–1900 MHz	Europe, Africa, Middle East, Australia, New Zealand, and parts of Asia.
•	
• 1900–1906 MHz	Thailand
• 1910–1930 MHz	South America
• 1920–1930 MHz	North America
Modulation:	GFSK
Channel spacing:	1.728 MHz
Antenna:	Integral
Maximum average power:	EU/LA/BR: 10 mW US: 4 mW

**Bluetooth**

Bluetooth radio spectrum:	ISM 2.4000–2.4835 GHz
Output power:	Class 2, maximum 3 dBm

**Environmental**

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 EN 60529
Immunity to electromagnetic fields:	10 V/m EN 61000-4-3
Immunity to ESD:	8 kV contact discharge and 10 kV air discharge (EN 61000-4-2)

**Accelerated Life Testing**

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 m
Vibration test	Handset exposed for vibrations during 2.5 h
Chemical stress	Handset exposed for 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.
Free fall test, standard product	IEC 60068-2-32, procedure 1, dropped 12 times, specification extended to 2 m. IEC 68-2-32, procedure 2, dropped 1 000 times from 0.5 m.
Chemical resistance test	3% Hydrochloric Acid M-alcohol (85% methylated ethanol) 60% Chlorhexidin 0.5mg/ml
Keypad abrasion test	20 NB 0500-B

Specifications are subject to change without notice.

### 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
- Voice mail
- Sending/receiving messages (SMS)
- Centralized management
- Message acknowledgement
- Loudspeaking function
- Vibrator
- Clear call lists in charger
- Call list with the last 25 calls
- Programmable Soft/Hot keys
- Site survey tool

### Accessories

- Hinge-type/Swivel-type clip
- Cover plate for no clip
- Security cord
- Pull-cord
- Leather casing, incl. swivel-type clip
- Desktop charger, Basic
- Desktop charger, Advanced
- Battery pack charger
- Charging rack
- Front plates (5)
- Headset with microphone on boom<sup>1</sup>
- 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.

### Verified Bluetooth Headsets and Bluetooth Barcode Readers

#### Bluetooth 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

#### Bluetooth Barcode Readers:

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

### Compliance to US Regulations and Standards

#### 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

Specifications are subject to change without notice.

**Compliance to Canadian regulations and standards**

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

**Compliance to European regulations and standards**

EU directives:

2014/53/EU (RED) and RoHS 2015/863 amending Directive 2011/65/EU.

Product marking:

   BT QD: B016451

Radio:

EN 301 406, TBR22

Bluetooth:

EN 300 328, EN 301 489-17

SAR (Specific Absorption Rate):

EN 50360, 0.137 W/kg (10 gram)

EN 50566

Safety:

EN 60950-1

EMC:

EN 301 489- 6, EN 301 489-1

**Compliance to Australian regulations and standards**

Product marking:

  BT ID: B016451

Radio:

EN 301 406

Bluetooth:

EN 300 328, EN 301 489-17, AUS/NZS-4771

SAR (Specific Absorption Rate):

EN 50360, 0.137 W/kg (10 gram)

EN 50566:2013

Safety:

AUS/NZS 60950-1

EMC:

EN 301 489- 6, EN 301 489-1

DECT:

AS/ACIF S004

For Sales and Support please contact your local Ascom partner



Connexus Communications Limited  
 Unit D2  
 Baldonnell Business Park  
 Naas Road  
 Dublin 22  
 Ireland  
 T: 00 353 1 4105866, F: 00 353 1 4105867  
[info@connexus.ie](mailto:info@connexus.ie)  
[www.connexus.ie](http://www.connexus.ie)

Specifications are subject to change without notice.