

## 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

- Personalized menu
- Bluetooth and handsfree as standard
- Bluetooth barcode reader support<sup>1</sup>

#### Location

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

#### Messaging

- Colour messaging
- Interactive messaging
- Broadcast/Multicast messaging

#### General

- Tough industrial handset
- IP65 classified design
- Headset connector
- Wide temperature range, -10 to 55 °C
- Loud volume
- Colour display
- 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)

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

Colour:

Handset: Grey/Dark Grey  
 Front plates: Steel Grey (standard), Dark Grey, 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 <sup>3</sup> :	18 h with Bluetooth module enabled, but no connected headset. 12 h with Bluetooth headset in use
Stand-by time <sup>3</sup> :	120 h without activated screensaver
Charge time:	< 2 hours - 10% charged; 3 hours - fully charged.
Discharge/charge cycles:	>=80% capacity left after 400 full charge/discharge cycles.

## Connectors

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

Display (w x h):	Multiple colours with high resolution, more than 65000 individual colours. 128 x 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:	<ul style="list-style-type: none"><li>- Soft keys (3)</li><li>- Hook off key</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:	Adjustable in 8 steps
Earpiece:	Adjustable in 8 steps
Maximum sound ring signal level:	100 dBspl @ 10 cm
Loudspeaker:	Duplex loud speaking function

## Settings

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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## Central Phonebook

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

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

3) Note that no other features are enabled, that is, alarm and location features.

*Specifications are subject to change without notice.*

## 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:	160 characters from handset. Message length to handset is system dependent.
Storage capacity:	30 received/sent messages (> 20 000 characters)

## Radio

Receiver sensitivity:	-93 dBm
Automatic DECT protocol detection:	Automatic detection and configuration for US DECT and EU DECT at first registration.

Frequency range:

- EU: 1880-1900 MHz
- US: 1920-1930 MHz
- LA: 1910-1930 MHz
- BR: 1910-1920 MHz
- Other: 1900-1920 MHz

Modulation:	GFSK
Channel spacing:	1.728 MHz
Antenna:	Integral
Radiated power:	EU: 250 mW US: 100 mW LA: 250 mW BR: 250 mW

## Bluetooth

Bluetooth radio spectrum:	ISM 2.4000-2.4835 MHz
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## Environmental

Operating temperature:	-10°C to +55°C
Storage temperature: <sup>4</sup>	-20°C to +60°C
Enclosure protection:	IP65, IEC EN60529
Immunity to electromagnetic fields:	3V/m EN61000-4-3
Immunity to ESD:	8 kV contact discharge and 16 kV air discharge (EN61000-4-2)

4) Note that storing Li-Ion batteries at high temperature dramatically reduces its capacity. For example storage reduces capacity with 20% in less than a month, permanently.

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## 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 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

20 NB 0500-B

## Keypad abrasion test

### 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
- Profiles
- 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

- Leather case
- Hinge-type/Swivel-type clip
- Security cord
- Pull cord
- Desktop charger, Basic
- Desktop charger, Advanced
- Charging rack
- Front plates (5 colours)
- Headset with microphone on boom<sup>1</sup>
- Headset adapter for Mic on boom
- Peltor hearing protection headset
- Headset adapter for standard Peltor headset


### Verified Bluetooth Headsets and Bluetooth Barcode Readers

- Bluetooth Headsets (10 supported)
  - Nokia BH-201
  - Nokia BH-804
  - Nokia BH-904
  - SonyEricsson HBH-GV435
  - SonyEricsson HBH-PV740
  - Plantronics Voyager 510
  - Plantronics Voyager 520
  - Plantronics Voyager 835
  - Plantronics Explorer 390
  - Peltor M2RX7-WS4
- Bluetooth Barcode Readers (4 supported)
  - Baracoda ScanWear BSW-L
  - Baracoda Roadrunners BRR-L
  - Baracoda Pencil2
  - Opticon OPL-2724




1. Requires the headset adapter for Mic on boom , which is ordered seperately.

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### **Compliance to European regulations and standards**

EU directives:	2006/95/EC(LVD), 2004/108/EC(EMC) and 1999/5/EC (R&TTE)
Product marking:	CE  BT QD: B016451
Radio:	EN 301 406, TBR22
Bluetooth:	EN 300 328-2, EN 301489-17
SAR (Specific Absorption Rate):	EN50360 and EN62209-1, 0.015 W/kg (10 gram)
Safety:	EN60950-1
EMC:	EN301489- 6, EN 301 489-1

### **Compliance to Australian regulations and standards**

Product marking:	  BT ID: B016451 
Radio:	EN301406
Bluetooth:	EN 300 328-2, EN 301489-17, AUS/NZS-4771
SAR (Specific Absorption Rate):	EN 50360 and EN62209-1, 0.015 W/kg (10 gram)
Safety:	AUS/NZS 60950-1
EMC:	EN301489- 6, EN 301 489-1
DECT:	AS/ACIF S004

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