DATA SHEET

Ascom d83 Protector DECT Handset

Features

- Wideband audio
- Shared phone
- Easy registration
- Loudspeaking function
- Procedure calls
- Advanced user profiles
- System profiles
- Programmable soft keys & hot keys
- Two multi-function buttons
- Push to talk (PTT)
- Priority handling of calls and messages
- Poll location
- Voicemail
- Dual microphones background noise canceling*
- Application controlled telephony with Automation calls and Automatic group calls

Alarm

- Push button alarm, with ability to send different alarm types
- Acoustic Location Signal (ALS)
- Automatic call after alarm
- Man-down and No-movement alarm
- Pull-cord alarm

Messaging

- Advanced messaging queueing
- Color messaging
- Interactive messaging
- Multicast / Broadcast messaging
- Message acknowledgement

Location

- IR Location
- DECT Beacon location
- Base station location
- BLE location*
- LF location

General

- High resolution 2.4 inch TFT display
- Bluetooth 5.0
- 3.5 mm headset connector
- Android compatible headset support
- Vibrator
- GAP / CAP compliant DECT handset
- Dynamic output power
- Cleanable, IP67
- 22 languages and 1 customizable
- Enhanced DECT security Step A and Step B (ETSI EN 300 444, N.35, N.36)

Will be available in the upcoming release

ascom

Technical Specifications

Overview

Dimensions (l × w × d):	150 × 64× 23 mm
Weight:	175 g (incl. battery and clip)
Material:	Case: PC / ABS, Key pad: PC, Clip: PA
Color:	Handset: Gray / Black Front plates: Black (standard), Steel Gray, Turquoise, Green, Orange
Display:	40 x 50 mm (2.4 in), TFT display Multiple colors with high resolution, 262 K individual colors 240 × 320 pixel LCD with white LED backlight
Clip:	Hinge-type (standard) or swivel-type or no clip

User Interface

Indicator:	Multicolor 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 / Incoming message / Alarm

Battery and Charging

ⓘ All battery times are based on optimal conditions (no roaming or handover and black display).

Type:	Li-ion 3.7 V 920 mAh
Speech time:	Up to 18 h (Bluetooth disabled / Location features disabled) Up to 12 h (with Bluetooth headset in use / Location features disabled) Up to 16 h (Bluetooth disabled / Location features enabled) Up to 10 h (with Bluetooth headset in use / Location features enabled)
Stand-by time:	Up to 120 h (Black screen saver activated / Location features disabled) Up to 60 h (Black screen saver activated / Location features enabled)
Charge time:	< 4 h

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

Specifications are subject to change without notice

Audio

Ring signal:	Maximum sound level 100 dBA @ 10 cm Adjustable in 8 steps
Earpiece:	Adjustable in 8 steps of 3dB each
Loudspeaker:	Duplex loudspeaking function
Voice Codecs:	G.722.2, G.726

Languages

Menu and message languages (22):	Arabic, Czech, Danish, Dutch, English, Finnish, Flemish, French, German, Greek, Hungarian, Italian, Norwegian, Polish, Portuguese (Brazilian), Portuguese (European), Russian, Simplified Chinese, Slovakian, Spanish, Swedish and Turkish + one downloadable

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) 1000 entries
Local phonebook:	48 character name 24 digit work number 24 digit mobile phone number 24 digit other number Selectable ringtones per contact 250 entries

Telephony

Indication:	14 ring signals, illuminated display, vibrator and LED
Answer call:	Button press or auto answer
Call list storage capacity:	50 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)
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

Additional

- High quality voice
- Centralized management
- Easy access to PBX services
- Easy replacement of handset
- Programmable headset button
- Programmable handset restrictions
- Site survey tool

- Customizable sounds
- Customizable menus
- Easily replaceable battery
- Sound off key
- Mute button
- 180 degrees rotation of message / call information
- Clear message and call lists in charger

Accessories

- Hinge-type/Swivel-type clip
- Cover plate for no clip
- Carrying case, incl. swivel-type clip
- Desktop charger
- Battery pack charger
- Charging rack
- Desktop programmer
- 3.5 mm charger EU

- Security cord: 80 cm for portable handsets
- Pull cord: 35 cm
- Pull cord: 80 cm
- Front plates (5 colors)
- Headset with microphone on boom
- Headset adapter for Mic on boom
- Peltor hearing protection headset and cable

Bluetooth

Bluetooth radio spectrum:	ISM 2.4000–2.4835 GHz
Output power:	Class 2, maximum 3 dBm
Supported Version:	5.0
Supported Profiles:	Headset and Handsfree

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

Specifications are subject to change without notice

Sensitivity:	−93 dBm
Maximum average power:	EU/LA/BR: 10 mW US: 4 mW

Environmental

Operating temperature:	−10°C to +55°C (+14°F to +131°F)
Storage temperature[1]:	−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 16 kV air discharge (EN 61000-4-2)
Enclosure protection:	IP67, IEC EN 60529
Free fall test[2]:	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

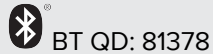| Climate stress:	Handset exposed to quick temperature and humidity changes Temperature: -40°C to +75°C Humidity: 0% to 90%
Drop test:	Handset dropped 30 times from 1.2 m (6 times each loop for 5 loops)
Vibration test:	Handset exposed to 30 Hz vibrations for a duration of 2.5 h
Chemical stress:	Handset 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

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.

2. 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:	BT QD: 81378

Compliance to European and UK Regulations and Standards

EU directives and regulations:	2014/53/EU (RED)
	2015/863 (RoHS3) amending directive 2011/65/EU
	2012/19/EU (WEEE)
	94/62/EC with amendment 2015/720 (Packaging and packaging waste)
	2006/66/EC (Battery Directive)
	Regulation 1907/2006 (REACH)
UK regulations:	Radio Equipment Regulations 2017
	RoHS in Electrical and Electronic Equipment Regulations 2012
	Reach Enforcement Regulations 2008
	Batteries Packaging (essential requirements) Regulations 2015 and Accumulators (placing on the market) Regulations 2008 and Waste Batteries and Accumulators Regulations 2009
	Waste Electrical and Electronic Equipment Regulations 2013
Product Marking:	IP67
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

Product Marking:	FCC ID: BXZDH8
	HAC
	IP67
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

Product Marking:	IC: 3724B-DH8 IP67
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 IP67
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 AS/CA S042

Specifications are subject to change without notice

ascom