DATA SHEET

PRELIMINARY



Ascom d83 Protector DECT Handset

Features

- Wide band audio
- Shared phone
- Bluetooth for headset
- Easy registration
- Loudspeaking function
- Procedure calls
- Advanced user profiles
- System profiles
- Programmable soft keys & hot keys
- Multi-function button
- Push to talk (PTT)
- Poll location
- Voice mail
- Background noise cancelling
- 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

- Priority handling of calls and messages
- 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

- 3.5 mm headset connector
- Vibrator
- GAP / CAP compliant DECT handset
- Dynamic output power
- Cleanable, IP67
- 20 languages and 1 customizable
- Enhanced DECT security Step A and Step B (ETSI EN 300 444, N.35, N.36)



	Technical Specifications	
Overview		
Dimensions (I × w × d):	150 × 64× 23 mm	
Weight:	164.2 g (excl. clip) 180 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 \times 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:	 18 h (Bluetooth disabled / Location features disabled) 12 h (with Bluetooth headset in use / Location features disabled) 16 h (Bluetooth disabled / Location features enabled) 10 h (with Bluetooth headset in use / Location features enabled) 	
Stand-by time:	120 h (Black screen saver activated / Location features disabled) 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	

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
Languages	
Menu and message languages (20):	Czech, Danish, Dutch, English, Finnish, Flemish, French, German, Greek, Hungarian, Italian, Norwegian, Polish, Portuguese (Brazilian), Portuguese (European), Russian, 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 ring tones 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

Additional	
 High quality voice Centralized management Easy access to PBX services Easy replacement of handset Programmable headset button Site survey tool 	 Customizable menus Programmable handset restrictions Easily replaceable battery Mute button / Sound off key 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 Security cord Pull-cord Leather casing, incl. swivel-type clip Desktop charger Desktop programmer 	 Battery pack charger Charging rack Front plates (5) Headset with microphone on cable Headset with microphone on boom Headset adapter for Mic on boom
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:	EU: 1880–1900 MHz US: 1920–1930 MHz LA: 1910–1930 MHz BR: 1910–1920 MHz THA: 1900–1906 MHz – : 1900–1920 MHz
Modulation:	GFSK
Channel spacing:	1.728 MHz
Antenna:	2 integral antennas for antenna diversity
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:	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	

Complia	Compliance to Regulations and Standards		
Bluetooth Marking:	BT QD: 81378		
Compliance to European/UK Regulations and Standards			
EU directives and regulations:	2014/53/EU (RED), 2012/19/EU (WEEE), 94/62/EC with amendement 2015/720 (Packaging and packaging waste), 2006/66/EC (Battery Directive), Regulation 1907/2006 (REACH) and RoHS 2015/863 amending Directive 2011/65/EU		
UK directives and regulations:	Radio Equipment Regulations 2017 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012		
Product Marking:	CE LUK B		
Radio:	EN 301 406, TBR22		
Bluetooth:	EN 300 328, EN 301 489-17		
SAR (Specific Absorption Rate):	EN 50360, 0.075 W/kg (10 gram) and EN 50566, 0.076 W/kg (10 gram)		
Safety:	EN 62368-1		
EMC:	EN 301 489- 6, EN 301 489-1		
Compliance to US Regulations an	d Standards		
Product Marking:	FCC ID: BXZDH8 HAC IP67		
SAR (Specific Absorption Rate):	FCC 47 CFR § 2.1093 (d) and IEEE Std. 1528 Body Worn 0.074 W/kg (1 gram)		
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		
Compliance to Canadian Regulati	ons and Standards		
Product Marking:	IP67		
SAR (Specific Absorption Rate):	RSS-102, Issue 5 Body Worn 0.074 W/kg (1 gram)		
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 Regulations and Standards		
Product Marking:		
Safety:	AUS/NZS 60950-1	
EMC/Radio:	Radiocommunications Act 1992 Telecommunications Act 1997 AS/CA S042	

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

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