# **DATA SHEET**



# Ascom d83 Talker DECT Handset

#### **Features**

- Wideband audio
- Easy registration
- Loudspeaking function
- Procedure calls
- Advanced user profiles
- System profiles
- Programmable soft keys & hot keys
- Two multi-function buttons
- Poll location
- Voicemail
- Dual microphones background noise cancelling
- Base station positioning

### Messaging

- Mini messaging (12 characters)
- Multicast/Broadcast messaging
- Voicemail

#### 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)



	Technical Specifications	
Overview		
Dimensions (I × 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 $\times$ 320 pixel LCD with white LED backlight	
Clip:	Hinge-type (standard) or swivel-type or no clip	
User Interface		
Indicator:	LED on top for visual indication of incoming call  The LED may also be used for visual indication of normal function	
Vibrator:	Incoming call / Incoming message	
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) Up to 12 h (with Bluetooth headset in use)	
Stand-by time:	Up to 120 h (Black screen saver activated)	
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	
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
Mini Messaging (12 characters)	
Maximum message length:	12 characters to handset
Storage capacity:	0
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	
<ul> <li>High quality voice</li> <li>Centralized management</li> <li>Easy access to PBX services</li> <li>Easy replacement of handset</li> <li>Programmable headset button</li> <li>Programmable handset restrictions</li> <li>Site survey tool</li> </ul>	<ul> <li>Customizable sounds</li> <li>Customizable menus</li> <li>Easily replaceable battery</li> <li>Sound off key</li> <li>Mute button</li> <li>Clear call lists in charger</li> </ul>

Accessories	
<ul> <li>Hinge-type/Swivel-type clip</li> <li>Cover plate for no clip</li> <li>Carrying case, incl. swivel-type clip</li> <li>Desktop charger</li> <li>Battery pack charger</li> <li>Charging rack</li> <li>Desktop programmer</li> </ul>	<ul> <li>Security cord: 80 cm for portable handsets</li> <li>Front plates (5 colors)</li> <li>Headset with microphone on boom</li> <li>Headset adapter for Mic on boom</li> <li>3.5 mm charger EU</li> <li>Peltor hearing protection headset and cable</li> </ul>
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
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 temperature1:	-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 15 kV air discharge (EN 61000-4-2)
Enclosure protection:	IP67, IEC EN 60529
Free fall test <sup>2</sup> :	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

<sup>1.</sup> 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.

<sup>2.</sup> IEC60068-2-31 supersedes IEC60068-2-32 and requirements are equivalent in free fall test.

Complia	nce to Regulations and Standards
Bluetooth Marking:	<b>8</b> 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:	C € 🕅 CA 😵 °
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 an	d Standards
Product Marking:	FCC ID: BXZDH8 HAC
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 D, FCC Part 15 C (Bluetooth) and FCC Part 15 D, FCC Part 15 C (Bluetooth) and FCC Part 15 D, FCC Part 15 D, FCC Part 15 C (Bluetooth) and FCC Part 15 D, FCC Part 15 D, FCC Part 15 C (Bluetooth) and FCC Part 16 D, FCC Part 15 D, FCC Part 15 D, FCC Part 15 C (Bluetooth) and FCC Part 16 D, FCC Part 15 C (Bluetooth)  Product Marking:    Compliance to Australian and New Zealand Regulations and Standards   Foduct Marking:   R-NZ   FCC Part 15 D, FCC			
Compliance to Canadian Regulations and Standards  Product Marking:    Product Marking:	art 15 B		
Product Marking:    IC: 3724B-DH8   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	Compliance to Canadian Regulations and Standards		
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IP67			
SAR (Specific Absorption Rate): EN 50360, 0.074 W/kg (10 gram) and EN 50566, 0.0			
	)84 W/kg (10 gram)		
Safety: AS/NZS 62368-1			
EMC/Radio: Radiocommunications Act 1992 Telecommunications Act 1997			
Audio AS/CA S004			
Bluetooth: EN 300328, EN 301489-17			

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