

# DATA SHEET



## Ascom i63 VoWiFi Handset

### Features

- Three variants: Talker, Messenger, and Protector
- Easy deployment
- Shared phone
- Bluetooth for headset
- Loudspeaker function
- Multifunction button<sup>1</sup> and programmable soft keys & hot keys
- Vibrating alert
- Push-to-talk (PTT)<sup>2</sup>
- Voicemail
- Particle and water resistant according to IP44

### Messaging<sup>2</sup>

- Interactive messaging including message acknowledgement and graphical messaging

### Alarm<sup>3</sup>

- Push-button alarm
- Man-down and No-movement alarm
- Acoustic Location Signal (ALS)
- Automatic call after alarm

### Location

- Associated WLAN access point (AP)
- Cisco MSE
- AiRISTA Flow RTLS
- IR and LF location<sup>3</sup>
- BLE location (iBeacon)<sup>2</sup>

1. Applicable to Talker and Messenger only.

2. Applicable to Messenger and Protector only.

3. Applicable to Protector only.

Technical Specifications	
<b>Overview</b>	
Dimensions (l × w × h):	137 × 52 × 21 mm
Weight:	135 g (excl. clip) (4.8 oz)
Material:	Case: PC, Key pad: coated vulcanized silicone Clip: PA
Color:	Black
Display:	31 × 41 mm (2.0 in), TFT color display 240 × 320 pixel LCD with white LED backlight
Menu and message languages:	Arabic, Chinese (simplified), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Norwegian, Polish, Portuguese (Brazilian), Russian, Slovak, Spanish, Swedish, and Turkish
Clip:	Hinge-type (standard) or swivel-type
<b>Indication</b>	
Indicator:	Illuminated display for visual indication of incoming calls, messages, and charging
Vibrating alert:	Incoming calls and messages Triggering alarm
<b>Battery<sup>1</sup></b>	
Type:	Li-polymer 3.7 V 920 mAh
Speech time:	10 h
Stand-by time:	100 h
Charging time <sup>2</sup> :	Approx. 3 hours in CR3 charging rack and CR4 battery pack charger
<b>Connectors</b>	
Multi-purpose connector:	With USB for fast software download, configuration, and battery charging
Headset connector <sup>3</sup> :	Standard 3.5 mm
<b>Audio</b>	
Ring signal:	Maximum sound level 88 dB <sub>A</sub> SPL @ 10 cm Adjustable in 8 steps
Earpiece:	Volume adjustable in 8 steps of 3 dB each
Loudspeaker :	Duplex loudspeaker function

*Specifications are subject to change without notice*

Telephony	
Indication:	Illuminated display Vibrating alert 14 ring signals Aggressive ring signal 7 beep signals 3 user-defined custom sounds
Answer call:	Phone button press Headset button press Automatic answer
Call list storage capacity :	25 calls (received, dialled and missed) with time stamp
Protocol :	SIP supporting RFC1889, RFC2327, RFC2833, RFC3261, RFC3264, RFC3265, RFC3515, and RFC3842
Encryption protocol:	SRTP TLS 1.0, 1.1, 1.2, 1.3 for SIP and Wi-Fi
Voice codecs:	Opus Wideband Opus Narrowband G.711 A-law (EU) G.711 u-law (US) G.722 G.729 G.729A G.729B G.729AB
Bluetooth	
Supported version:	5.0 inc. Bluetooth Low Energy (BLE)
Supported profiles:	Headset and handsfree
Bluetooth radio spectrum:	ISM 2.4000–2.4835 GHz
Bluetooth output power:	Class 1, maximum 8dBm
BLE beacon protocol:	iBeacon

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<b>Phonebook</b>	
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 (one number per name) 1000 entries
Local phonebook:	48-character name 30-digit work number 30-digit mobile phone number 30-digit other number Selectable ring signals per contact <sup>4</sup> 250 entries
<b>Messaging (applicable to Messenger and Protector only)</b>	
Maximum message length:	160 characters from the handset Message length to the handset is system-dependent
Storage capacity:	30 received/sent messages
<b>Alarm (applicable to Protector only)</b>	
Alarm features:	Push-button alarm (a dedicated alarm button with the ability to send different alarm types) Man-down and No-movement alarm Acoustic Location Signal (ALS) Automatic call after alarm Emergency call alarm
<b>Location Services</b>	
Location types:	Associated WLAN access point (AP) Cisco MSE AiRISTA Flow RTLS IR and LF location (applicable to Protector only) BLE location (applicable to Messenger and Protector only)
<b>WLAN</b>	
Supported networks:	802.11 a/b/g/n (HT: MCS0-7), 802.11 ac (VHT: MCS0-9)
Number of networks:	Four systems, auto and manual selection

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Frequency range:	EU (ETSI): b/g: 2.4–2.483 GHz (Ch 1–13) a: 5.17–5.33 GHz (Ch 36–64), 5.49–5.71 GHz (Ch 100–140), 5.735–5.835 GHz (Ch 149–165)
	USA (FCC): b/g: 2.4–2.473 GHz (Ch 1–11) a: 5.17–5.33 GHz (Ch 36–64), 5.49–5.73 GHz (Ch 100–144), 5.735–5.835 GHz (Ch 149–165)
	Canada (IC): b/g: 2.4–2.473 GHz (Ch 1–11) a: 5.17–5.33 GHz (Ch 36–64), 5.49–5.59 GHz (Ch 100–116), 5.65–5.73 GHz (Ch 140–144), 5.735–5.835 GHz (Ch 149–165) NOTE: The 5.60–5.65 GHz frequency band is disabled for use.
Regulatory domain:	802.11 d/h
Modulation speed:	b: 1, 2, 5.5, 11 Mbps a, g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps n: MCS-0–MCS-7 ac: MCS-0–MCS-9
Quality of Service (QoS):	WMM, TSPEC-based CAC
Roaming enhancements:	802.11r, 802.11k Opportunistic Key Caching PMKSA caching
Receiver sensitivity:	–87 dBm (802.11a, 6 Mbps) –93 dBm (802.11b, 1 Mbps) –87 dBm (802.11g, 6 Mbps) –86 dBm (802.11n, MCS0)
Maximum output power:	100 mW/20 dBm
<b>Security</b>	
Security standards:	802.11i, 802.11w
Encryption methods:	AES-CCMP, TKIP
Authentication methods:	Open WPA/WPA2-Personal WPA3-Personal WPA2-Enterprise (PEAP-MSCHAPv2, EAP-TLS) WPA3-Enterprise (PEAP-MSCHAPv2, EAP-TLS)
Certificate enrollment standard:	SCEP

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## Additional Features

List of features:	<ul style="list-style-type: none"> <li>Centralized management</li> <li>Easy access to PBX services</li> <li>Easy replaceable battery</li> <li>Mute button/Sound off key</li> <li>Programmable headset button</li> <li>Customizable menus</li> <li>Customizable sounds</li> <li>Clear message and call lists in charger</li> <li>Possible to view messages and call information upside down</li> <li>Site survey tool</li> <li>Dynamic output power</li> </ul>
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## Accessories

CR3-ABAD	CR3 Charging rack
CR4-AAAC	CR4 Battery pack charger
DC3-UAAA, DC3-UABA	DC3 Desktop charger
DP1-UAAA	DP1 Desktop programmer
660521	Carrying case
660517	Standard clip
660506	Swivel clip
660576, 660577	Silicon cover
660201	Security string
660497	Battery pack
660575	Battery pack adapter to be used in CR4-AAAA
660516	Headset with microphone on cable
660508	Headset with microphone on boom (requires headset adapter)
660515	Headset adapter 3.5 mm to QD
	Blind plate (delivered together with the handset)

## Licenses

WH2-L01:	Talker to Messenger upgrade license
WH2-L02:	Upgrade license Talker to Protector light <sup>5</sup> (only alarm button functionality)
WH2-L03:	Messenger to Protector light <sup>5</sup> upgrade license (only alarm button functionality)

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Environmental	
Operating temperature:	–5°C to +45°C (23° to 113°F)
Storage temperature <sup>6</sup> :	–20°C to +60°C (–4°F to 140°F)
Charging temperature:	0°C to +45°C (32°F to 113°F)
Enclosure protection:	IP44, IEC 60529
Chemical resistance:	Chemicals that have shown no harmful effects: 3% Hydrochloric Acid M-alcohol (70% Methylated Ethanol) 60% Chlorhexidine 0.5 mg/ml
Immunity to electromagnetic fields:	10 V/m (IEC 61000-4-3)
Immunity to electrostatic discharge (ESD):	8 kV contact discharge and 15 kV air discharge (IEC 61000-4-2)
Free fall test <sup>7</sup> :	IEC 60068-2-31, procedure 1, dropped 12 times from 1.5 m IEC 60068-2-31, procedure 2, dropped 1000 times from 0.5 m

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## Compliance to Regulations and Standards

Bluetooth marking:



BT QD: 118271BT QD: D044287

## Compliance to European and UK Regulations and Standards

Product marking:



EU directives and regulations:

RoHS in Electrical and Electronic Equipment Regulations 2015/863 amending 2011/65/EU  
 REACH Regulation (EC) 1907/2006  
 Battery Directive 2006/66/EC amending 2013/65/EU  
 Packaging Directive 94/62/EC  
 WEEE Directive 2012/19/EU  
 RED Directive 2014/53/EU

UK directives and regulations:

RoHS in Electrical and Electronic Equipment Regulations 2012  
 The REACH Enforcement Regulations 2008  
 The Batteries and Accumulators (Placing on the Market) Regulations 2008 and the Waste Batteries and Accumulators Regulations 2009  
 The Packaging (Essential Requirements) Regulations 2015  
 The Waste Electrical and Electronic Equipment Regulations 2013  
 Radio Equipment Regulations 2017

SAR (Specific Absorption Rate):

EN 50360, 0.637 W/kg (10 g)

Safety:

EN 62368-1

Bluetooth:

EN 300328, EN 301489-17

EMC:

EN 301489-01, EN 301489-17, EN 55032, EN 60601-1-2

Radio:

EN 300328, EN 301893

## Compliance to US Regulations and Standards

Product marking:

FCC ID: BXZWH2  
 HAC  
 US: 9FVIPNANWH2

SAR (Specific Absorption Rate):

FCC/OET Bulletin 65 Supplement C and IEEE Std. 1528  
 Normal operation 1.108 W/kg (1 g)  
 Body worn operation 1.586 W/kg (1 g)

Safety:

UL 62368-1

EMC/Radio:

FCC Part 15 E, FCC Part 15 C, and FCC Part 15 B

Hearing aid:

FCC 47CFR part 68


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**Compliance to Canadian Regulations and Standards**

Product marking:	IC: 3724B-WH2
SAR (Specific Absorption Rate):	RSS-102, Issue 5 Body Worn 1.586 W/kg (1 g) Left Head 1.108 W/kg (1 g)
Safety:	CAN/CSA-C22.2 NO. 62368-1-14
EMC/Radio:	RSS-GEN and RSS-247
Hearing aid:	CS-03 Part V, Issue 9, Amendment 1

**Compliance to Australian and New Zealand Regulations and Standards**

Product marking:	RCM 
SAR (Specific Absorption Rate):	EN 62209-1, 0.637 W/kg (10 g)
Safety:	AS/NZS 62368:2018
Bluetooth:	AUS/NZS-4771
EMC:	Radiocommunications (Electromagnetic Compatibility) Standard 2008
Radio:	Radiocommunications (Short Range Devices) Standard 2014, AS/NZS 4268
Audio:	AS/CA S004

1. All battery times are based on optimal conditions (no roaming or handover and black display).
2. Note that not following environmental conditions can prolong charging time.
3. Compatible with Android wired headsets only.
4. Selectable ring signals for local phonebook are not part of any phonebook file and ringtones shall be set using the handset's settings.
5. Protector light is when Talker and Messenger got a Protector license but still lack specific hardware features.
6. Storing Li-polymer batteries at high temperature dramatically reduces their capacity. See [Battery Storage and Maintenance Guidelines](#).
7. IEC60068-2-31 supersedes IEC60068-2-32 and requirements are equivalent in free fall test.

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