Ascom i62 VoWiFi Handset

Features

- VoWiFi Handset (Talker, Messenger, Protector) with voice, personal alarm\(^a\) and messaging\(^b\)
- Supports WiFi standard a/b/g/n radio
- Dynamic output power according to 802.11h
- TFT colour display
- Cleanable, IP 44
- Upgradeable by licenses
- Push button alarm, with ability to send different alarm types\(^a\)
- Man-down and No-movement alarm\(^a,c,d\)
- Acoustic Location Signal (ALS) at alarm\(^a\)
- Automatic call after alarm\(^a\)
- Location (AP, Ekahau RTLS\(^e\) and Cisco MSE\(^e\))
- Messaging
- Interactive Messaging
- Coloured Messaging
- Message acknowledgement
- Voice mail\(^f\)
- Push to talk (PTT)
- Shared phone\(^e\), supports virtual SIM
- 3 Programmable soft keys
- 9 Programmable hot keys
- Vibrator
- Compliance with Cisco Systems, Inc. Cisco
- Centralized management
- Hearing aid compatible (HA)

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a. Applicable to Protector only.
b. Applicable to Messenger and Protector only.
c. The handset version must be WH1-AAAA/2A or above (see label under battery cover).
d. These two functions require a license.
e. This function requires a license.
f. This function is system dependent (refers to the voice mail indication feature).

Technical Specifications

**Physical**

- Dimensions (l × w × d): 134 × 53 × 26 mm
- Weight: 135 g (battery and clip included)
- Material: Case: PC/ABS, Key pad: PC, Clip: PA12 Grilamid
  Keypad: PC/Silicon, illuminated by white LED’s
- Colour: Steel grey
- Display (w × h): 28 × 35 mm
- Clip: Hinge-type (standard) or swivel-type
### Battery
- **Type:** Li-polymer
- **Speech time:** 15 h
- **Stand-by time:** 100 h
- **Charging time:** 2.5 hours
- **Discharge/charge cycles:** >=80% capacity left after 400 full charge/discharge cycles.

### Connectors
- **Multi-purpose connector:** For battery charging, software download, and configuration
- **Headset connector:** Standard 2.5 mm

### User interface
- **Display (w × h):** TFT display with multiple colours with high resolution, more than 65000 individual colours. 176 × 220 pixel LCD with white LED backlighting
- **Indicator:** LED on top/front for visual indication of events and normal function. The LED may also be used for visual indication of a message.
- **Vibrator:** Incoming calls and other audio events and messages
- **Buttons/Keypad:**
  - Soft keys (3)
  - Call key
  - End key and Power On/Off on the same key
  - Five way navigation key (OK button in the centre of the key)
  - Numerical keys
  - Sound off key
  - Volume button up/down
  - Multifunction button
  - Mute button

### Audio
- **Ring signal:** Adjustable in 8 steps and silent
- **Earpiece:** Adjustable in 8 steps of 3 dB each
- **Maximum sound ring signal level:** 88 dBA @ 10 cm
- **Loudspeaker:** Duplex loudspeaking function

### Settings
- **Languages:** 18 (Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Norwegian, Polish, Portuguese (Brazilian), Russian, Slovak, Spanish, Swedish, and Turkish), + 1 customizable.

### Central Phonebook
- **Maximum name and number length:** 40 characters in a name and 20 digits in a number

### Company Phonebook
- **Maximum name and number length:** 24 characters in a name and 24 digits in a number (1 number per name).
- **Entries:** 1000

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*a.* Dependent of Active mode, U-APSD WLAN environment and configuration (refers to the speech time). Location in the system will also affect the speech time.

*b.* The stand-by time is without activated screensaver.

*Specifications are subject to change without notice.*
Local Phonebook
Storage of 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, dialed and missed) with time stamp
Protocol: H.323 with H.225, H.235 and H.245
H.450 with Supplementary Services H.450.1, H.450.2, H.450.3, H.450.4, H.450.6, H.450.7, H.450.8 and H.450.9
SIP supporting RFC1889, RFC2327, RFC2833, RFC3261, RFC3264, RFC3265, RFC3515 and RFC3842

Messaging
Maximum message length: 160 characters from VoWiFi Handset. Message length to VoWiFi Handset is system dependent.
Storage capacity: 30 received/sent messages.

Alarm
Location types: Associated WLAN access point and Cisco MSE as standard, Ekahau as option
Alarm types: 2 push button alarms, Man-down and No-movement alarm

Radio
Receiver sensitivity (typical values):
-87 dBm (802.11a, 6Mbps), -93 dBm (802.11b, 1Mbps),
-87 dBm (802.11g, 6Mbps), -86 dBm (802.11n, MCS0)
Frequency range:
EU: b/g: 2.4–2.4835 GHz (Ch 1–13) and
a: 5.15–5.35 GHz (Ch 36–64), 5.47–5.725 GHz (Ch 100–140)
USA/Canada:
b/g: 2.4–2.4835 GHz (Ch 1–11) and
a: 5.15–5.35 GHz (Ch 36–64), 5.47–5.85 GHz (Ch 100–165)
Maximum output power: 100 mW / 20 dBm
Modulation speed: b: 1, 2, 5.5, 11Mbps,
a: 6, 9, 12, 18, 24, 36, 48, 54Mbps,
n: MCS0-7

WLAN
Number of networks: 4 systems, manual selection
Quality of Service (QoS): WMM, TSPEC-based CAC
Supported networks: 802.11 a/b/g/n (MCS0-7, 20 MHz, 800nS GI)

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Security
Security standard: 802.11i
Encryption methods: 64/128 bits WEP, TKIP, AES-CCMP
Authentication methods: 802.1X
Original 802.11 open/shared key authentication
WPA-PSK
WPA2-PSK
PEAP-MSCHAPv2
EAP-TLS
EAP-FAST
Authentication certificate

Roaming enhancement
Pre-authentication
Opportunistic Key Caching
PMKSA caching
CCKM

Environmental
Operating temperature: -5 °C to +45 °C
Storage temperature\(^a\): -25 °C to +55 °C
Charging temperature: ≥ +5 °C
Enclosure protection: IP44, IEC EN60529
Immunity to electromagnetic fields: 10 V/m EN61000-4-3
Immunity to ESD: 6 kV contact discharge and 8 kV air discharge (EN61000-4-2)
Free fall test, standard product: IEC 60068-2-32, procedure 1, dropped 12 times from 1 metre.

Additional Features
- High quality voice
- Illuminated display and keypad
- Time and date indication
- Customized GUI
- Profiles
- Local, central, and company phonebook\(^b\)
- Easy replacement of VoWiFi Handset
- Easy replaceable battery
- Name in call list
- Call list with the 25 last calls
- Clear lists in charger
- 18 languages and 1 customizable
- Standard headset connector 2.5 mm
- Loudspeaking function
- Mute button/Sound off key
- Manual and automatic keypad lock
- Site survey tool

Licenses
WH1-L01: License i62 Messenger
WH1-L02: License i62 Protector
WH1-L03: Upgrade license Messenger to Protector i62
WH1-L04: License Ekahau
WH1-L05: License Shared Phone i62
WH1-L06: License mandown/nomovement i62

\(^a\) Note that storing Li-Polymer batteries at high temperature dramatically reduces its capacity. For example storage around maximum temperature reduces capacity with 20 % in less than a month, permanently.

\(^b\) Central phonebook is system dependent.
Accessories
• Leather case
• Hinge-type clip
• Swivel-type clip
• Security cord
• Desktop charger
• Desktop Programmer (USB)
• Charging Rack
• Multiple battery charger
• Headset with microphone on cable
• Headset with microphone on boom
• Hearing protection 2.5 Peltor
• Battery pack
• Portable Device Manager

Compliance to European regulations and standards
EU directives: 1999/5/EC (R&TTE), 2009/125/EC (Eco Design)
Product marking: CE 
Radio: EN300 328, EN301 893
SAR (Specific Absorption Rate): EN50360, 0.280 W/kg (10 gram)
Safety: EN60950-1
EMC: EN301 489-01, EN301 489-17, IEC/EN 61000-4-2
Level 3 criteria B, IEC/EN 61000-4-3
Level 3 criteria A (10 V/m at 80 MHz–2.7 GHz)

Compliance to US regulations and standards
Product marking: FCC ID: BXZWH1
SAR (Specific Absorption Rate): FCC/OET Bulletin 65 Supplement C and IEEE Std. 1528
Normal operation 1.02 W/kg (1 gram)
Body worn operation 0.689 W/kg (1 gram)
Safety: UL/CSA 60950-1
Hearing Aid: 47 CFR Part 68

Compliance to Canadian regulations and standards
Product marking: IC: 3724B-WH1
EMC/Radio: RSS-210 Annex 8
SAR (Specific Absorption Rate): RSS-102, Issue 3
Normal operation 1.02 W/kg (1 gram)
Body worn operation 0.689 W/kg (1 gram)
Safety: UL/CSA 60950-1
Hearing aid: CS 03, Issue 9

Compliance to Australian and New Zealand regulations and standards
Product marking: N1514
Radio: EN 301 893
Audio: AS/ACIF S004:2008
SAR (Specific Absorption Rate): EN 50360, 0.280 W/kg (10 gram)

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