

## Wearable Wi-Fi Tags for Location Tracking

The Ekahau W4 Wi-Fi tag enables real-time location visibility of a person's exact location enterprise-wide, with reliable room and sub-room accuracy. The Ekahau W4 is worn comfortably on a person's wrist using a detachable wristband with a lock-in mechanism, which makes it easy to put on and prevents removal of the band while in use. The tag is also waterproof, allowing users to comfortably bathe during use and enabling easy cleaning after use.

The Ekahau W4 includes an LED for display of signaling events, and a built-in vibration unit to alert the tag wearer. The tag also contains a call button that may be pressed to request help. By activating the vibration and LED functions over the wireless (802.11) network, a staff member can call patients over the air using Ekahau's B4 badge tags or using the Ekahau Vision™ web-based messaging software application. Patients may also acknowledge or cancel help requests by pressing a software-configurable button on the Ekahau W4.

The Ekahau W4 uses a rechargeable, long life lithium polymer battery and can be charged with a single charger. Alternately, Ekahau W4s can be powered using a multi-charger that can be daisy-chained with other multi-chargers, wall-mounted, or placed on flat surfaces.



### Features

- Full two-way alerting over standard Wi-Fi networks
- Tag is secure when in use and wristbands are easily detached when not in use.
- Comfortable, watch-like design
- Waterproof (badge and wristband)
- Active RFID technology enables 1m/3ft real-time location visibility (IR receiver for room and sub-room level accuracy)
- Re-chargeable long life lithium polymer battery.
- Single or multicharger with multiple mounting options (re-charge time less than two hours)

# Technical Specifications

## Radio

Supported Wi-Fi Networks: 802.11 b  
Modulation: DSSS (Direct Sequence Spread Spectrum)  
Media Access: CSMA/CA  
Output Power: +11dBm @11Mbit  
Receiver Sensitivity: -95dBm @1Mbit  
Frequencies FCC, Canada, ETSI: 2.4 - 2.4835 GHz  
Frequencies Japan: 2.471 -2.497 GHz  
Network Protocol: UDP/IP, addressing DHCP or static  
Security: WEP 40/104bit (equals 64/128bit), WPA2-PSK

## Electrical Interface

DC Power: Rechargeable Lithium Polymer battery  
Capacity: 530mAh  
Rated cycle life: >300 cycles with 80% of nominal capacity  
Interface Antenna: Omni-directional antenna  
Battery life: up to 500h @ 15s interval in blink mode

## User Interface

Call button  
One red/green LED  
Vibration alarm  
3D accelerometer for motion detection

## Certifications

FCC Part 15 (US), IC (Canada), CE Mark (European Union)  
Frequency Band:  
Channels 1-11: North America  
Channels 1-13: Global  
Channels 1-14: Japan

## Environment

Operating temperature: 32 to 122 °F / 0 to 50 °C  
Storage temperature: -40 to 140 °F / -40 to 60 °C  
Humidity: 95 % non-condensing, relative humidity  
Protection: dust and waterproof enclosure  
Typical Operating Range  
Open Space: 330ft/100m @11Mb, 500ft/150m @2Mb  
Closed Office: 140ft/40m @11Mb, 200ft/60m @2Mb

## Physical

Dimensions: 51.5 x 50 x 17.5mm / 2 x 1.9 x 0.7in  
Weight 31g / 1.09 oz  
Fully waterproof enabling easy cleaning.

Specifications subject to change without prior notice.



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