WiFi Location Monitor is a real-time locating system (RTLS) designed for tracking active Wi-Fi-enabled devices inside buildings or throughout a campus.

**Features**
- Provides location of active Wi-Fi devices moving throughout monitored venue
- No app required running on devices
- Tracks movement of iPhones, iPads, Android, BlackBerry, Windows Mobile, Symbian and Wi-Fi tags
- Daily log of devices tracked
- Daily Heatmap
- Real-time aggregate analytics
- Dashboard for site management
- Average accuracy 3 meters / 10 feet

**Components**
- **Nodes** (hardware) deployed at the site
- Cloud-based **server**
- **API** for integration
- Online **dashboard**

**How it works**
- Nodes detect active Wi-Fi devices and periodically upload a list of MAC addresses and signal strengths.
- The server estimates devices' locations from this data.
- Applications query the server to obtain devices' locations.

**Getting started**
1. Estimate number of nodes required to provide desired coverage and accuracy
2. Plug each node into a regular power outlet
3. Connect gateway nodes to the internet through a network router. Nodes form a "mesh network", communicating with server through the gateways
4. Log into Accuware's administrative online dashboard
   a. Define the various levels of your venue
   b. Upload floor plans or maps for every level
   c. Mark the placement of each node on the floor plans

And you are done. No software to install.
### Functional Features

#### Analytics
- Samples visitor traffic in real-time and historically
- Counts unique Wi-Fi MAC addresses nearby
- Detects first-time and repeat visitors
- Dashboard displays daily/weekly/monthly charts
- Minimal site configuration requires a single node
- A chart may display data from multiple nodes

#### Heatmaps
- Dashboard displays density of WiFi devices detected
- Darker colors denote higher density
- Lighter colors indicate lower density
- Devices must actively emit Wi-Fi signals
- Display shows density in real-time
- Historical heat maps show varying density over time

#### Daily CSV log
- Collects time-stamped list of devices detected
- Universal comma-separated-value (CSV) format
- Rows include timestamp, MAC address, RSS, latitude, longitude and ID of node detecting a device
- Downloaded daily to enable data analysis

### Sampling a crowd using their MAC addresses
When sampling a “population” (e.g. a crowd of visitors) using their devices’ MAC addresses, note that...
- Only a percentage of the crowd is detected: those whose devices scan for Wi-Fi signals
- Venues offering free WiFi entice visitors to connect their devices, so they can be counted
- The percentage of detected devices is usually representative of behavior by the whole group
- MAC addresses are “randomized” by the device’s OS (iOS or Android), so privacy is not compromised
License
Two options:
1. By subscription to a public cloud-based service
2. Standalone installation

Pricing
Annual fee based on the number of nodes used.
Contact us or see our current Price List.

Nodes
Order from Accuware.
Data Sheet
• OM2P Data Sheet

Wi-Fi tags
• They are designed to use with Accuware WiFi Location Monitor
• Can be carried by people or attached to assets
• Button on Compact tags can be programmed to issue alerts
Most common FAQs

Devices can be tracked by WiFi Location Monitor only when...

- Electric power is available at the monitored site
- Internet connectivity is available at the site when used with cloud-based server
- Devices have their Wi-Fi interfaces turned on
- Devices actively emit Wi-Fi signals

Can we use the existing Wi-Fi infrastructure to locate?

Unfortunately no. WiFi Location Monitor was designed to operate with Open-Mesh hardware. Porting the system to use a different Wi-Fi infrastructure, though theoretically possible, is not recommended because of cost.

Alternatively, depending on your requirements, these Accuware products may meet your needs:

- **Indoor Navigation** for positioning and wayfinding in a venue
- **Wearabouts** for tracking people and assets indoors