

# Wander Detection Controller

## Main features

- Controls external component
- Internal Buzzer
- Transfers Tags and sensor data to cloud
- Wireless communication to repeater
- Real Time Location technology
- 5V power supply
- Easy to install
- Wall/pole mount
- Narrow Band RF

## Applications:

- Wander detection
- Asset tracking
- Patient, residents tracking
- Assisted living supervision
- Duress button
- Location based services, alarms and monitoring residents
- Wireless Sensor networks



PowerTags' redefines location tracking for people and asset via an innovative approach using active RFID/Narrow band technology. The first component of the system is an ultra-compact tag operated by a small, long- life battery that lasts years and doesn't require replacing of batteries or recharging. It communicates via sub-1GHz Radio Frequency with a number of Gateways or repeaters placed in the facility that triangulate the tag's position. The data is sent via the gateways to the command and control software or PowerTags' CMS which then calculates the tag's real-time Location as well as historical movement patterns that are then displayed on a map/table providing components monitoring, variety of analytics and automatous rule engine that operates based on user's profiles.

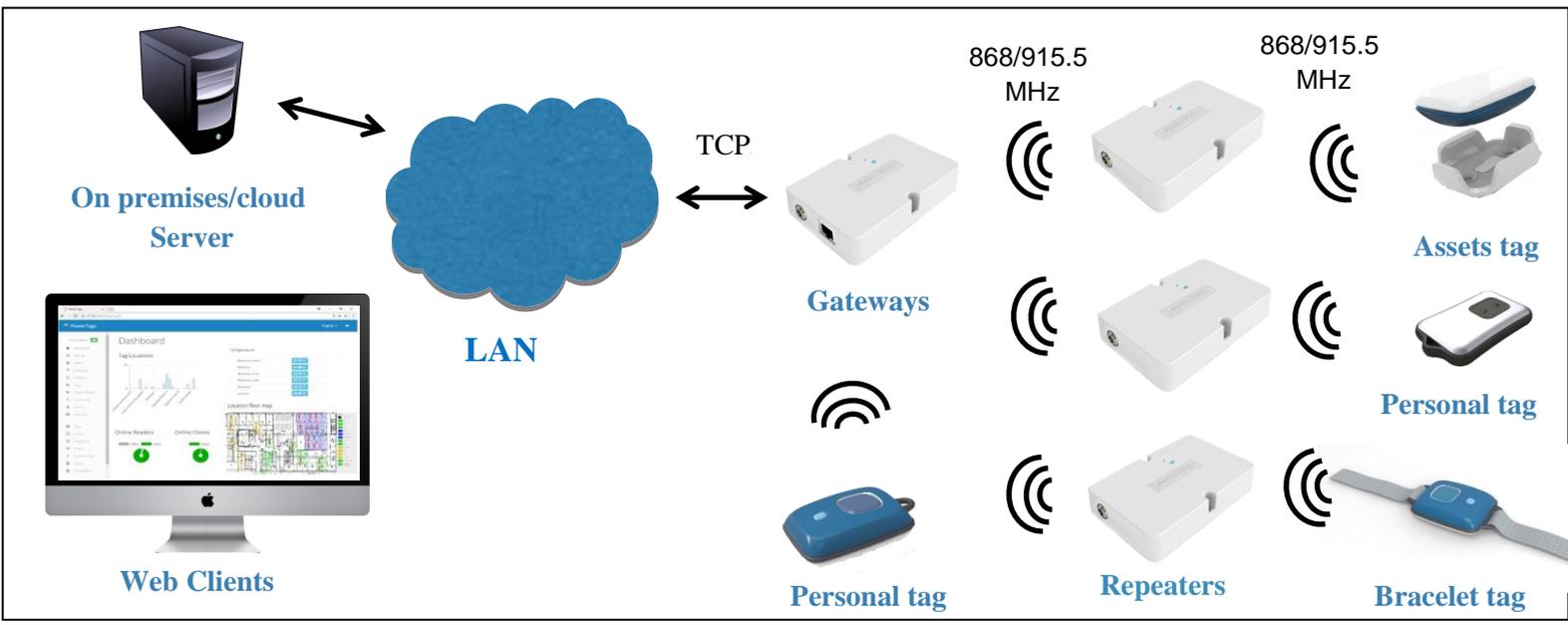
The wandering controller, can operate as a stand-alone unit or as part of a complete system, is connected to a door lock or other external device and is able to turn on or off (dry contact) when patient/assets tags are entering within configured range.

When a patient/assets tag enters into range an internal buzzer will activate and the dry contact will change state of PIN NO to Close ('0') and PIN NC to Open ('1')

The wandering detection will turn back to default state when a staff tag button is pressed, for a duration of 40 seconds, will prevent patient tags of changing relay state even if they are within un-authorized range.

The Gateways are able to receive RF communications from the repeater-reader or tags up to 100 meters range (default configurations for tag long battery life) and over 500 meters for sensor operations upon demand for sensors only applications

**PowerTags system's overview:**



**\*All tags are provided with Location Tracking, sensitive Tilt sensor, a Button and years lasting battery life-span**

RTLS technology..... Active RFID /Narrow band RF  
 Power supply stabilized transformer.....5V, 1 Ampere or more

**Product specifications:**

Gateway Dimensions ..... 100 x150 x 40 mm  
 Weight..... 300 grams  
 Temperature.....0C to 80C  
 Reception Frequency range .....868/915.5 MHz (720 - 970 Mhz by demand)

**Complies with FCC/ CE/ IC regulatory standards:**

- Tag FCC ID: 2AEXTTAGS3V04V0
- Tag IC ID: 21825-TAG3V04V0
- REPATER/GATEWAY FCC: 2AEXTPOWER TAGS

**Installation guidelines:**

- The wander controller needs to be install near the door as close as possible to the height of the tags at the upright position.
- The wander controller requires a 5V power supply
- The Ethernet connector is optional and is required only in order to modify the range of detection
- The dry contact (relay) is placed inside the enclosure – connect the NO, NC and Common

\*The default of the relay is when the patient tags are out of range

The wander detection controller distinguishes between patients and staff tags, as the patients tags will result in activate the relay when entering defined range the staff tags will not activate the relay rather in any range rather they will de-activate the relay when their button is pressed.

The Wander controller will identify and differentiate between the tags (Staff or Patient) according to their tag\_id (sticker with number which is placed on every tag):

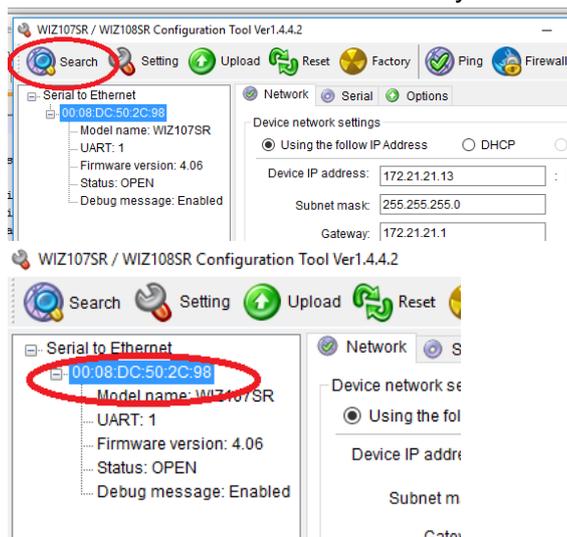
- tag\_id's 1000 to 1191 are patients' tags
- tag\_id's 65500 -65536 for staff's tags

Run this section **ONLY** when range detection configurations need to be modified, as changing the default range requires connecting to the software

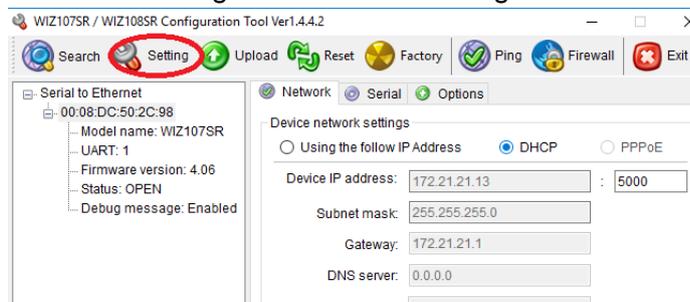
**Downloadable:**

- Configuration tool [link](#) for Windows computers
- Network configuration description [link](#)

1. Run the ConfigTool and search for LAN connected Ethernet Gateway or directly connected to PC with Static IP address
2. Search for connected Gateway devices



3. Configure DHCP or STATIC IP, Subnet mask and network gateway IP
4. Under the "remote IP/host name" section Configure the software Management IP address and choose TCP client IP address and type Port number
5. Press the setting button to send configuration to the selected Gateway



6. In the Software management change the RSSI value at this screen

- Live Updates: **ON**
- Dashboard
  - Settings
  - Users
  - GW & Repeaters**
  - Tags
  - Passive Reader
  - Tag Groups
  - Rules
  - LPR

-75 to -110

Longer range or when a lot of obstacles

Enabled tilt events

Custom Commands

set min RSSI value

detect tags

enable tilt

Apply >