## Scan

The Scan tab allows the user to actively scan for nearby Access Points.

A screenshot of a computer

Description automatically generated

Figure 18: Scan tab

**Choose the Scheme**: User can choose Standard Wi-Fi Scan or Low-Power Wi-Fi Smart Scan for scanning.

1. **Standard Wi-Fi Scan**: In this scan mode, Talaria TWO scans each channel with the configured scan time (default being 40ms).
2. **Low Power Wi-Fi Smart Scan**: In this scan mode, Talaria TWO reduces the overall current consumption by enabling dynamic dwelling and napping features.

Default values of parameters for Standard Wi-Fi and Low-Power Wi-Fi scan are shown in Table 2. Depending on the user’s choice of the scanning scheme, respective default values will be set to corresponding parameters.

|  |  |  |  |
| --- | --- | --- | --- |
| **Default Value** | | | |
| **Parameters** | **Standard Wi-Fi scan** | **Low-Power Wi-Fi Scan** | **Remark** |
| **No\_of\_Probes** | 2 | 1 | Configurable |
| **Ide\_Slots** | 3 | 3 | Configurable |
| **Select the Required Probe Rate** | 11b\_1Mbps | 11b\_6Mbps | Configurable |
| **NAP Enable** | No | Yes | Hard coded |

Table 2: Default values for Standard Wi-Fi and Low-Power Wi-Fi Scan

The following scan parameters can be configured from the tool:

1. SSID (optional): Providing the SSID helps enable scan for a specific AP.
2. BSSID (optional): Providing the BSSID helps enable scan for a specific AP.
3. No\_of\_probes: Maximum number of probes to send in an active scan.
4. Idle slots: Maximum number of idle slots to decide whether the user should keep listening or not.
5. Min\_Listen\_Time(ms): Minimum amount of time (in milliseconds) to listen for probe responses on the channel after transmitting the probe request.
6. Max\_Listen\_Time(ms): Maximum amount of time (in milliseconds, including listen and probe requests) to stay on the channel.
7. Wait\_Time(ms): Idle time between each channel (giving other parties access to the media).
8. Scan Interval (ms): Time duration in milliseconds in which Talaria TWO scans the vicinity for networks.
9. Probe\_rate: The rate as defined by rate\_t used to transmit the probe request. If this field is set to 0xffff, no probes will be sent and the scan will only be passive.