



# ZWR-V626

## 60GHz mmWave PtMP Radio Link

User Manual v 0.5.1



# Zinwell ZWR-V626 PtMP Radio Link

## User Manual

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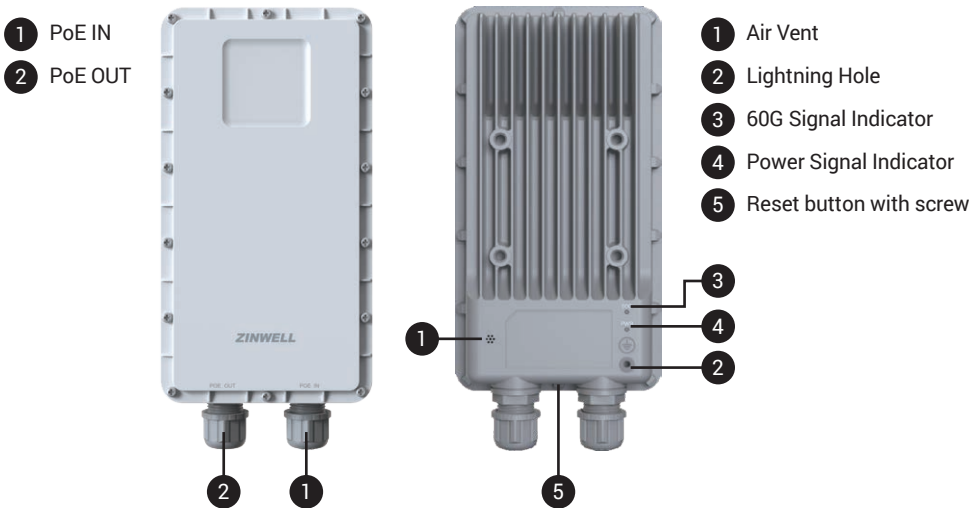
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### DEVICE OVERVIEW & LED LIST:



POE OUT could be used to connect an IP camera that supports POE.

Reset Button Behavior  
Short press (<5 seconds): Device Reboot.  
Long press (≥5 seconds): Resets all configuration.

|                  |                      |                       |
|------------------|----------------------|-----------------------|
| Power Signal Led | Solid Green          | Power On              |
|                  | Off                  | Power Removed         |
| 60GHz Signal LED | Solid Blue           | 60GHz On without Link |
|                  | Solid green          | 60GHz Link Up         |
|                  | Flash Green and Blue | Device Factory Reset  |
|                  | Off                  | 60GHz Off             |

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### PACKAGE CONTENTS:

#### 1 Mounting Bracket Kit



#### 2 PoE Adaptor

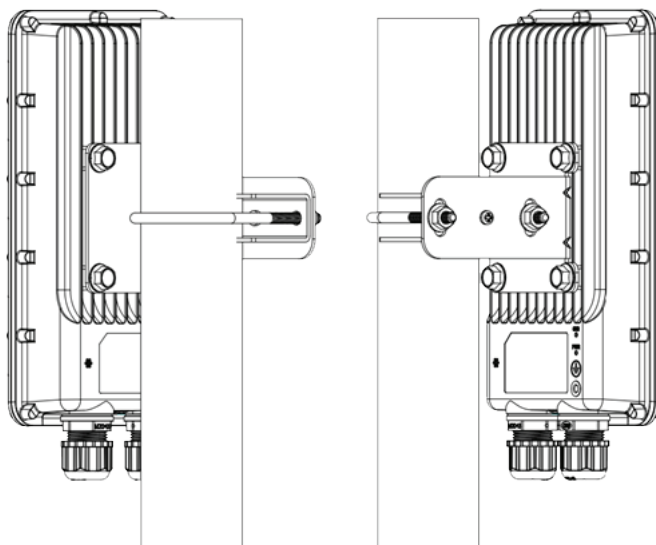


#### 3 Power Cable



### MOUNTING YOUR DEVICE:

1. Attach the L-shaped bracket backplate to the rear side of the device using the provided screws.
2. Position the U-bolt around the pole or pipe where the device is to be installed.
3. Align the U-bolt ends with the two mounting holes on the bracket support and the two holes on the L-shaped bracket backplate.
4. Secure the assembly using the screws and nuts included in the mounting bracket kit.



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### POWERING THE DEVICE (PASSIVE POE):

#### POWER (PASSIVE POE)

This device supports Passive Power over Ethernet (PoE), allowing both power and data to be transmitted over a single Ethernet cable.

#### POWER INPUT REQUIREMENTS

|                        |                                                     |
|------------------------|-----------------------------------------------------|
| Input Voltage (+/- 5%) | PoE 48 Vdc $\pm$ 5%                                 |
| Power Rating           | 48V 0.625A 30W                                      |
| Power Consumption      | Max. ~30W with PoE out<br>Max. ~17W without PoE out |



**NOTE:** This device **does not support Active PoE (IEEE 802.3af/at)**. Supplying power through an incompatible Active PoE injector may damage the device.

When using this device to provide PoE output to other equipment, ensure the total power budget does not exceed the specified limits to prevent power insufficiency or overheating.

### INITIAL SETUP & ALIGNMENT:

Connect your laptop's Ethernet cable to the LAN port of the PoE adapter, then connect the PoE port to the PoE IN port of the ZWR-V626 device.

- Access your device: Device default static IP is **192.168.1.1**, using browser to login device in default IP address. User Name/Password is **admin/admin (P9)**
- Configure network settings : Navigate to Settings > Network.(**P22**) Configuration Device IP.  
DHCP (automatically obtain IP address)  
Static IP (manually assign IP address)  
Example Settings:Access Point (AP) Mode: 192.168.1.1    Station (STA) Mode: 192.168.1.2
- Configure wireless setting : Navigate to Settings >Wireless(**P26**)  
Set operation mode : PTMP- AP/STA or PTP- Master/Slave  
Set SSID/Security mode: **Match SSID and security settings** on AP and STA to establish a 60G link.  
Set Channel : Suggested channel settings based on distance as below  
Channel 1~4: Recommended for short-range transmission (distance < 500 meters)  
Channel 5~6: Recommended for long-range transmission (distance > 500 meters)

(This is due to oxygen attenuation effects at higher frequencies. Channels 5 and 6 operate at slightly lower attenuation levels over longer distances, resulting in more stable performance.)

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### INITIAL SETUP & ALIGNMENT:

After assembling all accessories and initial setup, placing the AP and STA units face-to-face(Note), power on both devices. Connect your laptop's Ethernet cable to the LAN port of the PoE adapter, then connect the PoE port to the PoE IN port of the ZWR-V626 device.

- Check the 60G signal indicator: when the LED changes from blue to green, it means the 60G connection has been successfully established.
- Align the STA device toward the AP by adjusting its azimuth (AZ) angle. Use the Sector Table on the dashboard to verify the alignment status. (Example: C43 displays Sector 33/33, it indicates optimal alignment with the beam center.)
- Once the azimuth is properly adjusted, fine-tune the elevation (height) of the STA device to optimize the RSSI (Received Signal Strength Indicator) for best performance



#### NOTE:

60 GHz wireless links require **line of sight**. Any obstruction may cause the connection to drop. For longer distances(1KM), keep at least **1.5 m of clear space** between devices due to the **Fresnel Zone effect**.

### WEB UI CONFIGURATION LOGIN & ACCESS:

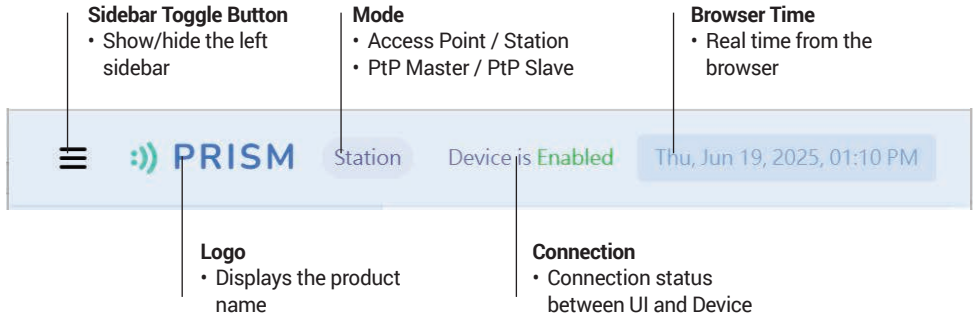
1. Open a web browser and enter <https://192.168.1.1> in the address bar.
2. Login in using the following default credentials:
3. Username: admin
4. Password: admin
5. Password can be changed through user information

The screenshot shows the PRISM login page. At the top, the word "PRISM" is displayed in a large, blue, sans-serif font. Below it, the text "Sign in to your account" is centered. There are two input fields: "Username \*" and "Password \*". The "Password \*" field has a small eye icon to its right. At the bottom, there is a blue button labeled "Sign in".

# Zinwell ZWR-V626 PtMP Radio Link

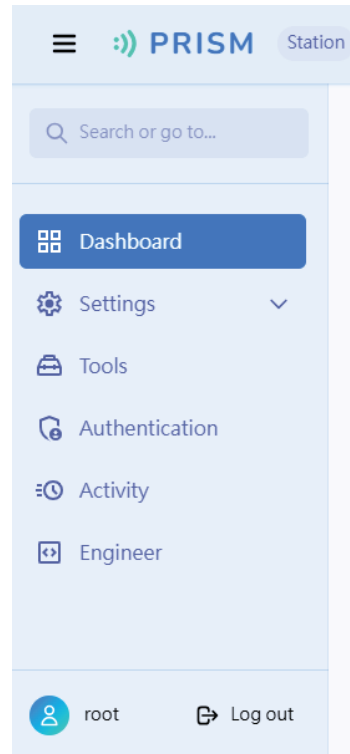
## User Manual

### TOP NAVIGATION BAR:



### LEFT SIDEBAR NAVIGATION:

- Search and Go
  - Enter keyword to search
- Dashboard
- Settings (collapsible)
  - Network
  - Wireless
  - Services
  - System
- Tools
- Authentication (Root / Administrator only)
- Activity
- Engineer (Root only)
- User Info & Logout



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### DASHBOARD:

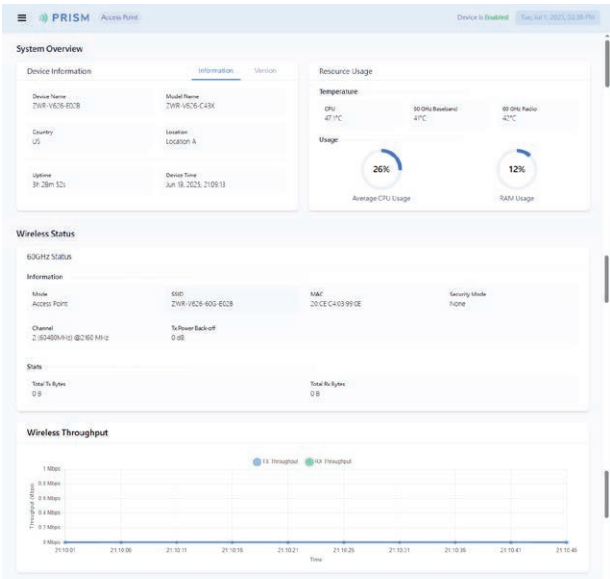
Dashboard shows the overall status of your device, including:

#### SYSTEM OVERVIEW

- Device Information
- Resource Usage

#### WIRELESS INFORMATION

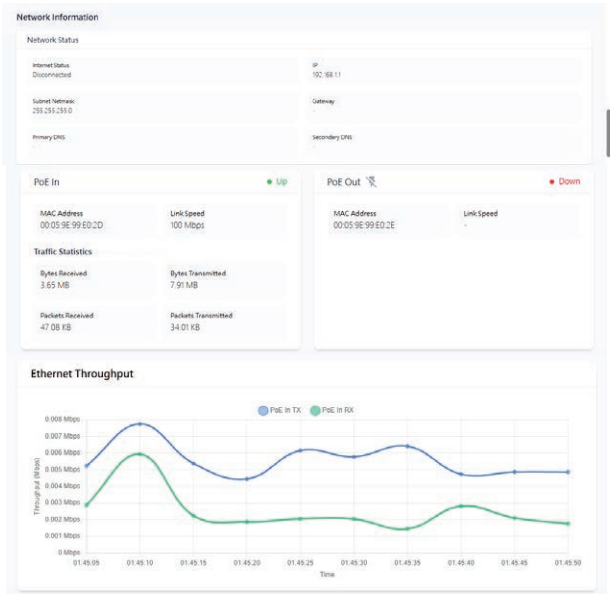
- 60GHz Status
- Wireless Throughput Plot



### DASHBOARD:

#### NETWORK INFORMATION

- Network Status
- PoE In/Out Information
- Ethernet Throughput Plot



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### DASHBOARD:

#### CONNECTED STATIONS

- (Only visible in AP Mode)



### SYSTEM OVERVIEW:

The **System Overview** provides information about your device, including:

- **Device name, model name, country, and location**

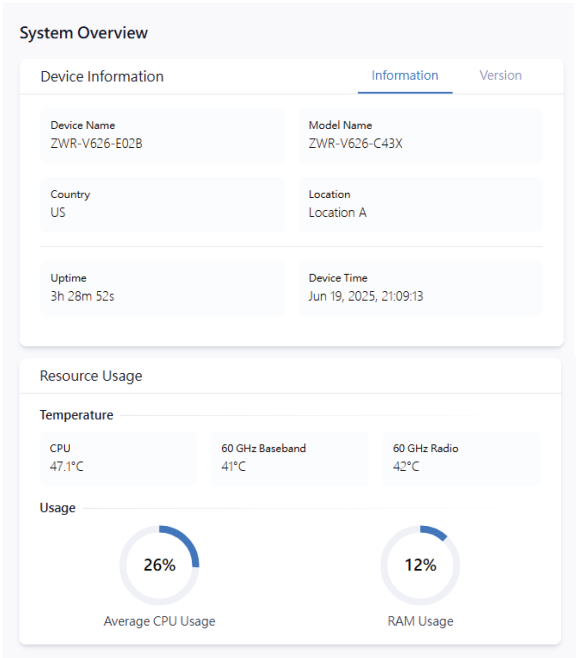
You can edit the device name and location in **Settings > System**.

- **Firmware and driver versions** Displays the current model/module firmware version and module driver version.

- **Device uptime** Shows the duration since the last reboot.

- **Device time** Displays the system's default time before NTP is enabled, and the correct time after NTP synchronization.

- **Resource usage** Monitors the device's temperature and CPU/RAM usage. If temperature or resource usage exceeds the configured thresholds, an alert will be triggered in the Dashboard.



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### WIRELESS STATUS:



The Wireless Status displays different information about your device depending on its operating mode. The image on the right shows examples of how the wireless status appears in:

#### AP mode or PTP Master mode

##### Information Panel

- **Mode:** Displays the radio operating mode
- **SSID:** The broadcast network name
- **MAC:** The MAC address of the radio interface
- **Security Mode:** Indicates the wireless security setting
- **Channel:** Shows the selected operating frequency and bandwidth
- **Tx Power Back-off:** The current transmit power adjustment level

##### Stats Panel

- **Total Tx Bytes:** Total transmitted data
- **Total Rx Bytes:** Total received data

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### WIRELESS STATUS:

| Wireless Status        |                   |                   |                   |
|------------------------|-------------------|-------------------|-------------------|
| 60GHz Status           |                   |                   |                   |
| Information            |                   |                   |                   |
| Mode                   | SSID              | MAC               | Security Mode     |
| Station                | ZWR-V626-60G      | 20:CE:C4:03:98:D7 | None              |
| Channel                | Tx Power Back-off |                   |                   |
| 4 (64800MHz) @2160 MHz | 0 dB              |                   |                   |
| Connected Status       | Connected Time    | RSSI              | Distance (m)      |
| Connected              | 18:46:08          | -23               | 9                 |
| AP IP Address          | AP BSSID          | MCS (Tx/Rx)       | Data Rate (Tx/Rx) |
| 192.168.1.1            | 20:CE:C4:03:D6:3A | 12/12             | 4620/4620         |
| Sector (Tx/Rx)         | Link SNR          |                   |                   |
| 33/33                  | 20                |                   |                   |
| Stats                  |                   |                   |                   |
| Total Tx Bytes         | Total Rx Bytes    |                   |                   |
| 17.11 GB               | 37.19 GB          |                   |                   |

#### Station mode or PTP Slave mode Information Panel

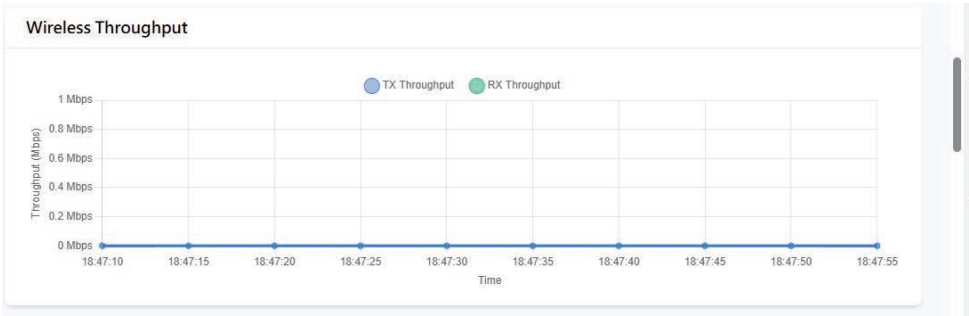
(Only displays fields that differ from the previous status page)

- **Connected Status:** Indicates whether the station is currently linked to an AP
- **Connected Time:** Duration of the active connection
- **RSSI:** Received Signal Strength Indicator in dBm
- **Distance:** Estimated distance to the access point in meters
- **AP IP address:** IP address of the access point
- **AP BSSID:** MAC address of the access point radio
- **MCS (Tx/Rx):** Modulation and Coding Scheme indices for transmit and receive
- **Data Rate (Tx/Rx):** Current data rate in Mbps
- **Sector (Tx/Rx):** Antenna sector allocation
- **Link SNR:** Signal-to-noise ratio

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### WIRELESS THROUGHPUT:



The **Wireless Throughput** displays TX/RX throughput and can show individual information by clicking the benchmark above the graph.

### ETHERNET THROUGHPUT:



The **Ethernet Throughput** displays POE in TX/RX throughput and can show individual information by clicking the benchmark above the graph.

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### NETWORK INFORMATION:

Network Information

Network Status

|                                 |                    |
|---------------------------------|--------------------|
| Internet Status<br>Disconnected | IP<br>192.168.1.1  |
| Subnet Netmask<br>255.255.255.0 | Gateway<br>-       |
| Primary DNS<br>-                | Secondary DNS<br>- |

PoE In ● Up

|                                  |                                 |
|----------------------------------|---------------------------------|
| MAC Address<br>00:05:9E:99:E0:2D | Link Speed<br>100 Mbps          |
| Traffic Statistics               |                                 |
| Bytes Received<br>3.65 MB        | Bytes Transmitted<br>7.91 MB    |
| Packets Received<br>47.08 KB     | Packets Transmitted<br>34.01 KB |

PoE Out ✖ Down

|                                  |                 |
|----------------------------------|-----------------|
| MAC Address<br>00:05:9E:99:E0:2E | Link Speed<br>- |
|----------------------------------|-----------------|

The **Network Information** provides detailed information about the device’s network status and Power over Ethernet (PoE) connections.

#### Network Status

- **Internet Status, IP Address, Subnet Netmask, Gateway, Primary DNS, Secondary DNS**

#### PoE In/Out

- **Status**
- Shows whether the PoE In/Out connection is active.
- **MAC Address, Link Speed, Traffic Statistics**

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### CONNECTED STATIONS: *(Only visible in AP Mode)*

| Connected Stations                |             |        |         |         |         |        |
|-----------------------------------|-------------|--------|---------|---------|---------|--------|
| 2 stations connected              |             |        |         |         |         |        |
| ZWR-V626-E023 (20:EC:40:03:99:2F) |             |        |         |         |         |        |
| IP                                | 192.168.1.3 | 1m 27s | 1.22 KB | 1.92 KB | MCS 9/7 | SNR 14 |
| ZWR-V626-E039 (20:EC:40:1F:27:0)  |             |        |         |         |         |        |
| IP                                | 192.168.1.2 | 3m 16s | 638 B   | 1.92 KB | MCS 7/4 | SNR 19 |

This section displays information about all client devices (Stations) currently connected to the access point. Each entry includes the following details:

- **Device Name**
- **MAC Address:** Unique identifier of the connected station
- **IP Address:** The assigned IP address
- **Connection Duration:** The time the station has been connected
- **TX/RX Data:** The amount of data transmitted (⬆) and received (⬇) in bytes.
- **MCS (Modulation and Coding Scheme):** Indicates the current modulation rate used for uplink and downlink (e.g., MCS 12/12 for higher throughput, MCS 2/2 for lower throughput).
- **Signal Strength (RSSI):** The received signal level in dBm. The color indicator represents the link quality. Link threshold is -70dBm
- **SNR:** Indicates the ratio between the signal level and background noise. A higher SNR means a clearer and more reliable signal

### SETTINGS - NETWORK:

#### Device Management

Configure the IP settings for the device.

#### IP Configuration (IPv4/IPv6)

- **Auto IP (DHCP)** for IPv4
- **Static IP**
- **Static IP Address**
- **Subnet Netmask**
- **Default Gateway, Primary DNS Server, Secondary DNS Server (Optional)**

Device Management

Interface

Other Settings

• IP Configuration

Configure the IP settings for the device.

Choose IPv4 Connection Type \*

Static

Static IP Address \*

192.168.1.1

Subnet Netmask \*

255.255.255.0

Default Gateway

192.168.1.1

(Optional)

Primary DNS Server

8.8.8.8

(Optional)

Secondary DNS Server

8.8.4.4

(Optional)

☒ Enable Static IPv6 Configuration

IPv6 Address \*

fdab:5678:1

Prefix Length \*

64

Range: 0-128

IPv6 Gateway

2001::db8:1

(Optional)

Primary IPv6 DNS Server

2001:4860:4860:8888

(Optional)

Secondary IPv6 DNS Server

2001:4860:4860:8844

(Optional)

### SETTINGS - NETWORK:

#### Interface

Basic network interface parameters and Port-specific setting.

#### General Settings

- **MTU Size:** Maximum transmission unit, default 1500 bytes
- **Bridge Aging Time:** Duration that a MAC address is kept in a bridge's FDB after last packet received

#### POE Settings

- **POE Out Enable**
- **Data over POE Out Enable**

Device Management   **Interface**   Other Settings

• General Settings  
Basic network interface parameters

MTU Size \*  
1500  
Default: 1500 bytes

Bridge Aging Time \*  
300  
Default: 300 seconds

• PoE Setting  
Port-specific setting

☐ Enable PoE Out

☒ Enable data over PoE out

### SETTINGS - NETWORK:

#### Other Settings

#### Alternative Local IP

- Backup IP for device access, in 169.254.x.x format

Device Management   Interface   **Other Settings**

• Alternative Local IP  
Backup IP for device access

☒ Enable Alternative Local IP

Alternative IPv4 Address \*  
169.254.100.1  
Alternative IP address in 169.254.x.x format

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### SETTINGS - WIRELESS:

60 GHz Radio Configuration

Mode \*

Access Point

SSID \*

ZWR-V626-60G-E02B

#### 60GHz Radio Configuration

##### Mode

- Access Point/Station/PtP Master/PtP Slave

##### Operating Modes: PTMP (AP/Station) and PTP (Master/Slave)

This device supports two main operating modes:

##### PTMP (Point-to-Multipoint) Mode

- In PTMP mode, one device operates as an Access Point (AP) and multiple devices operate as Stations.
- The AP acts as the central hub communicating with multiple Stations simultaneously.
- Typical use case: connecting several remote clients to a single base station.

##### PTP (Point-to-Point) Mode

- In PTP mode, one device operates as a Master and the other as a Slave.
- The Master establishes a dedicated link with a single Slave device.
- Typical use case: creating a direct wireless bridge between two locations.

##### Important: PTP and PTMP modes are not compatible with each other

- A device configured as Master/Slave (PTP) cannot connect to an AP/Station (PTMP).
- Similarly, an AP or Station cannot link with a Master or Slave.
- Ensure both devices are set to the same mode type when establishing a connection.

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### SETTINGS - WIRELESS:

#### SSID

- To establish a 60G link, the SSID must be properly aligned.

#### Security Mode

- None/WPA2/WPA3

#### Channel Width

- Full (2160 MHz) / Half (1080 MHz)
- Both AP/STA shall use same value

#### Channel

- 1-6 of full bandwidth
  - 1-6 Low/High of half bandwidth
- Channel selection varies based on bandwidth:
- Full bandwidth with wider frequency spacing
  - Half-bandwidth with narrower frequency spacing slightly improves SNR.

#### Max MCS

- 1-12
- Higher MCS values provide better throughput but require stronger signal quality. Lower values are more reliable in challenging conditions.

#### Tx Power Back-off

- 0 / 3 / 6 / 9 / 10 / 20 db
- This function can be used to prevent power saturation in short-distance links (<10m), which can otherwise lead to throughput degradation.
- Adjust the TxPower Back-off to reduce transmission power. Higher values decrease power output.

#### 60 GHz Radio Configuration

|                                                                                                                                                            |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Mode *                                                                                                                                                     | SSID *                   |
| Access Point                                                                                                                                               | ZWR-V626-60G-E02B        |
| Security Mode *                                                                                                                                            |                          |
| None                                                                                                                                                       |                          |
| Channel Width *                                                                                                                                            | Channel *                |
| Full (2160 MHz)                                                                                                                                            | 2 (60480 MHz)            |
| <small>Full bandwidth (2160 MHz) provides higher throughput but shorter range. Half bandwidth (1080 MHz) offers better range but lower throughput.</small> |                          |
| Max MCS *                                                                                                                                                  | Tx Power Back-off (dB) * |
| MCS12                                                                                                                                                      | 0 dB                     |

#### 60 GHz Radio Configuration

|                                                                                                                                                            |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Mode *                                                                                                                                                     | SSID *                   |
| Access Point                                                                                                                                               | ZWR-V626-60G-E02B        |
| Security Mode *                                                                                                                                            |                          |
| None                                                                                                                                                       |                          |
| Channel Width *                                                                                                                                            | Channel *                |
| Full (2160 MHz)                                                                                                                                            | 2 (60480 MHz)            |
| <small>Full bandwidth (2160 MHz) provides higher throughput but shorter range. Half bandwidth (1080 MHz) offers better range but lower throughput.</small> |                          |
| Max MCS *                                                                                                                                                  | Tx Power Back-off (dB) * |
| MCS12                                                                                                                                                      | 0 dB                     |

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### SETTINGS - SERVICES:

#### HTTPS Server

- Enable HTTPS to configure secure web access

#### NTP (Network Time Protocol)

- Enable NTP to enter NTP address and select timezone to sync time with NTP servers

The screenshot shows two configuration panels. The 'HTTP Server' panel has a note 'Note: Enable HTTPS to configure secure web access', an 'Enable HTTPS' toggle switch that is turned on, and an 'HTTPS Port' field with the value '443'. Below it is a note 'Secure HTTPS port for encrypted web access'. The 'NTP' panel has a note 'Note: Enable NTP to sync time with NTP servers', an 'Enable NTP' toggle switch that is turned on, and a 'Server Addresses' field with the value '0.openwrt.pool.ntp.org,1.openwrt.pool.ntp.org,2.openwrt.pool.ntp.org'. Below this is a note 'Enter NTP server addresses separated by commas (e.g., pool.ntp.org, time.google.com)'. There is also a 'Timezone' dropdown menu set to 'Asia/Taipei (CST-8)' with a note 'Select the timezone for NTP synchronization (e.g., Asia/Taipei)'.

#### SNMP

##### (Simple Network Management Protocol)

- Support SNMP v2c
- Set Community and Port to download MIB files
- Install SNMP Tools (MIB Browser), import MIB file to get result

The screenshot shows the 'SNMP' configuration panel. It has a note 'Note: Enable SNMP for network monitoring and management', an 'Enable SNMP' toggle switch that is turned on, and a 'Protocol' dropdown menu set to 'SNMP v2c'. To the right is a 'Community' field with the value 'public' and a note 'SNMP community string for authentication (default: public)'. Below the protocol field is a 'Port' field with the value '161' and a note 'SNMP port for communication (default: 161)'. At the bottom is a link 'Click [here](#) to download the MIB File'.

#### SNMP Traps

##### (Enable SNMP Traps to send trap notifications)

- Support SNMP v2c
- Set Community, Port and Server Address
- Open Trap Receiver, the device will send trap every minute

The screenshot shows the 'SNMP Traps' configuration panel. It has a note 'Note: Enable SNMP Traps to send trap notifications', an 'Enable SNMP Traps' toggle switch that is turned on, and a 'Protocol' dropdown menu set to 'SNMP v2c'. To the right is a 'Community' field with the value 'public' and a note 'SNMP community string for trap authentication'. Below the protocol field is a 'Port' field with the value '162' and a note 'SNMP port for trap communication (default: 162)'. To the right of the port field is a 'Server Address' field with the value '127.0.0.1' and a note 'IP address or hostname of SNMP trap receiver'. At the bottom is a link 'Click [here](#) to download the MIB File'.

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### SETTINGS - SERVICES:

#### Ping Watchdog (Enable Ping Watchdog to monitor network connectivity)

**Interval** (default: 60 seconds)

- Time between ping attempts

**Startup Delay** (default: 30 seconds)

- Delay before starting ping monitoring after boot

**IP Address to Ping**

**Failure Count** (default: 3)

- Number of consecutive failures before triggering action- Reboot (optional)

**Ping Watchdog**

Note: Please enable Ping Watchdog to monitor network connectivity

☒ Enable Ping Watchdog

Interval (seconds) \*

Startup Delay (seconds) \*

Time between ping attempts (default: 60 seconds)

Delay before starting ping monitoring after boot (default: 30 seconds)

IP Address to Ping \*

Failure Count \*

Target IP address to monitor

Number of consecutive failures before triggering action (default: 3)

☐ Reboot device if failure count is reached

#### Remote Syslog

Enable Remote Syslog to send logs to a remote syslog server

##### Protocol

- UDP for basic logging, TCP for reliable delivery

##### Address

- IP address or hostname of syslog server

##### Port

- Syslog server port

**Remote Syslog**

Note: Enable Remote Syslog to send logs to a remote syslog server

☒ Enable Remote Syslog

Protocol

Address \*

Select transport protocol (UDP for basic logging, TCP for reliable delivery)

Port \*

Syslog server port (default: 514)

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### SETTINGS - SYSTEM:

#### Device Information

- Device Name / Device Location

#### Threshold Settings

- Temperature: CPU / 60GHz Baseband / 60GHz Radio
- Usage: CPU / Memory
- If either metric exceeds its threshold, an alert will be triggered in the Resource Usage section of the Dashboard.

#### Other Settings

- Enable physical reset button
- The reset button restores the device to its factory default settings.
- Reset config after firmware upgrade

#### Firmware Upgrade

- Display the current version, click select file to upload upgrade file

#### Device Actions

- Backup and restore
- Reset to default and reboot device
- Download system information and logs for troubleshooting

Device Information

Device Name \*

ZWR-V626-E02B

Device Location \*

Location A

Threshold Settings

CPU Temperature \*

80 °C

60GHz Baseband Temperature \*

80 °C

60GHz Radio Temperature \*

80 °C

The temperature threshold is used to monitor the device's temperature. If the temperature exceeds the set threshold, an alert will be triggered in the Resource Usage section of the Dashboard.

Other Settings

☒ Enable physical reset button

☐ Reset config after firmware upgrade

Firmware Upgrade

Current Version

0.5.1

Manual Firmware Upload

Device Actions

Backup and Restore

System Actions

Troubleshooting

Download system information and logs

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### TOOLS:

#### Aiming (Only in Station Mode)

- During aiming mode, users should align the sector to center, then fine-tune azimuth and elevation angles to optimize RSSI. The aiming tool will update the RSSI and sector information quickly, making it easier for users to align the direction accurately.
- \* (Please use Calculator to determine the optimal RSSI for your installation).

The Aiming tool interface shows a navigation bar with tabs: Aiming, Site Survey, Ping, TraceRoute, Bridge Table, and Sector. The Aiming tab is active. Below the navigation bar, there is a sub-header 'Aiming' with a description 'Adjust antenna alignment for each radio link strength'. A red 'Stop Aiming' button is in the top right. A section titled 'Signal Strength' contains a table with four columns: Current RSSI, Best RSSI, TX Factor, and RX Sector. The values are: Current RSSI: -33 dBm, Best RSSI: -22 dBm, TX Factor: 33, and RX Sector: 33.

| Current RSSI | Best RSSI | TX Factor | RX Sector |
|--------------|-----------|-----------|-----------|
| -33 dBm      | -22 dBm   | 33        | 33        |

#### Site Survey (Only in Station Mode)

- Click start scanning to search for available wireless networks
- \* (The scan will take about 25 seconds).

The Site Survey tool interface shows a navigation bar with tabs: Aiming, Site Survey, Ping, TraceRoute, Bridge Table, and Sector. The Site Survey tab is active. Below the navigation bar, there is a sub-header 'Site Survey' with a description 'Scan for available wireless networks'. A blue 'Start Scanning' button is in the top right. A note states 'Note: The scan will take about 25 seconds.' Below this is a table with columns: SSID, SMC, SIGNAL, CHANNEL, SECURITY, and ACTION. There are two rows of data, each with a 'Connect' button in the ACTION column.

| SSID              | SMC                  | SIGNAL  | CHANNEL | SECURITY | ACTION                   |
|-------------------|----------------------|---------|---------|----------|--------------------------|
| ZWR-V626-000      | 20000000000000000000 | -20 dBm | 8       | None     | <button>Connect</button> |
| ZWR-V626-000-0000 | 20000000000000000000 | -20 dBm | 8       | None     | <button>Connect</button> |

#### Ping

- Test network connectivity to a target host.

The Ping tool interface shows a navigation bar with tabs: Aiming, Site Survey, Ping, TraceRoute, Bridge Table, and Sector. The Ping tab is active. Below the navigation bar, there is a sub-header 'Ping' with a description 'Test network connectivity to a target host'. A blue 'Start Ping' button is in the top right. A section titled 'Configuration' contains a 'Target' field with a placeholder 'IP address or hostname' and a 'Count' field with a value of '4'.

Configuration

Target \*

Count \*

#### Trace Route

- Trace the route packets take to a network host.

The TraceRoute tool interface shows a navigation bar with tabs: Aiming, Site Survey, Ping, TraceRoute, Bridge Table, Sector, Log, and Calculator. The TraceRoute tab is active. Below the navigation bar, there is a sub-header 'TraceRoute' with a description 'Trace the route packets take to a network host'. A blue 'Start Tracing' button is in the top right. A section titled 'Configuration' contains a 'Target' field with a placeholder 'IP address or hostname', a 'Max Hops' field with a value of '30', and a checkbox labeled 'Resolve Hostnames' which is checked.

Configuration

Target \*

Max Hops \*

☒ Resolve Hostnames

# Zinwell ZWR-V626 PtMP Radio Link

## User Manual

### TOOLS:

#### Bridge Table

- Access the Bridge Table tool to view all MAC addresses currently recorded in the device's forwarding table.

AimingSite SurveyPingTraceRouteBridge TableSector

Bridge Table

List of bridge configurations

Refresh

| BRIDGE NAME | MAC ADDRESS       | PORTS        | STP     | STATUS |
|-------------|-------------------|--------------|---------|--------|
| br-lan      | 00:05:96:99:ED:28 | eth0eth1p2p3 | Enabled | UP     |

#### Sector

- The sector tool provides a visual representation of how each connected device aligns with the current unit, helping you evaluate the accuracy of the directional alignment
- Boresight/Center Sector
  - C42: 32
  - C43: 33

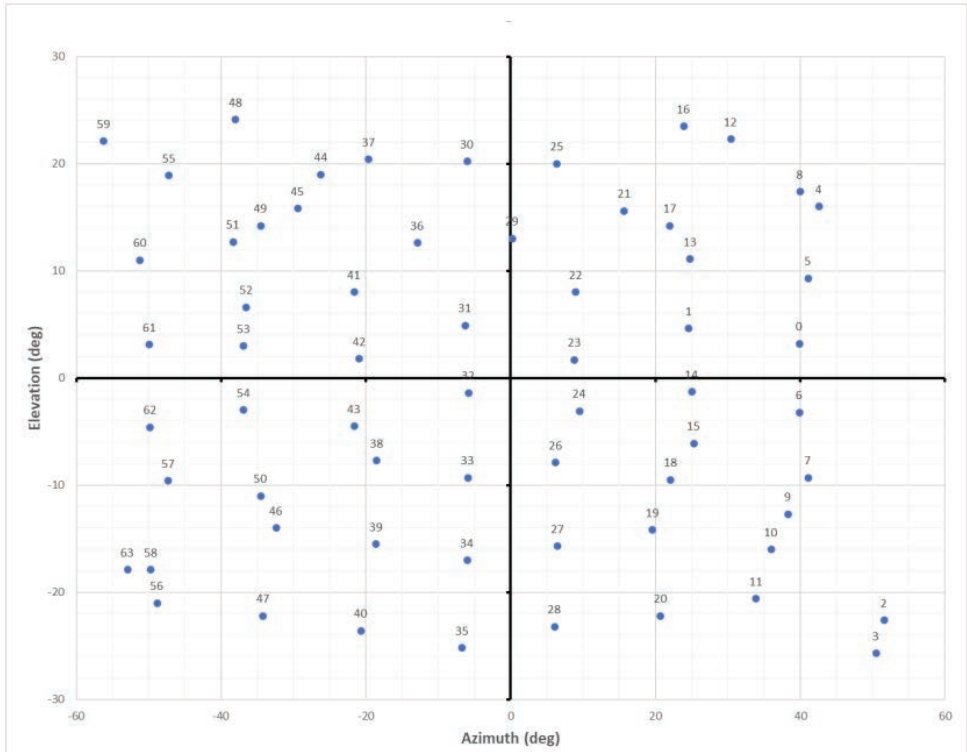


# Zinwell ZWR-V626 PtMP Radio Link

## User Manual

### SECTOR:

C42 Sector Table

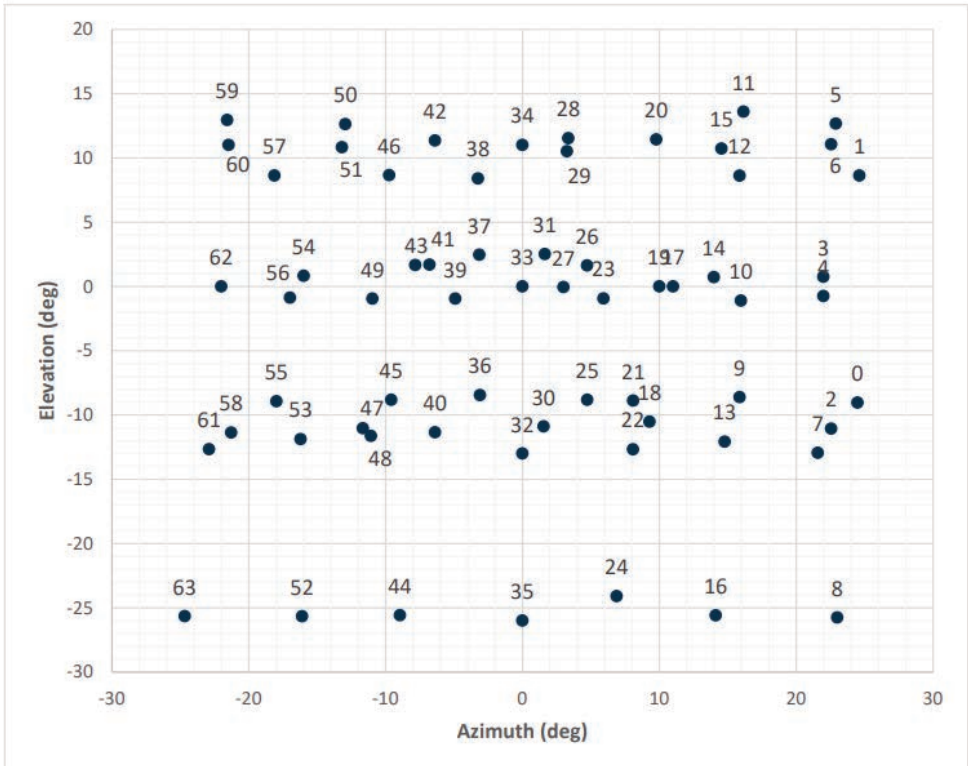


# Zinwell ZWR-V626 PtMP Radio Link

## User Manual

### SECTOR:

C43 Sector Table



# User Manual

## System Log

- [Aiming](#)
[Site Survey](#)
[Ping](#)
[Traceroute](#)
[Bridge Table](#)
[Sector](#)
[Log](#)
[Calculator](#)

---

### System Logs

view and manage system logs

[Stop System Log](#)
[Download System Log](#)

```

# 2025/11/12 12:56:22
[449.883269] DRIVER_LOG(20c0e402598eb)[ALWAYS-OSFI]-iprs_suppliment_cfg00211_notify_scan_done:2379s:orig request
00000000000000000000000000000000 aborted 0
# 2025/11/12 12:57:56:27
[449.883273] DRIVER_LOG(20c0e402598eb)[ALWAYS-CORE]-iprs_suppliment_cfg00211_notify_scan_done:2380s:
prti_linux_compat_ctg00211_scan_done 000000000000m9da
# 2025/11/12 12:59:15:27
[449.883276] DRIVER_LOG(20c0e402598eb)[ALWAYS-CORE]-iprs_linux_compat_ctg00211_scan_done:74s:ctg00211_scan_done aborted
0
# 2025/11/12 12:59:36:27
Sat Jul 12 02:56:22 2025 daemon.info logread[407]: failed to send log data to 127.0.0.1:514 via udp
    
```

Calculator

Calculate RSSI

Calculate RSSI

Calculator

AP

ZWR-V626-C42X

Distance (m)

1000

Channel

CH6

STA

ZWR-V626-C43X

Rain (mm/hr)

0

MCS

MCS1(385 Mbps)

☒ Calculate Rain Attenuation
 ☒ Calculate Oxygen Loss
 ☐ Use Average Oxygen Loss

Result

Rx Sensitivity

Expected RSSI

Connectable

Budget

## User List

- User List

+ Add User

| USERNAME | ROLE                 | EDIT | DELETE |
|----------|----------------------|------|--------|
| root     | Administrator (Root) |      |        |
| admin    | Administrator        | Edit | Delete |
| user     | User                 | Edit | Delete |

# User Manual

### ACTIVITY:

The Activity page displays recent events, including user logins, Config changed activities, and more.

## Filters

- Select a time range, user, and event type to filter the timeline more effectively.

Filters

Clear Filters

Time Range

User

Event Type

Records per page

All time

All users

All events

5 per page

## Activity Timeline

- Display activity information.

| Activity Timeline                                                                |                                                       |
|----------------------------------------------------------------------------------|-------------------------------------------------------|
| Info<br>User Login                                                               | @ 2025/7/12 上午9:53:11<br>admin<br>IP: 189.254.124.229 |
| Warn<br>PingWatchdogFailure<br>Ping watch failed to reach 8.8.8.8 for 5 attempts | @ 2025/7/12 上午9:50:44<br>system<br>IP: 127.0.0.1      |
| Info<br>WiFiConfig Changed<br>WiFi Mode : ap → sta                               | @ 2025/7/12 上午9:49:00<br>admin<br>IP: 189.254.124.229 |
| Warn<br>PingWatchdogFailure<br>Ping watch failed to reach 8.8.8.8 for 3 attempts | @ 2025/7/12 上午9:13:39<br>system<br>IP: 127.0.0.1      |
| Info<br>WiFiConfig Changed<br>WiFi Mode : sta → ap                               | @ 2025/7/12 上午9:12:56<br>admin<br>IP: 189.254.124.229 |

# Zinwell ZWR-V626 PtMP Radio Link

## User Manual

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## TROUBLESHOOTING:

### BASIC RECOVERY

#### Forgot Device IP Address

- Connect a laptop directly to the device (Ethernet).
- Set a static IP in 169.254.100.x/24 (e.g., 169.254.100.10). Browse to <http://169.254.100.1>. If still unreachable, press and hold RESET over 5sec to restore factory defaults (all settings erased).

#### Forgot Username/Password

- Press and hold RESET over 5sec to perform a factory reset, then log in with default credentials and reconfigure.

#### Power & Ethernet Checks

- PoE/Power: Use the correct injector. Device does not support Active PoE (IEEE 802.3af/at).
- Cabling: Shielded outdoor-rated CAT5e/6; length  $\leq 100$  m; check for water ingress/corrosion; replace suspect cables.

### COMMON 60 GHZ LINK FAILURES AND FIXES

#### Check Line of Sight (LoS)

- Ensure a clear, unobstructed path. For longer distances ( $>1$  km), maintain  $\sim 1.5$  m Fresnel clearance around the path.

#### Verify Link Parameters

- Confirm channel, channel width, region, and security match your distance and environment (rain loss). Use an RSSI calculator as reference.

#### Adjust Device Position

- Poor signal quality may be caused by multipath reflections. Slightly adjust the station up or down (5–20 cm) to minimize multipath interference.

#### Try a Different Channel

- If signal issues persist, try switching channels. Different frequencies may reduce interference caused by reflections.

#### Use Half Channel

- Using half channel improves SNR and sensitivity, but limits the data rate to 50% of full channel mode.



Helpline: 0861 40 41 42

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