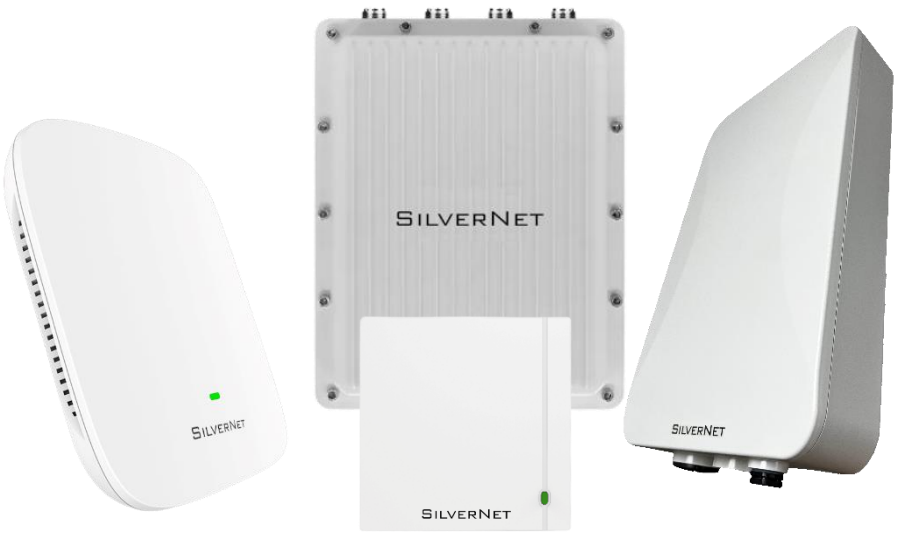
SILVERNET

WIRELESS-NETWORK-SOLUTIONS

SIL WCAP-AX



User Manual

TABLE OF CONTENTS

INTRODUCTION

This User Guide is for the SilverNet SIL WCAP AX Access Points.

SUPPORTED PRODUCTS

This manual covers the following products:

• SIL WCAP-AX

• SIL WCAP-AX-W

• SIL WCAP-AX-EXT

• SIL WCAP-AX-EXT+

For more information, visit **www.silvernet.com**

WIRELESS MODES

The SilverNet Access Points support the following modes:

• FAT mode

A FAT AP can provide wireless access independently.

• FIT mode

A FIT AP must be used with a Access Point to provide wireless access.

SYSTEM REQUIREMENTS

• Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10, Linux, or Mac OS X

• Web Browser: Mozilla Firefox, Apple Safari, Google Chrome, or Microsoft Internet Explorer 9 (or above)

PACKING LIST

Please check the following items in the package before installing the device

Access Point	1 piece
User manual	1 copy
Set of brackets	1 piece
Set of screws	1 piece

Please contact your distributor immediately for any missing or damaged items.

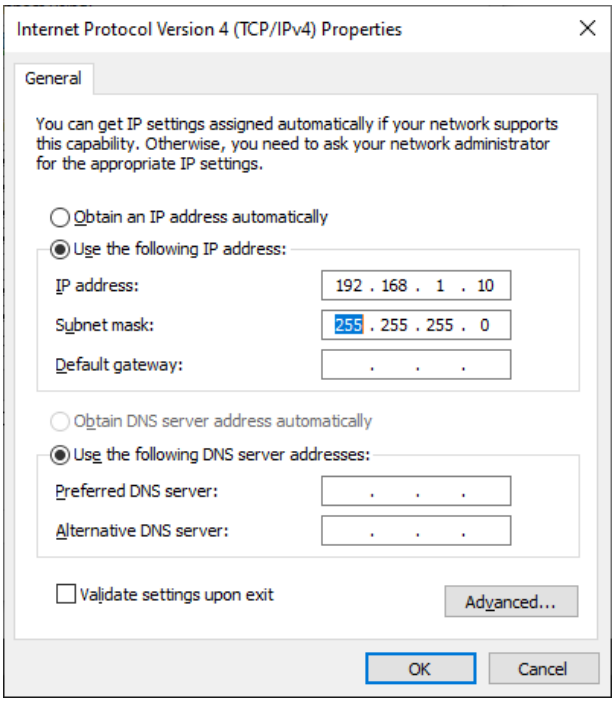
CONFIGURATION

GETTING STARTED

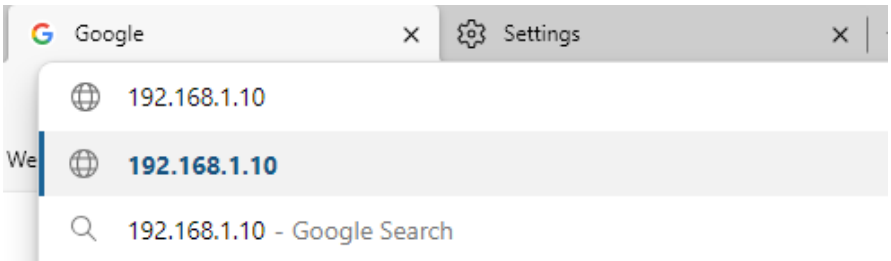
The Access Point is sent out on DHCP. Once you have connected the Access Point to your network it is recommended you run an IP scan to check the IP address. If no DHCP server is present, then the Access Point will either be on 192.168.1.88.

To access the Access Points Configuration Interface, perform the following steps:

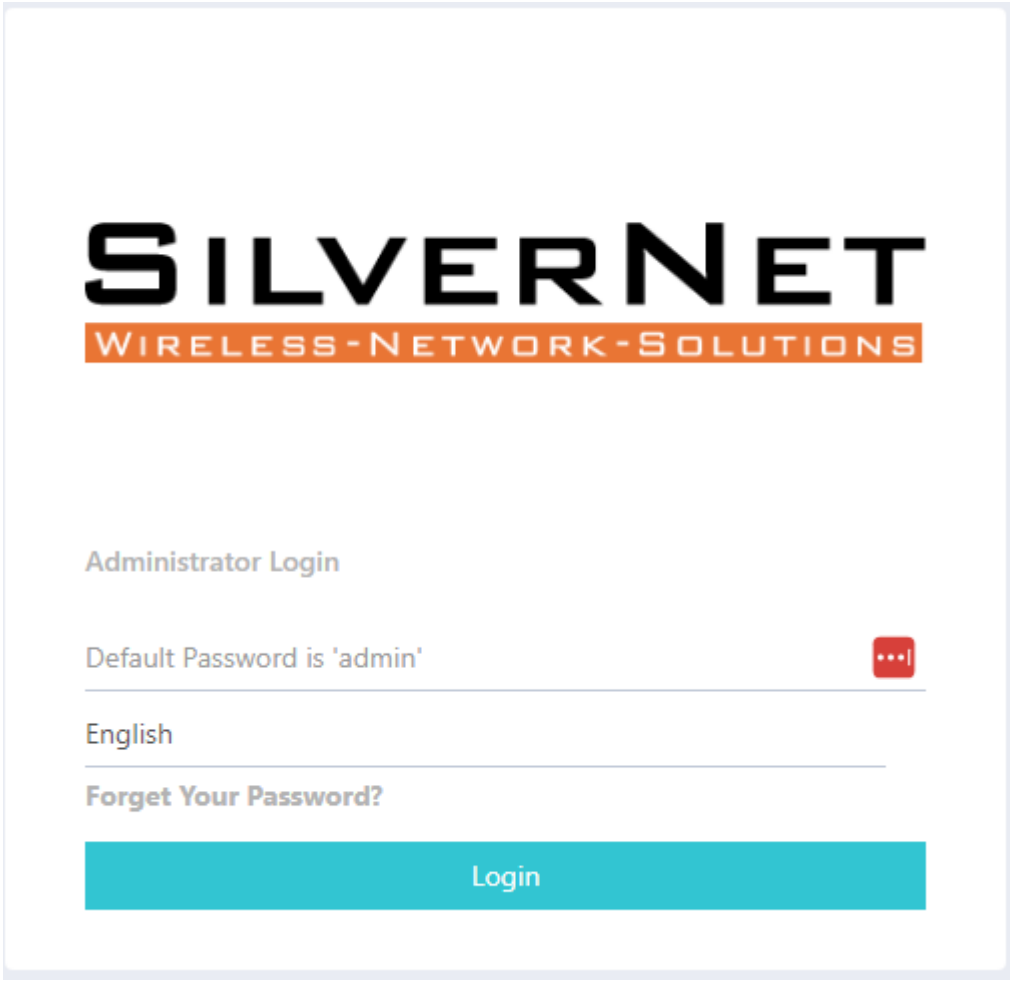
1. Configure the Ethernet adapter on your computer with a static IP address on the correct subnet. In this example we will be using the 192.168.1.x subnet (for example, IP address: 192.168.1.10 and subnet mask: 255.255.255.0).



2. Launch your web browser and enter the IP address of the Access Point into the address field. The SIL WCAP AX AP has a default IP address of 192.168.1.88.



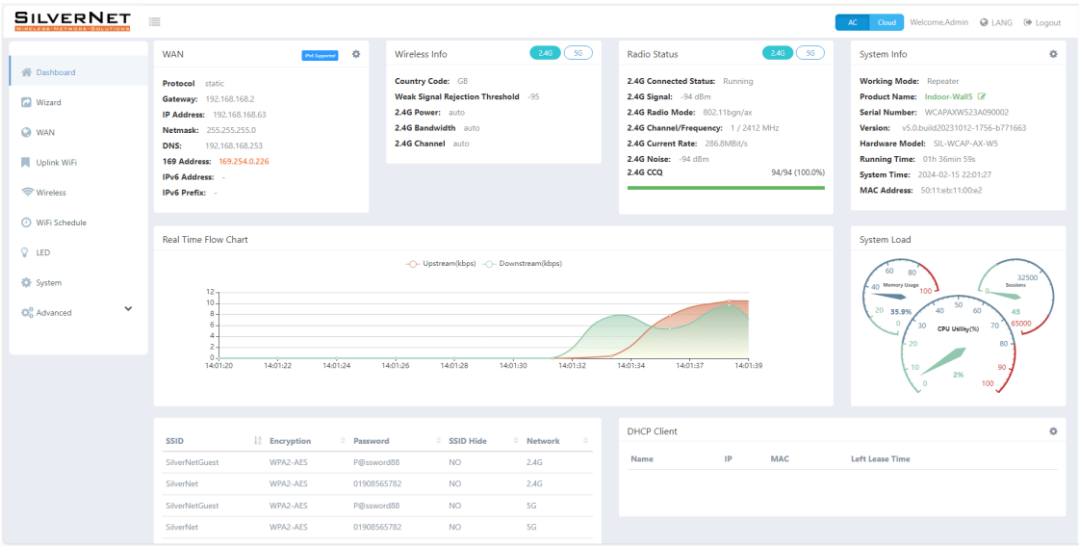
3. Enter **admin** in the Password field and click **Login**.



System Overview

Dashboard

The Dashboard displays a summary of the Access Points status information. It shows you the Wireless Info, Radio Status, System Info, System Load, SSID info and a Real Time Flow Chart.

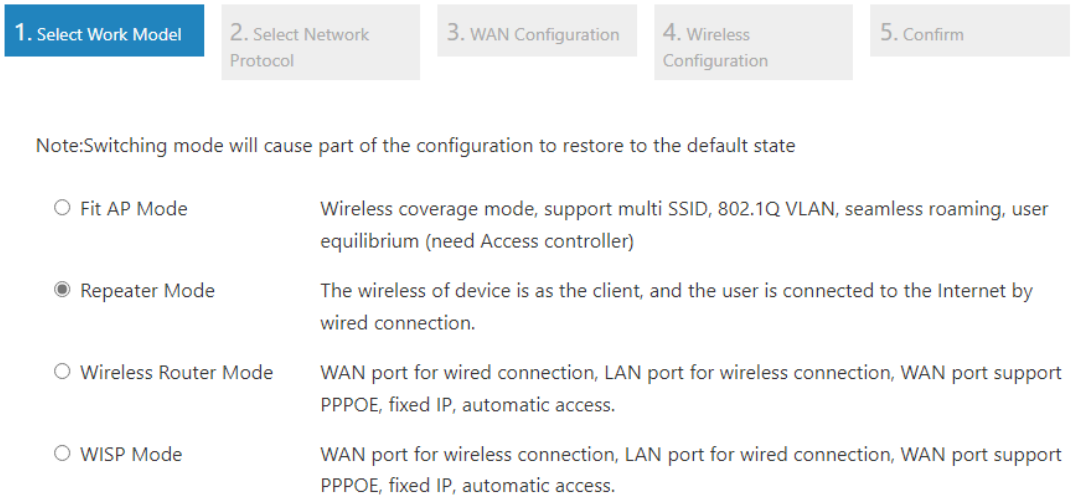


All of these sections will be covered later in the manual.

WIZARD

The Wizard helps to simplify WiFi setup by guiding you through the basic settings.

WORK MODEL



Fit AP Mode This mode is for use with a controller. See SIL WAC AX Manual.

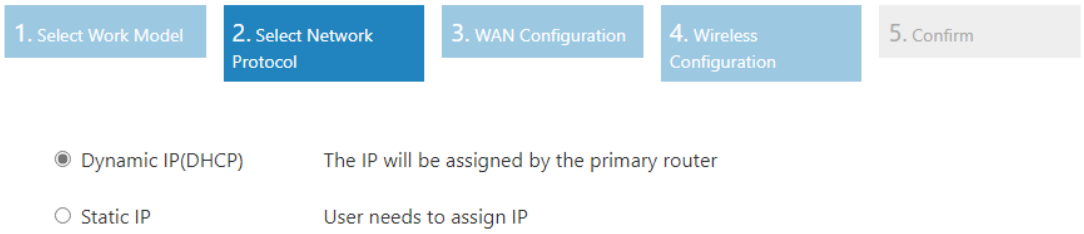
Repeater Mode The AP will become a client device and connect to an AP. The user can then connect via LAN port to access the internet.

***Note – Only available on certain models.**

Wireless Router Mode In this mode the device becomes a router and connects to the internet via PPPoE, DHCP or Static IP and shares the wireless network to LAN devices.

WISP In this mode the device connects to remote hotspot and shares its internet connection to client devices via Wi-Fi and LAN.

NETWORK PROTOCOL

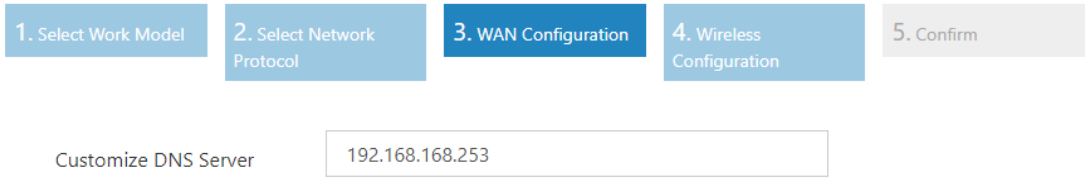


Dynamic IP (DHCP) If enabled, your device will get an IP address automatically from the network. There must be a DHCP server configured on your network for this to function.

Static IP Allows you to enter a static IP address.

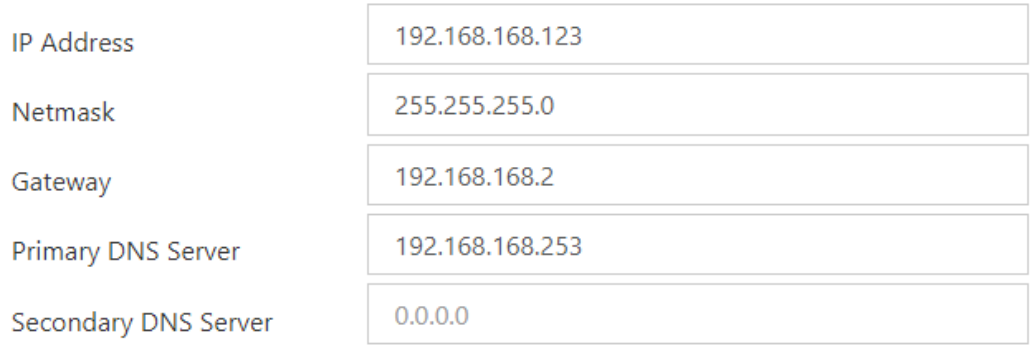
WAN CONFIGURATION

If DHCP is selected, then the WAN Configuration page will only ask you for a DNS.



Customise DNS Server Enter a DNS server.

If Static IP is selected, then the WAN configuration page will ask for more details.



IP Address Enter the IP address you wish the device to use.

Netmask Enter the subnet address.

Gateway Enter the IP address of your gateway/router.

Primary DNS Server Enter the IP address of your primary DNS server.

Secondary DNS Server Enter the IP address of your secondary DNS server.

Wireless Configuration

SSID Enter the SSID. This will be visible to other devices.

Encryption Select the Encryption method.

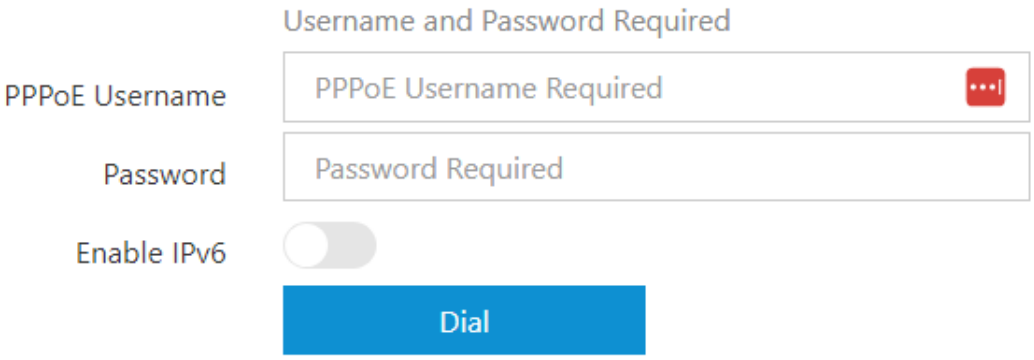
Password Enter the password needed to connect to the wireless.

***Note – To set up Multiple SSID's please visit the Advanced tab and go to Multiple SSID.**

WAN

Here you can configure PPoE, Dynamic IP (DHCP) and Static IP settings.

PPPoE

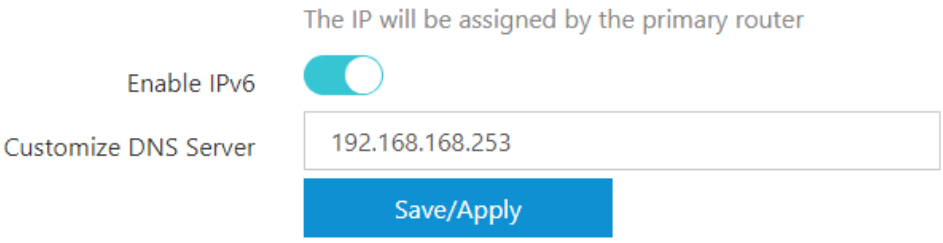


PPPoE Username Enter your PPPoE username. This is usually provided by your ISP.

Password Enter your password. This is usually provided by your ISP.

Enable IPv6 Enable or Disable IPv6.

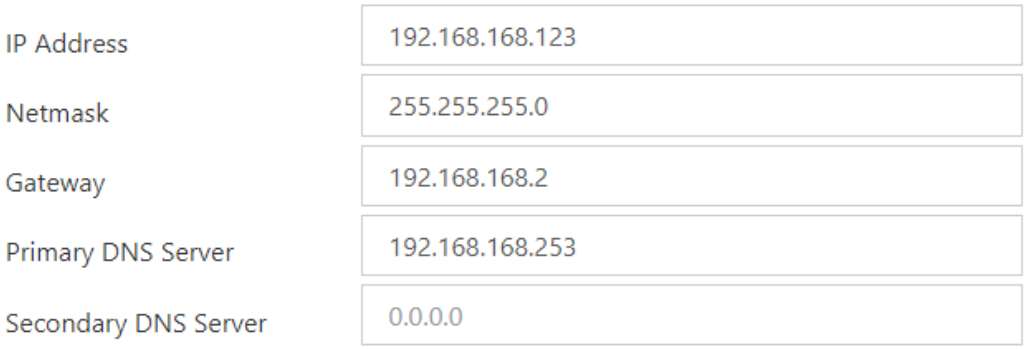
Dynamic IP (DHCP)



Enable IPv6 Enable or Disable IPv6.

Customise DNS Server Enter the IP address of your primary DNS server.

STATIC IP



IP Address Enter the IP address you wish the device to use.

Netmask Enter the subnet address.

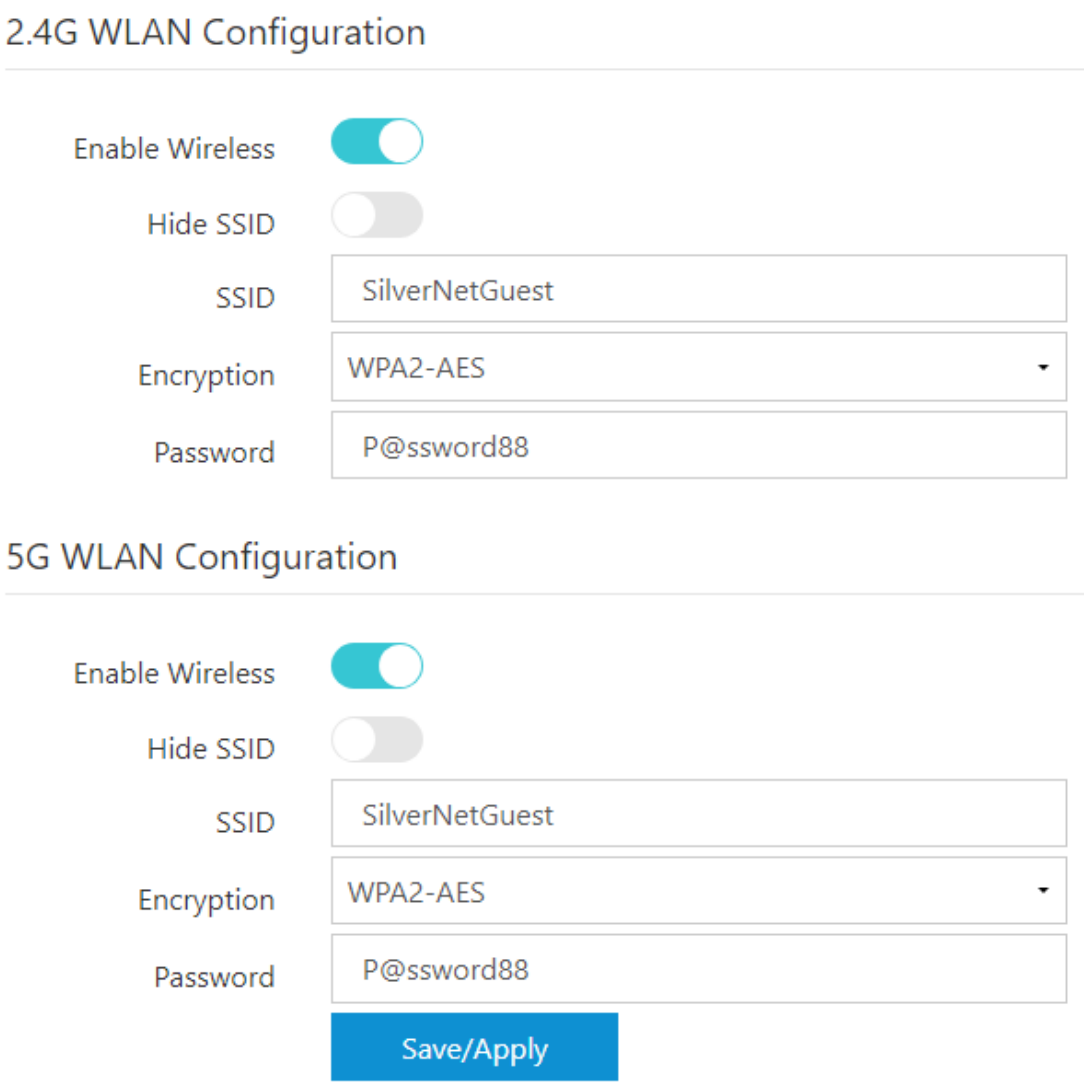
Gateway Enter the IP address of your gateway/router.

Primary DNS Server Enter the IP address of your primary DNS server.

Secondary DNS Server Enter the IP address of your secondary DNS server.

WIRELESS

Here you can configure your 2.4GHz and 5GHz wireless settings.



Enable Wireless Enable or Disable the 2.4GHz or 5GHz wireless.

Hide SSID Makes the SSID not visible to other devices.

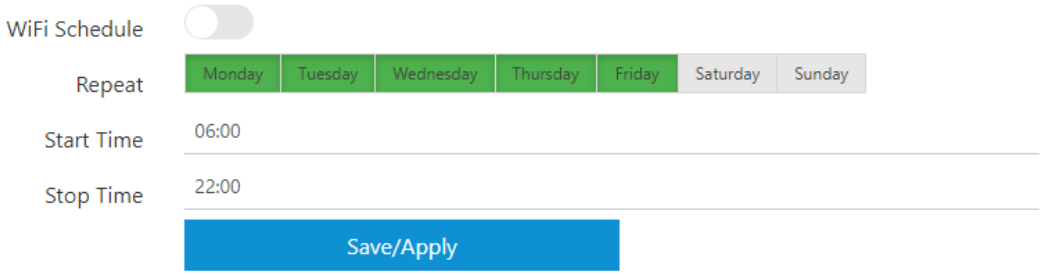
SSID Enter the SSID. This will be visible to other devices.

Encryption Select the Encryption method.

Password Enter the password needed to connect to the wireless.

WiFi Schedule

Use this to create a WiFi Schedule.



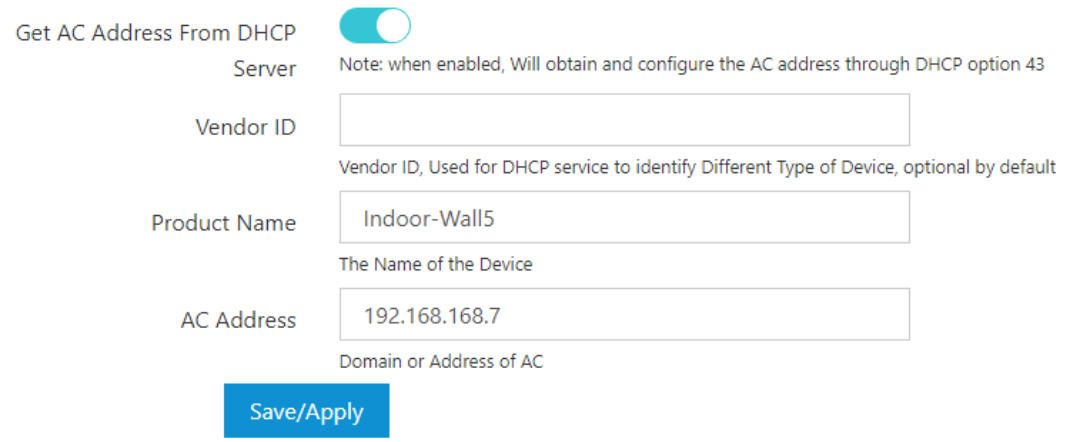
WiFi Schedule Enable or Disable.

Repeat Select the days you wish the WiFi schedule to be active.

Start Time Enter the schedule start time.

Stop Time Enter the schedule end time.

ACCESS CONTROLLER



Get AC Address from DHCP Server Enable or Disable. When enabled, the device will use DHCP option 43 to obtain the IP address of the controller. If disabled then you must enter the Controller address manually in AC address.

Vendor ID Use this setting to inform the DHCP server of a particular vendor and/or model information.

I.e. 'MSFT 5.0' corresponds to a Windows device.

This is an optional setting.

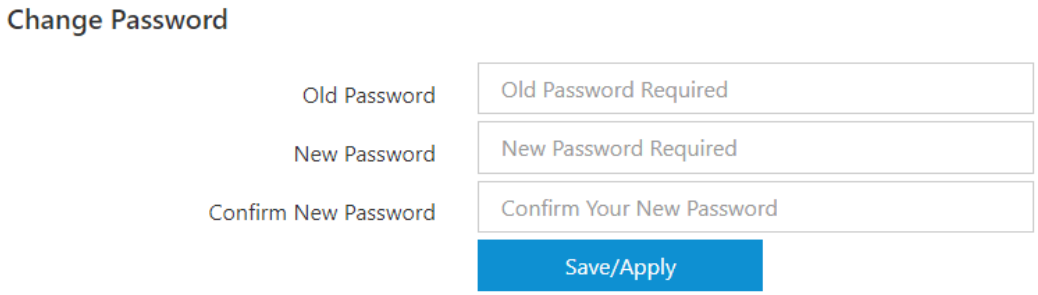
Product Name Enter the product name.

AC Address Enter the address of the controller if using one on the network.

SYSTEM

In this section you can change you password, the WiFi signal power, upgrade firmware, backup and restore config files and reboot the AP.

CHANGE PASSWORD

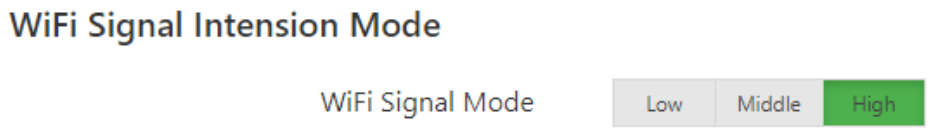


Old Password Enter the current password.

New Password Enter the New password.

Confirm New Password Confirm the New password.

WIFI SIGNAL INTENSION MODE

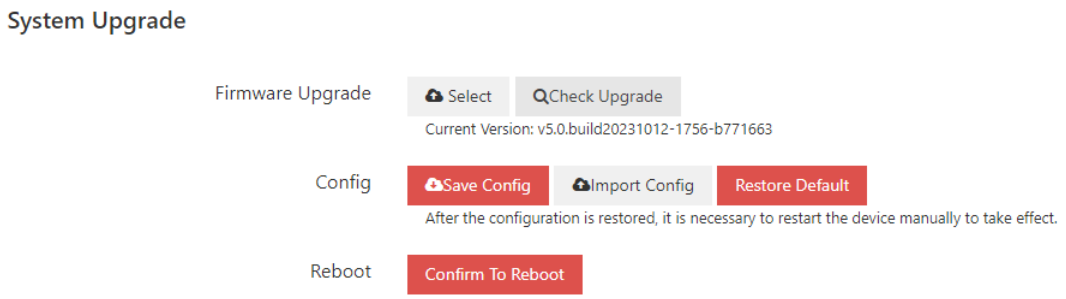


Low Sets the Tx Power of the wireless device to 18dBm

Middle Sets the Tx Power of the wireless device to 20dBm

High Sets the Tx Power of the wireless device to 27dBm

SYSTEM UPGRADE



Firmware Upgrade Click Select and browse to the firmware file to upload a new firmware update.

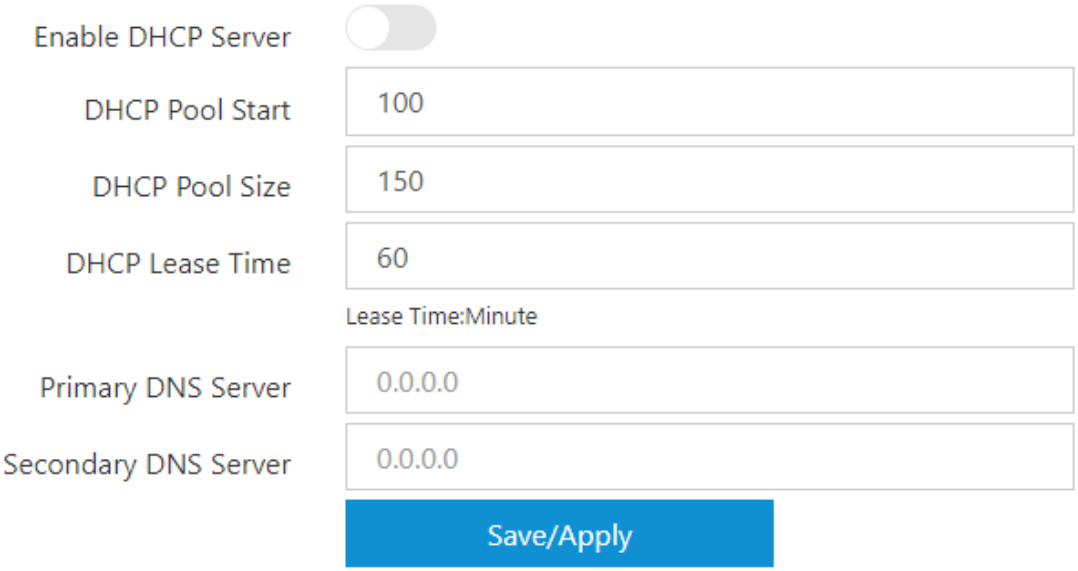
Config Click Save Config to save the current configuration. Click Import config to browse to a saved configuration file and upload it into the AP. Click Restore Default to factory default the AP.

reboot Click to reboot the AP.

ADVANCED

Advanced settings.

DHCP SERVER



Enable DHCP Server Enable or Disable.

DHCP Pool Start Enter the first address to use for DHCP.

DHCP Pool Size Enter the amount of IP addresses to use for DHCP.

DHCP Lease Time Enter the length of time for the DHCP lease. When the lease expires, the device must renew it or request a new one.

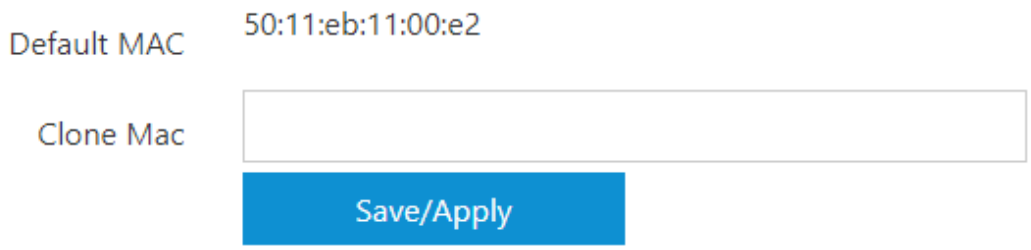
Primary DNS Server Enter the IP address of your primary DNS server.

Secondary DNS Server Enter the IP address of your secondary DNS server.

MAC CLONE

Sometimes, some ISPs register a certain MAC address (your computer, or another device) when they first install the service. When you place a router behind the modem, the MAC address from the device may not be recognised by the ISP.

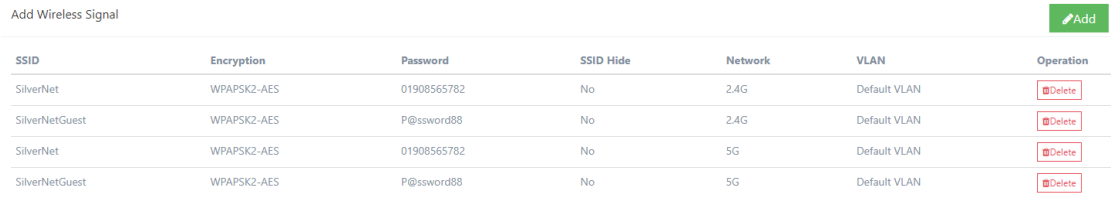
If this is the case, and to configure your device to be recognised by your ISP, you can clone the MAC address of the port to be the same as your computer (or other device) MAC address.



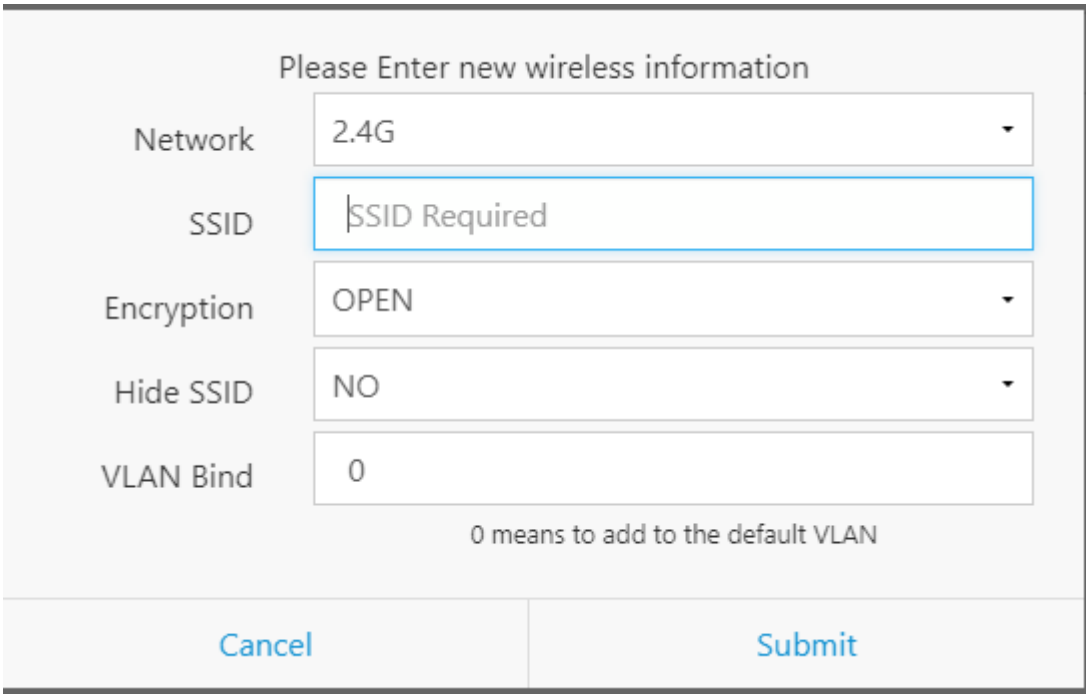
Clone Mac Enter the MAC address you wish to clone.

MULTIPLE SSID

To use multiple SSID you will need to enter the additional SSIDs in this section.



Click Add and enter the relevant information.



Network Select 2.4GHz or 5GHz.

SSID Enter the SSID. This will be visible to other devices.

Encryption Select the Encryption method.

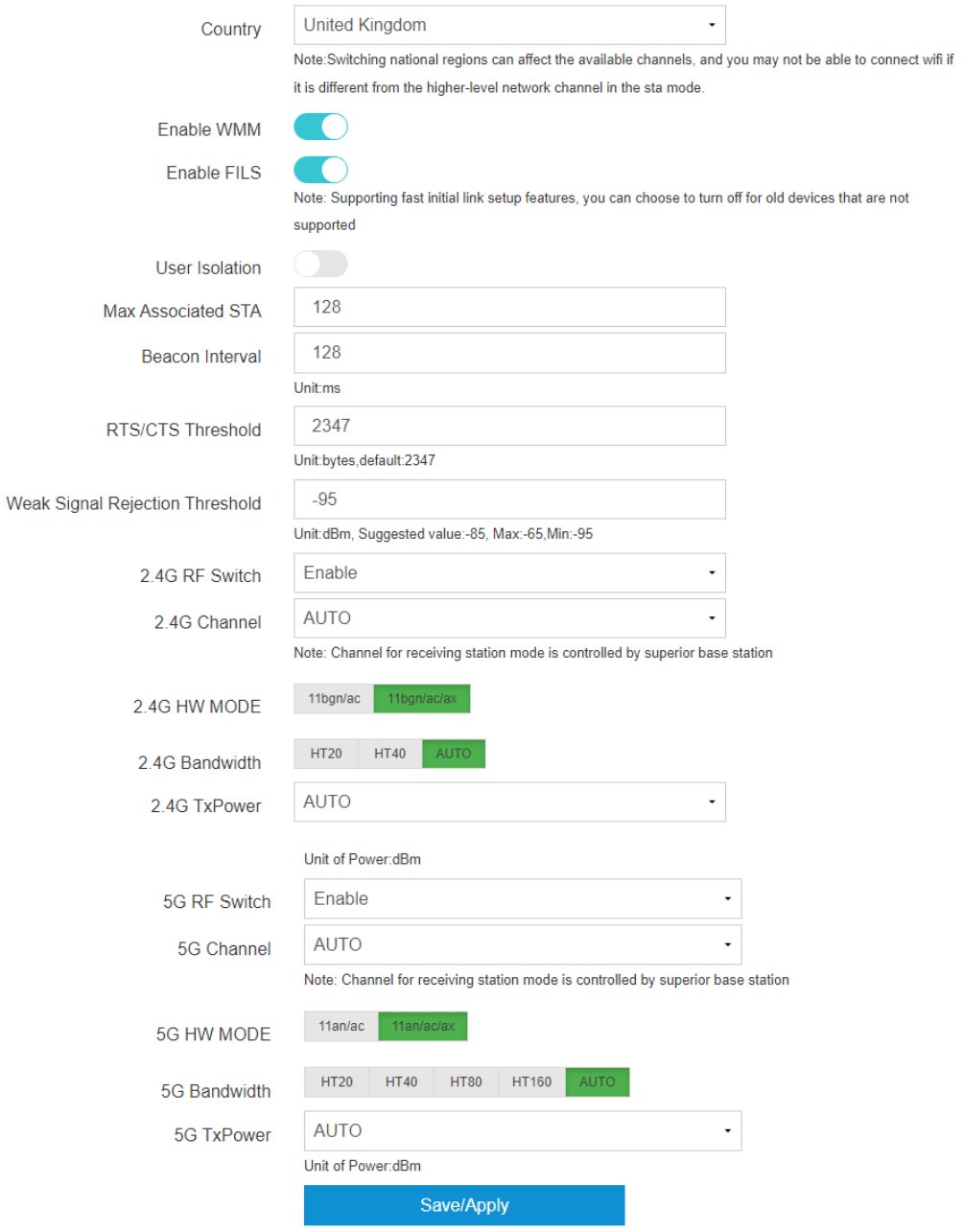
Password Enter the password needed to connect to the wireless.

Hide SSID Makes the SSID not visible to other devices.

VLAN Bind Use if you want to add to a VLAN.

RF PARAMETER

This section allows you to fine tune the wireless signal.



Country Select your country code.

Enable WMM When enabled WMM prioritises network traffic to improve performance of applications such as video and voice.

Enable FILS FILS stands for Fast Initial Link Setup. It reduces the link up time to below 100ms. Designed for dense environments.

User Isolation Select if needed. User **Isolation** will stop any user devices connected to this Wi-Fi from communicating with each other.

Max Associated STA Enter the maximum number of connected devices.

Beacon Interval This value indicates the frequency interval of the beacon. A beacon is a packet broadcast by the router which carries the SSID, channel number and security protocols. We recommend using the default setting of 128.

In poor reception areas you may turn this down to 50.

RTS/CTS Threshold Set the RTS (Request To Send) packet size. Default is 2347 octets. It is recommended to leave this setting.

Weak Signal rejection Threshold When a user's device falls below this threshold it will automatically disconnect and roam to the next AP. Setting depends on the environment, but the recommended range is -80 to -85.

2.4GHz RF Switch Enable or Disable the 2.4GHz wireless.

2.4GHz Channel Select the channel you wish to use.

2.4GHz HW Mode Default is 802.11ax. You can set to 802.11ac mode if needed.

2.4GHz Bandwidth Select the channel width you wish to use. The bigger the channel width the more traffic can pass through. Its also uses more of the channel spectrum. Best to leave on Auto.

2.4GHz TX power Set the power in dBm.

5GHz RF Switch Enable or Disable the 5GHz wireless.

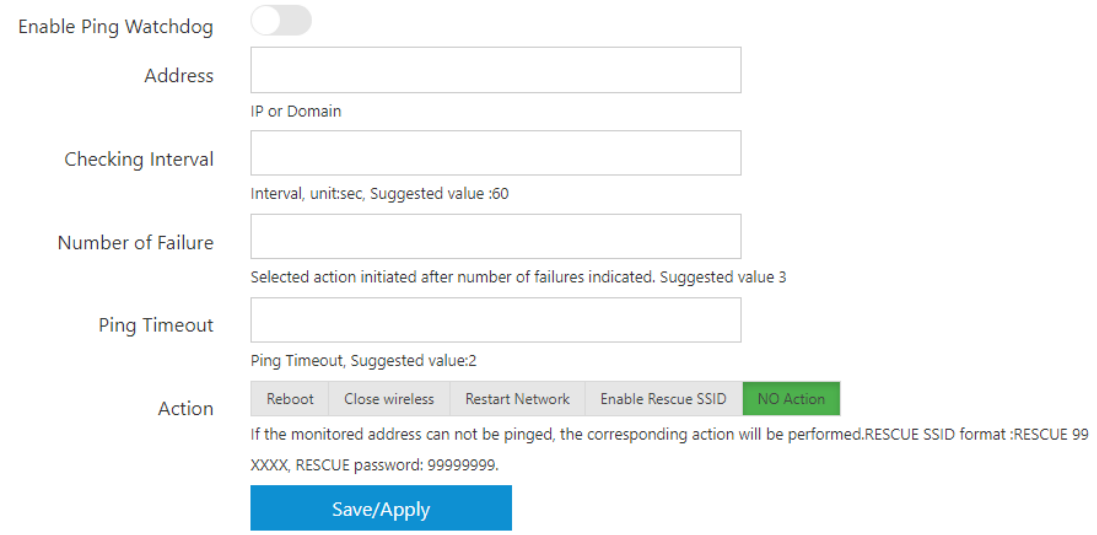
5GHz Channel Select the channel you wish to use.

5GHz HW Mode Default is 802.11ax. You can set to 802.11ac mode if needed.

5GHz Bandwidth Select the channel width you wish to use. The bigger the channel width the more traffic can pass through. Its also uses more of the channel spectrum. Best to leave on Auto.

5GHz TX power Set the power in dBm.

PING WATCHDOG



Enable Ping Watchdog Default is disabled. Check on box to enable.

Address Target IP address to ping.

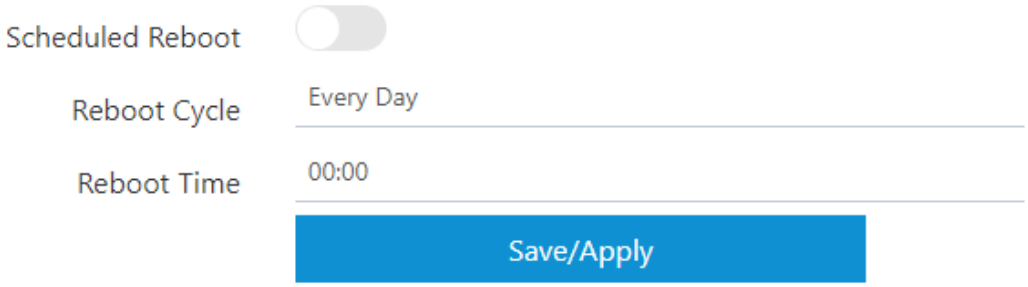
Checking Interval This is the Ping test duration.

Number of Failure This is the number of ping failure counts before the device begins the reboot process.

Ping Timeout This is the ping timeout.

Action Select what the device should do if the ping watchdog is triggered. Reboot will reboot the device. Close Wireless will disable the wireless for a short period of time. Restart Network will restart the wireless card. Enable Rescue SSID will set the AP into rescue mode with an SSID of RESCUE 99XXXX and password of 99999999.

SCHEDULED REBOOT

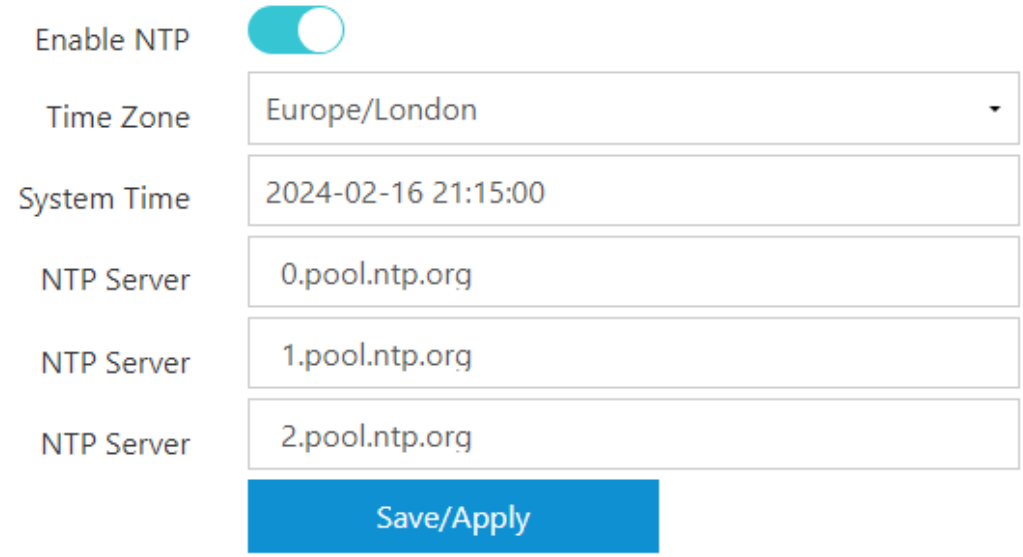


Scheduled Reboot Enable or Disable.

Reboot Cycle Select if the schedule will be Daily, Weekly or Monthly and then Select the Day of the week or Month.

Reboot Time Select the time you wish the device to be rebooted.

System Time



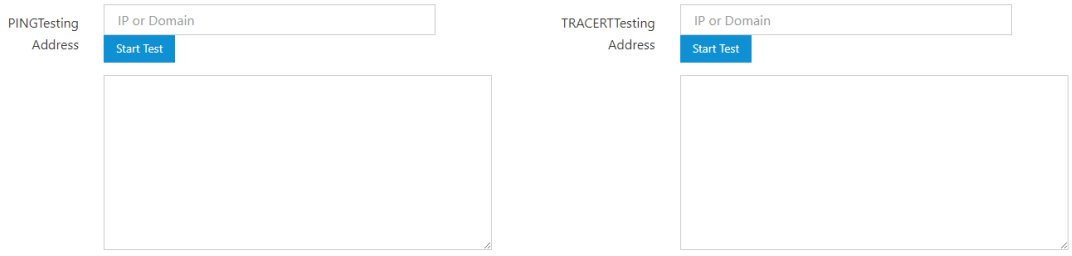
Enable NTP Enable or Disable NTP.

Time Zone Select your time zone.

System Time Shows the current time.

NTP Server Enter details of your time server.

Diagnoses

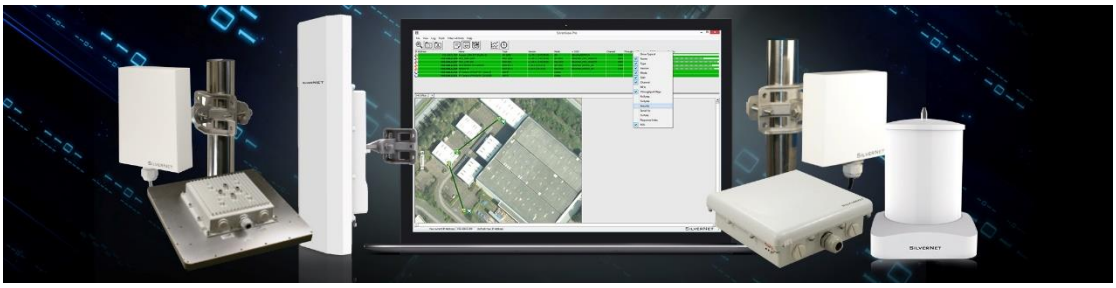


Ping Test/Trace cert Testing Enter the IP address or Domain you wish to ping.

Start test Starts the ping test.

OTHER SILVERNET PRODUCTS

PRO RANGE



INDUSTRIAL NETWORK TRANSMISSION

INTELLIGENT WI-FI SOLUTIONS

INDUSTRY LEADING TECHNICAL SUPPORT