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WIM1200-20 CONFIGURATION MANUAL

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Preface

Audience

This manual is directed for the technical services workers from SKSpruce Technologies, users and related partners. It introduces the basic parameter configuration and management on module.

Applicable Browsers

The web page is applicable in Firefox, Chrome and Internet Explorer.

Note: for a better user experience, please use the Internet Explorer 8 or above.

Documentation Structure

Chapter	Title	Description
Chapter 1	SSH Configuration	Log in to the module for detailed and basic configuration update through SSH.
Chapter 2	WEB Configuration	Simple status monitoring and security parameter configuration through the WEB interface on module.

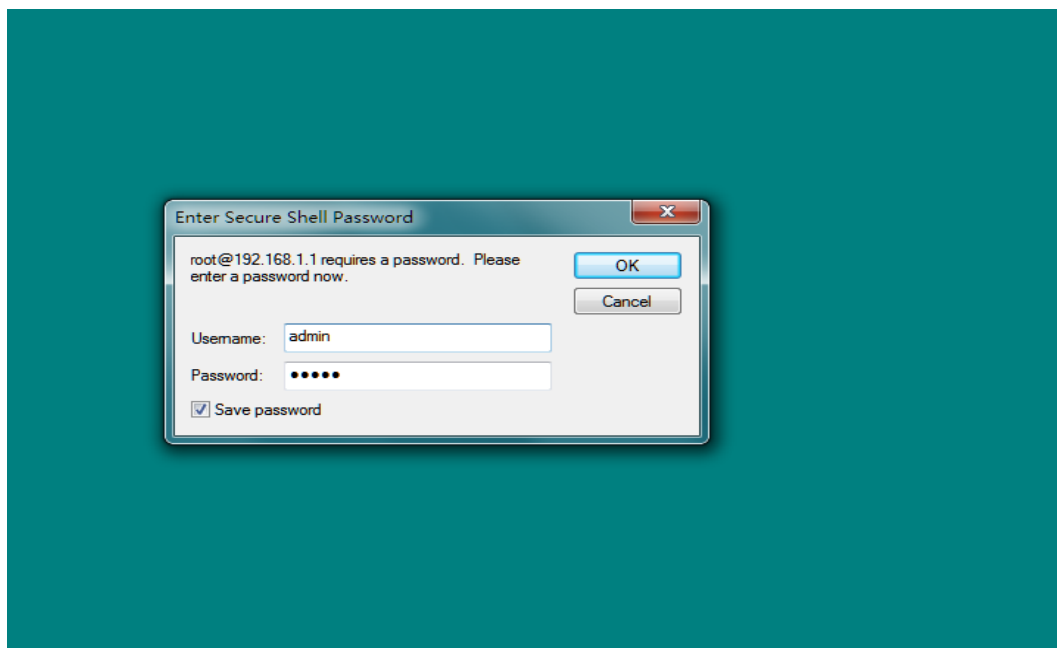
1 SSH Configuration

1.1 Default Username and Password

After launching the WIM1200-20 module, three SSID (AU-WIFI, AU-WIFI-1 and AU-WIFI-2) would open and their passwords are the last 8 characters of the serial number on module by default, which can be acquired in the label on it. Then the SSID is searchable and connected by Wi-Fi terminal device.

The default SSH username is “admin” and the password is “5upS%k!”. Please see the figure 1-1 below.

Figure 1-1 SecureCRT Login



1.2 Initial Password Change

The password can be changed through passwd command “passwd admin”, then the user can input the new password according to the note.

For further parameters change, please refer to the *basic module configuration command manual*.

Note: the WEB configuration is recommended for terminal users instead of SSH configuration, which may induce configuration fault.

2 WEB Configuration

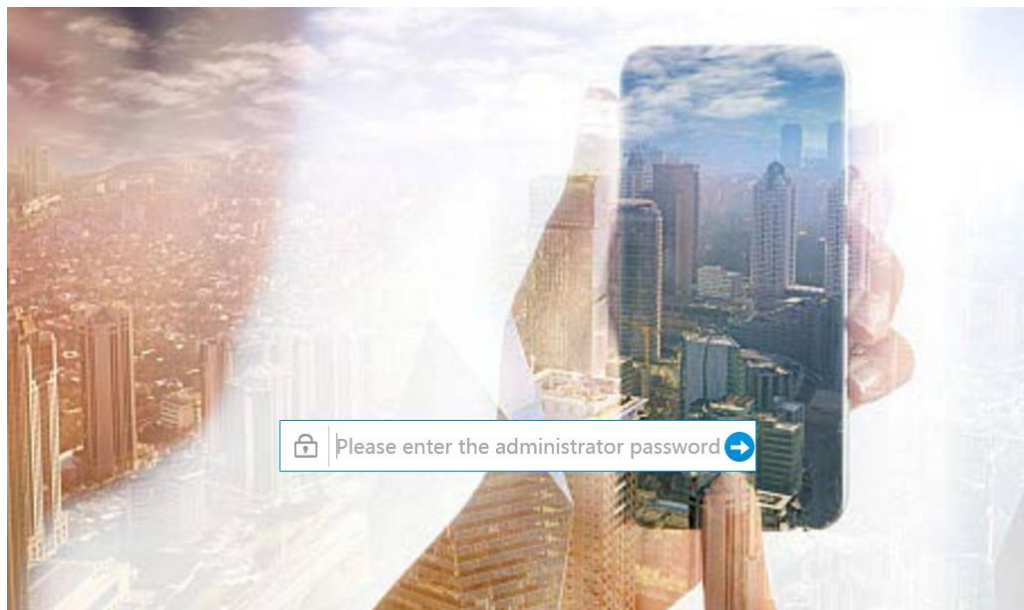
This chapter introduces the basic WEB configuration for WIM1200-20 including login page, System Info, Wi-Fi Settings, Admin Password, Upgrade and Restart.

2.1 Page Login

After launching WIM1200-20 module, three SSID (AU-WIFI, AU-WIFI-1 and AU-WIFI-2) would open and their password is the last 8 characters of the serial number on module by default, which can be acquired in the label on it. Then SSID is searchable and connected by Wi-Fi terminal device.

The module login page can be visited through <http://192.168.1.1:8080/>. See the figure below.

Figure 2-1



Input the password “admin” and click “Enter” for the configuration page.

2.2 System Info

System Info is used for module information and network connection monitoring. See the figure below.

Figure 2-2



System Info	Firmware version:	AmOS-4.5.4.050P00R01
Wi-Fi Settings	Serial Number:	448E1C72A2B0
Admin password	MAC Address:	44:8e:1c:72:a2:b0
Upgrade	Extranet IP :	10.10.23.56
Restart	Default route :	10.10.23.1
	DNS :	192.168.10.3
	Intranet IP:	192.168.1.1

This page displays the firmware version, serial number, MAC address, intranet IP, router, DNS and Internet IP, but the data of intranet IP, router and DNS are only visible under intranet connection.

Firmware version: AmOS-4.5.4.050P00R01

Serial Number: 448E1C72A2B0

MAC Address: 44:8e:1c:72:a2:b0

Extranet IP: 10.10.23.56

Default route: 10.10.23.1

DNS: 192.168.10.3

Intranet IP:192.168.1.1

2.3 Wi-Fi Settings

This page is used for configuring basic Wi-Fi information and DHCP Server. See the figure 2-3 and figure 2-4 below.

Figure 2-3

The screenshot shows the 'Wi-Fi Settings' page with a sidebar on the left containing 'System Info', 'Wi-Fi Settings', 'Admin password', 'Upgrade', and 'Restart'. The main content area has a 'Sprint' logo in the top right. Below the sidebar, there are three rows for SSID configuration. Each row has columns for 'Wi-Fi', 'SSID Name', 'Password', and 'Confirm Password'. The first row has SSID 'AU-WiFi', a checked 'Broadcast/Hide' checkbox, and a 'Save' button at the bottom right. The second row has SSID 'AU-WiFi-1' and an unchecked checkbox. The third row has SSID 'AU-WiFi-2' and an unchecked checkbox. Below the SSID rows, there is a 'DHCP Service' section with 'Start: 192.168.1.100' and 'End: 192.168.1.250' fields.

Figure 2-4

The screenshot shows the 'Wi-Fi Settings' page with a sidebar on the left containing 'System Info', 'Wi-Fi Settings', 'Admin password', 'Upgrade', and 'Restart'. The main content area has a 'Sprint' logo in the top right. Below the sidebar, there are three rows for SSID configuration. Each row has columns for 'Wi-Fi', 'SSID Name', 'Password', and 'Confirm Password'. The first row has SSID 'AU-WiFi', an unchecked 'On/Off' checkbox, and a 'Save' button at the bottom right. The second row has SSID 'AU-WiFi-1' and an unchecked checkbox. The third row has SSID 'AU-WiFi-2' and an unchecked checkbox. Below the SSID rows, there is a 'DHCP Service' section with 'Start: 192.168.1.100' and 'End: 192.168.1.250' fields.

2.3.1 Revisable Wi-Fi Information

The revisable Wi-Fi information includes the SSID name, password and switch for each SSID (if selected it is ON and otherwise OFF), any changes of it would take effect on the 2.4G / 5G interfaces and their SSIDs at the same time.

Note: the definition of the first SSID of the checkbox is different from others. It is used for hiding the SSID or not (once putting the cursor on the checkbox, there would be “Broadcast/Hide” like figure 2-3. The definition of “Broadcast” is searchable for other users and “Hide” means not, once hiding the SSID, it can only be connected by manual input). While other checkbox means to open or close the SSID (once putting the cursor on the checkbox, there would be “On/Off” as figure 2-4).

Input the new information, click “save” to submit the Wi-Fi configuration parameter.

The SSID name should no more than 32 characters, password should between 8-64 characters.

2.3.2 Default Wi-Fi Configuration

The default SSID amount: 3 SSIDs on 2.4G and 3 on 5G. The first SSID is ON, other two are OFF in factory settings and they are available to open or edit by users if necessary.

Maximum connected user amount: 16 under each radio permission and 32 for the overall unit.

Default SSID name: they are AU-WIFI, AU-WIFI-1 and AU-WIFI-2 for both 2.4G and 5G.

Default Wi-Fi password: the last 8 characters for all the SSID.

Default Cipher mode: wpa2-psk+ccmp

Default bandwidth rate limit: the utmost 1Mbps of uploading and downloading speed for each SSID and user.

Default Wi-Fi mode: 802.11b/g/n mixed mode for 2.4G and 802.11a/n/ac mixed mode for 5G.

Default Tx power: maximum

Default channel: automatic

Default country code: US

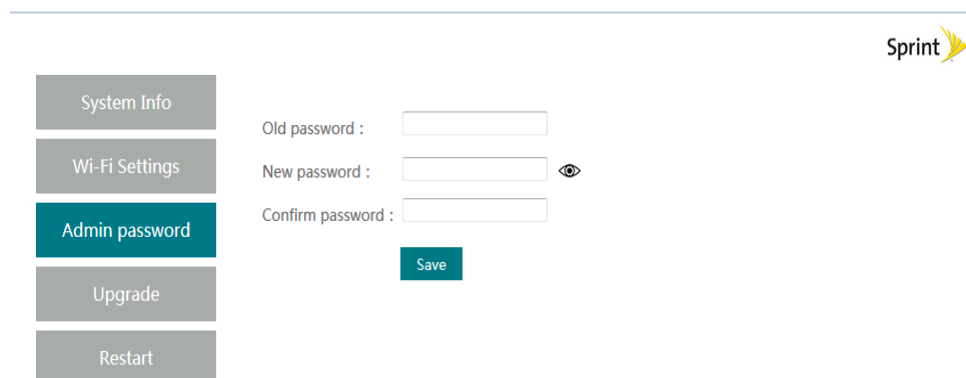
2.3.3 DHCP Server Configuration

The configurable DHCP address pool through DHCP Server ranges from 2-254.

2.4 Admin Password Change

For admin password changes, please see the figure below.

Figure 2-5



The screenshot displays a web interface for changing the admin password. On the left, a vertical sidebar contains five menu items: 'System Info', 'Wi-Fi Settings', 'Admin password' (which is highlighted in a teal color), 'Upgrade', and 'Restart'. The main content area on the right features three text input fields labeled 'Old password:', 'New password:', and 'Confirm password:'. The 'New password:' field includes a small eye icon to the right, indicating a toggle for password visibility. Below the 'Confirm password:' field is a teal 'Save' button. In the top right corner of the interface, the 'Sprint' logo is visible.

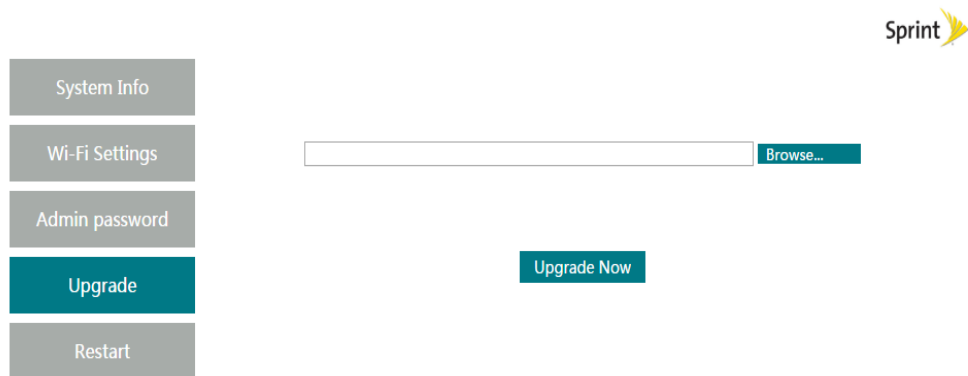
According to the note, input old password, new password, confirm password and click “Save”.

2.5 Upgrade

The module supports for local upgrade and online upgrade, and when the module cannot detect the new version for remote server, there would be only local upgrade on the page. See the figure 2-6 below.

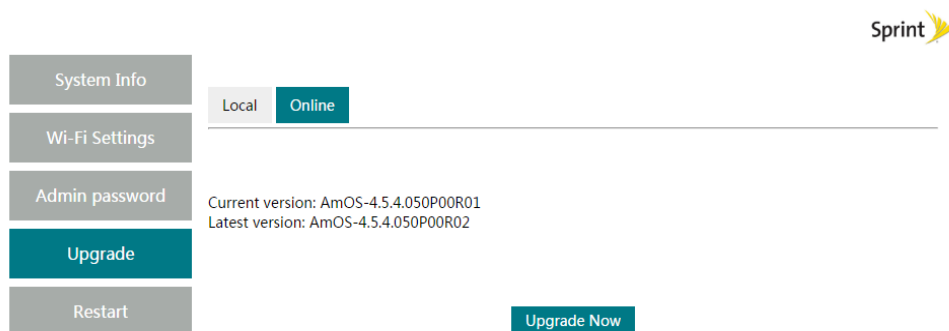
When the system detects the upgradable firmware like figure 2-7 below, the user can choose to upgrade in Local or Online column. The page displays Online upgrade first by default. For Local upgrade page, please see the figure 2-8 below.

Figure 2-6



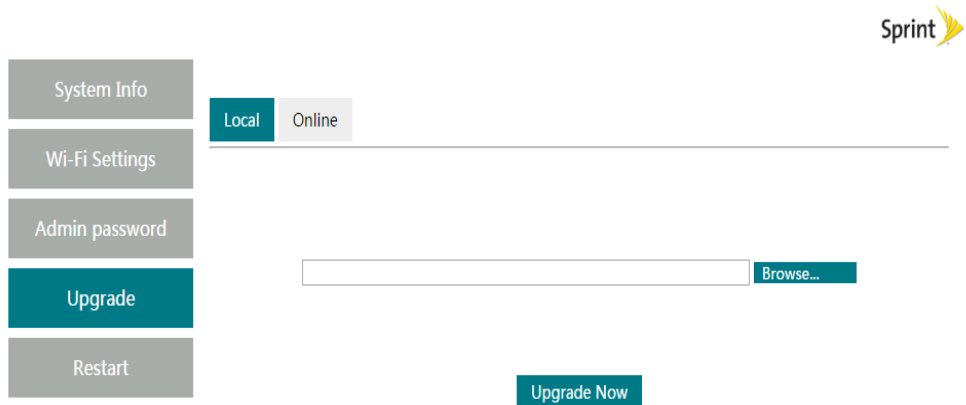
This page is used for the local upgrade for module system. First, the user needs to download the firmware to the local path from official website, then browse the object on this page and click “Upgrade Now”. It requires 3 to 4 minutes before completed.

Figure 2-7



This page displays the current firmware version and detected version from remote server. Clicking “Upgrade Now” means the automatic downloading and upgrading of module.

Figure 2-8

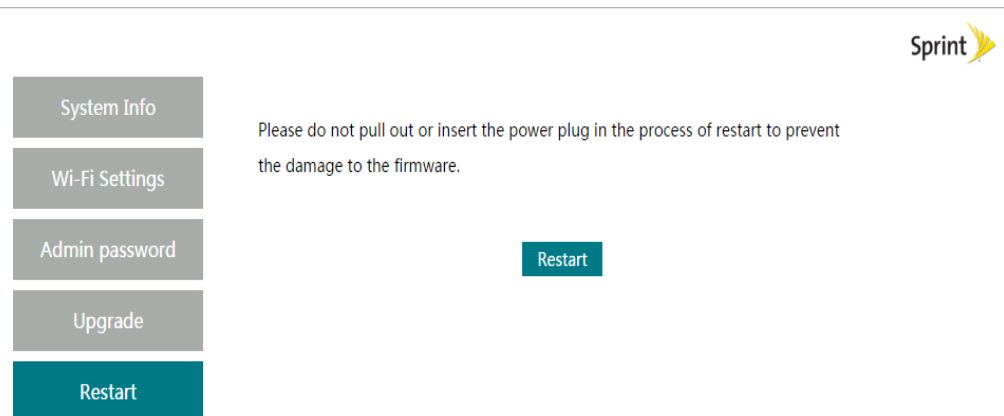


The operation on this page is used for local upgrade.

Note: please don not switch the power off for the good performance of firmware.

2.6 Restart

This page is used for local restart in module. See the figure below.



Clicking Restart means restart the module.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

This device is restricted to indoor use.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

The module is limited to OEM installation ONLY.

This module is intended for OEM integrators under the following conditions:

1. This module is restricted to installation in products for use only in mobile and fixed applications.
2. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons.
3. The antenna(s) used for this transmitter must not transmit simultaneously with any other antenna or transmitter.
4. OEM integrator has be limited the operation channels in channel 1-11 for 2.4GHz band.

The OEM integrator is still responsible for

1. ensuring that the end-user has no manual instructions to remove or install module
2. the FCC compliance requirement of the end product, which integrates this module.
3. Appropriate measurements (e.g. 15 B compliance) and if applicable additional equipment authorizations (e.g. Verification, Doc) of the host device to be addressed by the integrator/manufacturer.
4. The separate approval is required for all other operating configurations, including portable configurations with respect to Part 2.1093 and different antenna configurations

The user manual of the end product should include

1. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
2. the restriction of operating this device in indoor could void the user's authority to operate the equipment.
3. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.
4. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.
5. The FCC part 15.19 statement: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Label of the end product:

The final end product must be labeled in a visible area with the following

" Contains TX FCC ID: 2ACKD-WIM1200-20-A "

The end product shall bear the following 15.19 statement: This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

If the labeling area is considered too small and therefore it is impractical (smaller than the palm of the hand) to display the compliance statement, then the statement may be placed in the user manual or product packaging.

Guidance to the Host Manufacturer:

1. We hereby acknowledge our responsibility to provide guidance to the host manufacturer in the event that they require assistance for ensuring compliance with the Part 15 Subpart B requirements.
2. The host manufacturer is responsible for additional testing to verify compliance as a composite system. When testing the host device for compliance with the Part 15 Subpart B requirements, the host manufacturer is required to show compliance with the Part 15 Subpart B while the transmitter module(s) are installed and operating. The modules should be transmitting and the evaluation should confirm that the module's intentional emissions are compliant (i.e. fundamental and out of band emissions) with the Radio essential requirements. The host manufacturer must verify that there are no additional unintentional emissions other than what is permitted in the Part 15 Subpart B or emissions are compliant with the Radio aspects.