



EM220II

Mobile Printer

Net Configuration Tool

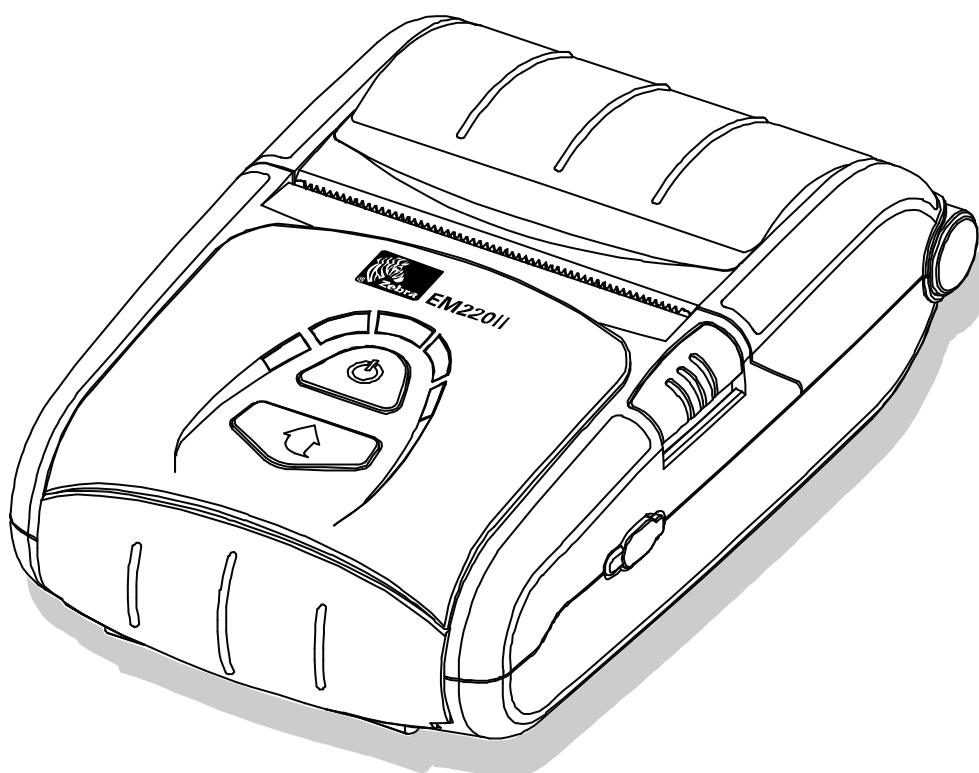


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NOTE: This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 or circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING: Exposure to Radio Frequency radiation. To conform to FCC RF exposure requirements this device shall be used in accordance with the operating conditions and instructions listed in this manual.

NOTE: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to insure compliance.

Changes or modifications to this unit not expressly approved by Zebra Technologies Corporation could void the user's authority to operate this equipment.

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This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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1. Manual Information

This Net Configuration Tool Manual provides information on the utility program used to set printer operation conditions.

2. Operating System (OS) Environment

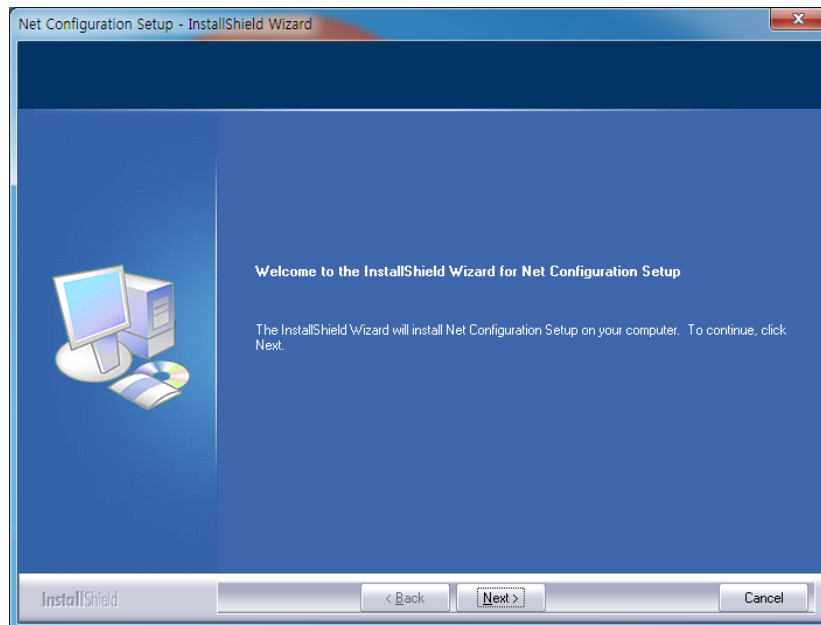
The following operating systems are supported for usage.

- Microsoft Windows XP (32bit/64bit)
- Microsoft Windows 2003 Server (32bit/64bit)
- Microsoft Windows Embedded For Point Of Service
- Microsoft Windows VISTA (32bit/64bit)
- Microsoft Windows 2008 Server (32bit/64bit)
- Microsoft Windows 7 (32bit/64bit)
- Microsoft Windows 8 (32bit/64bit)

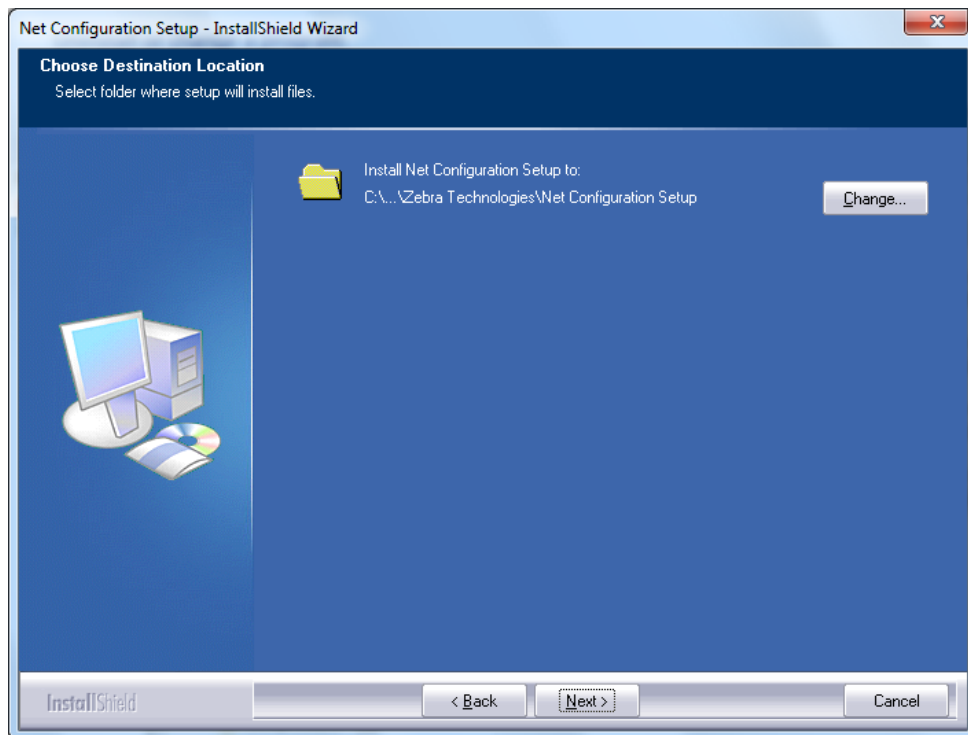
3. Software Installation & Deletion

3-1 Installation

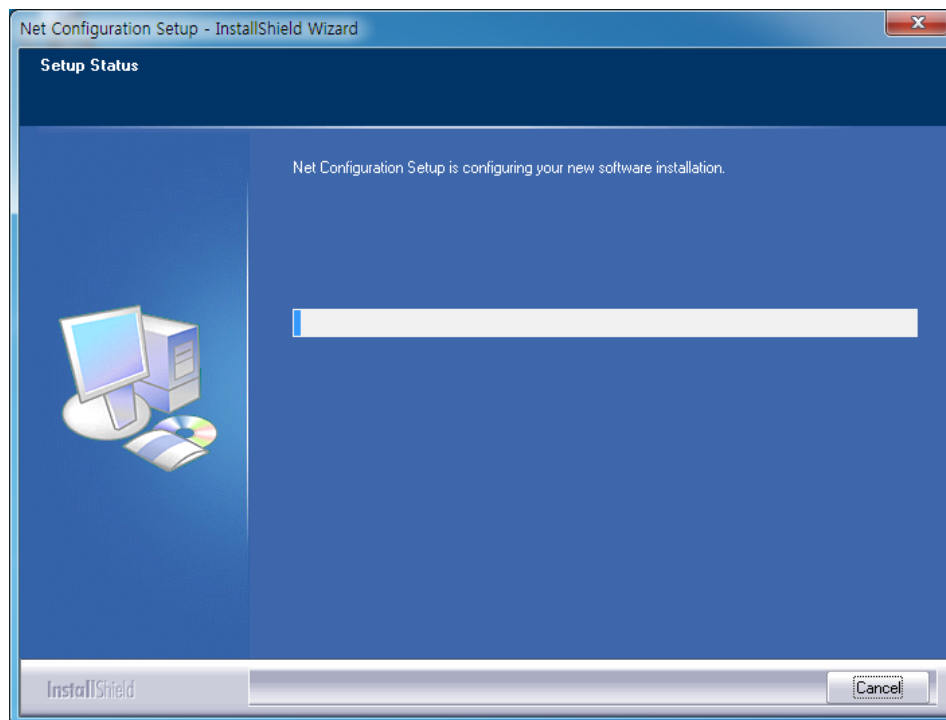
- 1) Execute the “Net Configuration Setup_V1.x.x.exe” file.
(This file must first be downloaded.)
- 2) Click the “Next” button.



- 3) Click the “Next” button.
(Install to: C:\Program Files\Zebra Technologies\Net Configuration Setup)

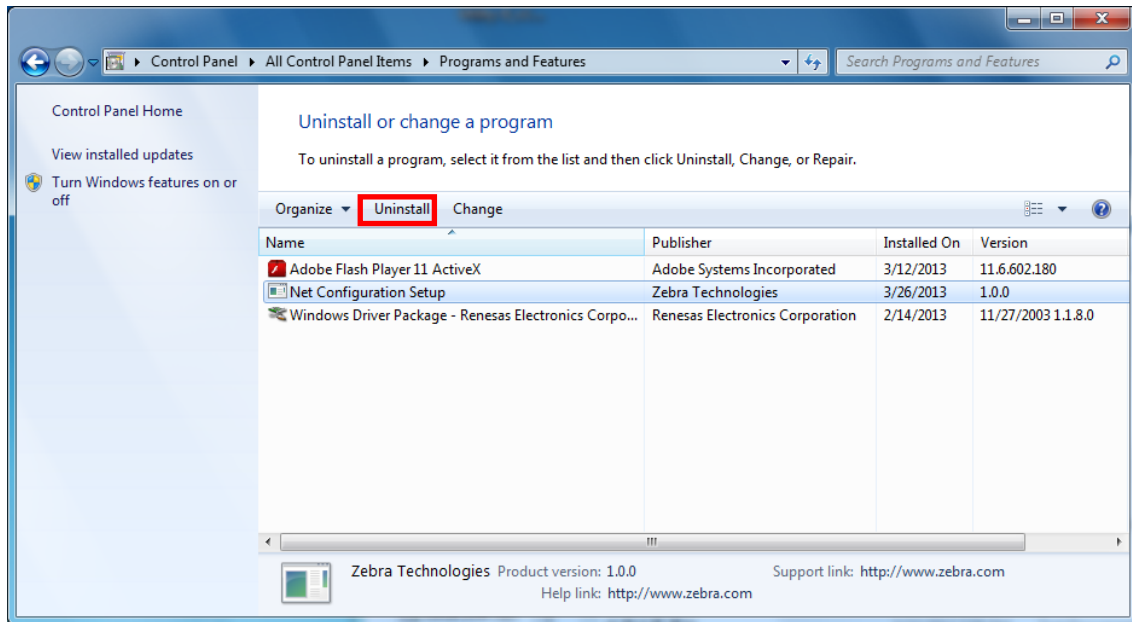


- 4) Installation will be completed on click the “Finish” button.

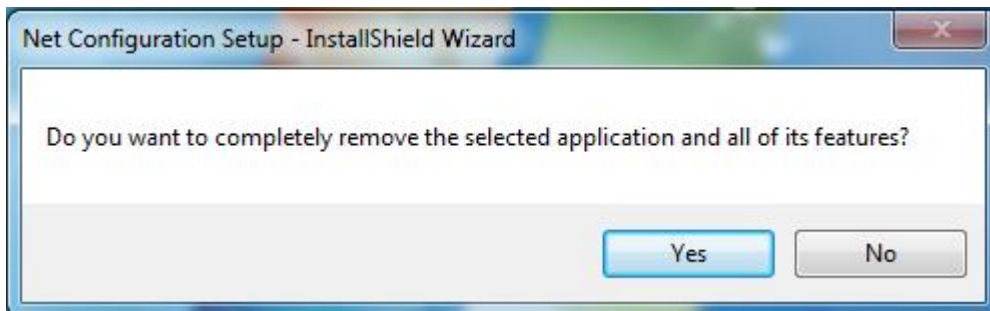


3-2 Deletion

- 1) Click and activate the “Programs and Features” icon in the Control Panel.
- 2) Select “Net Configuration Setup” and click the “Uninstall” button.



- 3) Click the “Yes” button to completely remove the application.

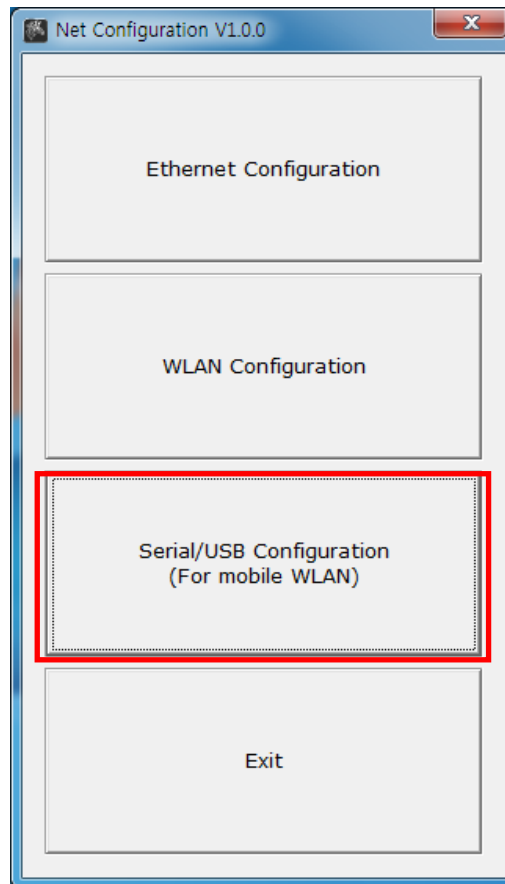


4. Configuration

Install and execute NetConfiguration.exe involved in CD.
(Start>>Zebra>>NetConfiguration.exe)

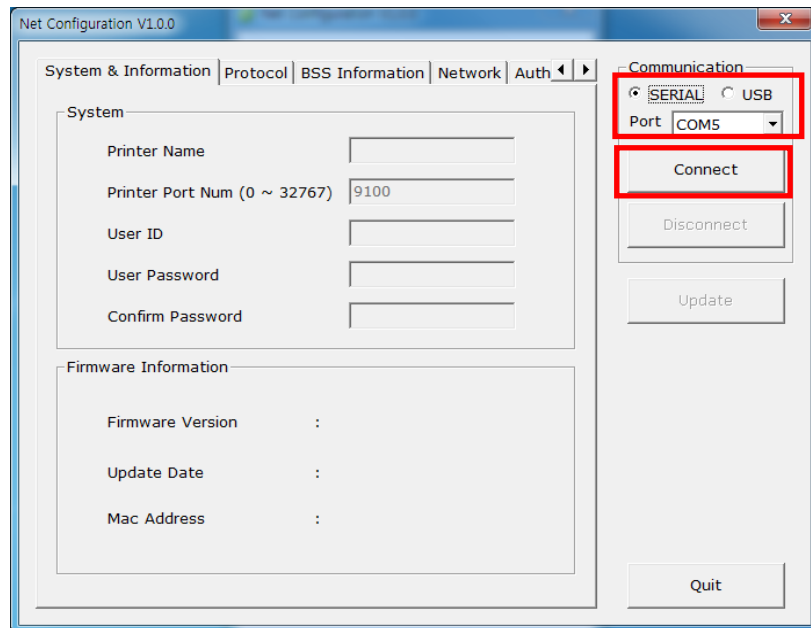
4-1 Serial / USB Configuration

Connect to Serial/USB cable, then click “Serial/USB Configuration”.



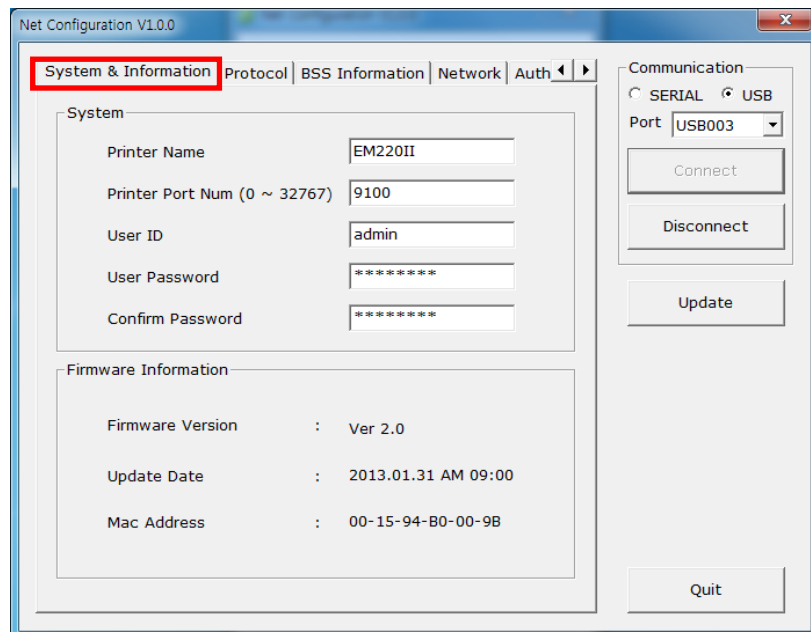
1) Choose the “Port”, then click “Connect”.

If it is properly connected, “Succeeded to printer connection” will be shown. Then the configuration of the printer will be listed.



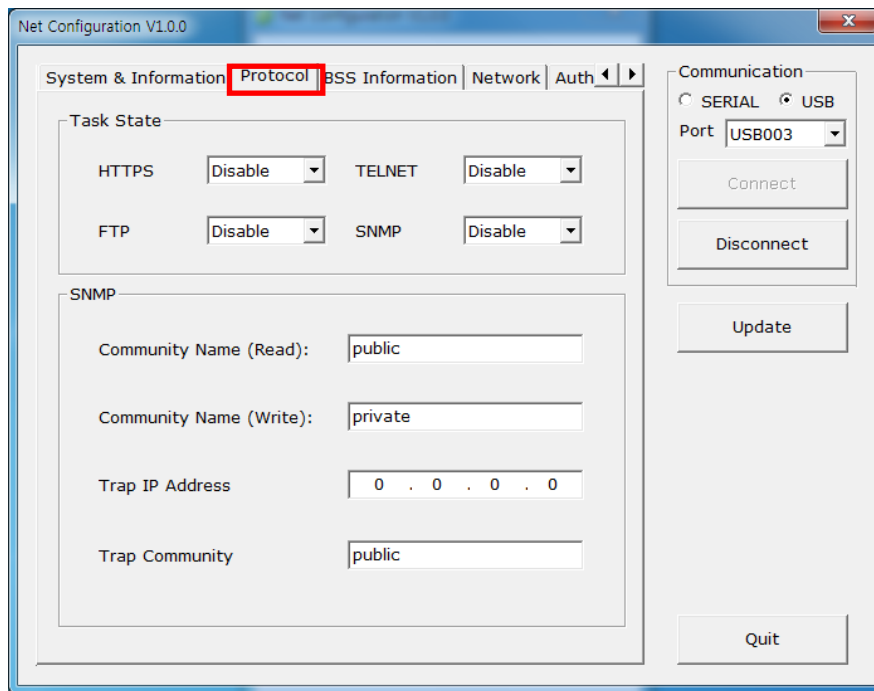
2) System & Information

Printer Name, Printer Port, User ID, User password can be set.



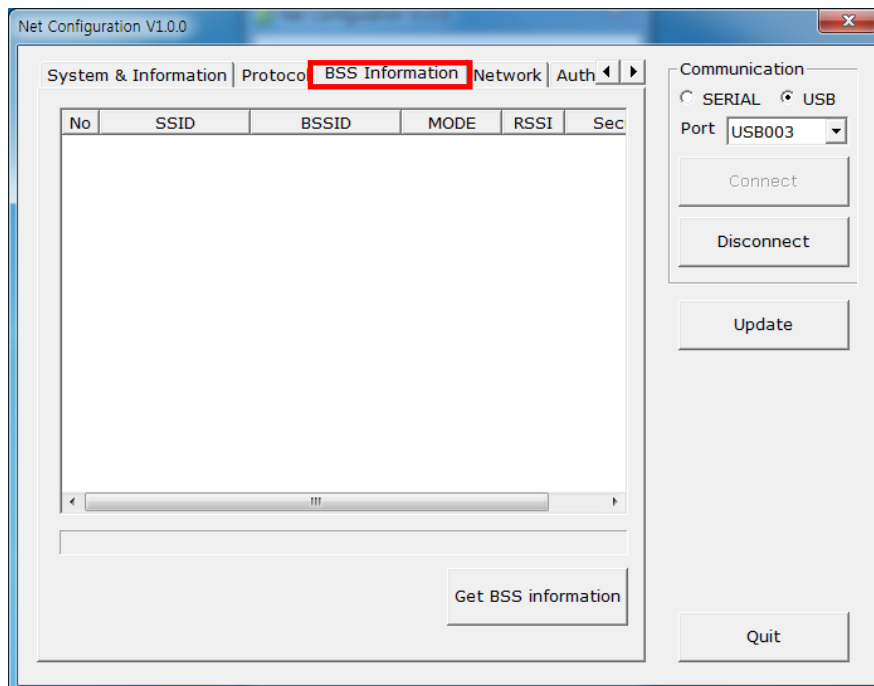
3) Protocol

You can set HTTPS, TELNET, FTP and SNMP protocol as able or disable.
SNMP can be also set.



4) BSS Information

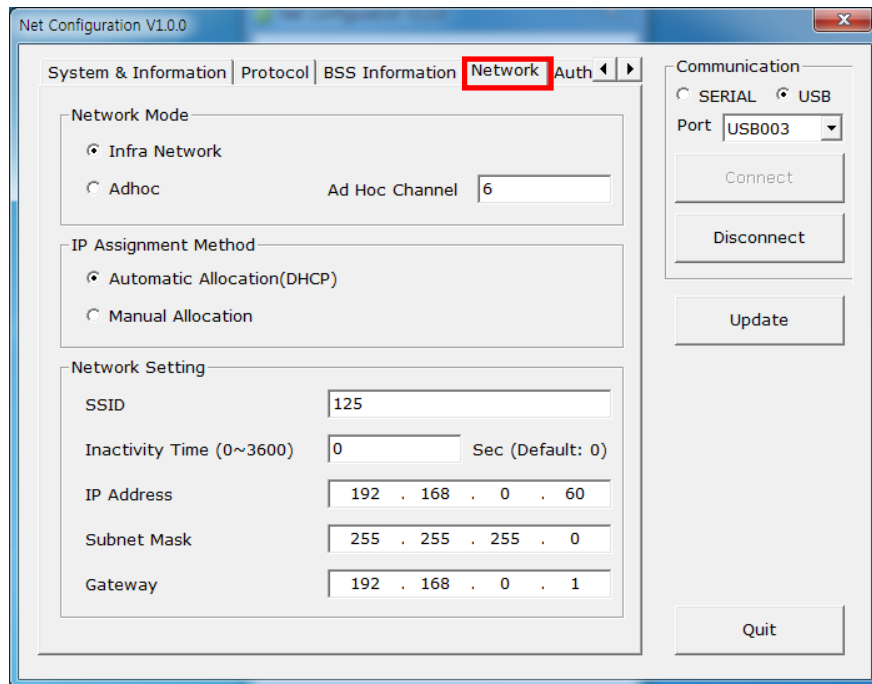
When you click "Get BSS information", close AP information will be listed.



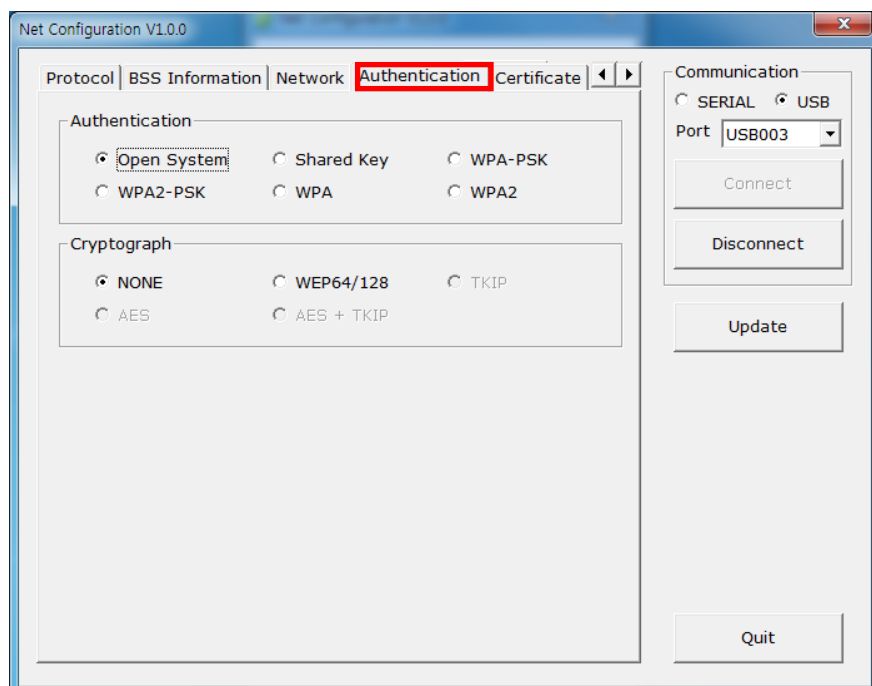
5) Network

You can set Infrastructure/Adhoc, SSID, IP, Subnetmask and Gateway.

By setting “Inactivity Time”, you can disconnect the printer to host device when the data is not transferred while inactivity time. If multiple host devices are used with one printer, “Inactivity Time” is recommended. (Other host devices are restricted to use a printer if one host device keep connecting to a printer.)

**6) Authentication**

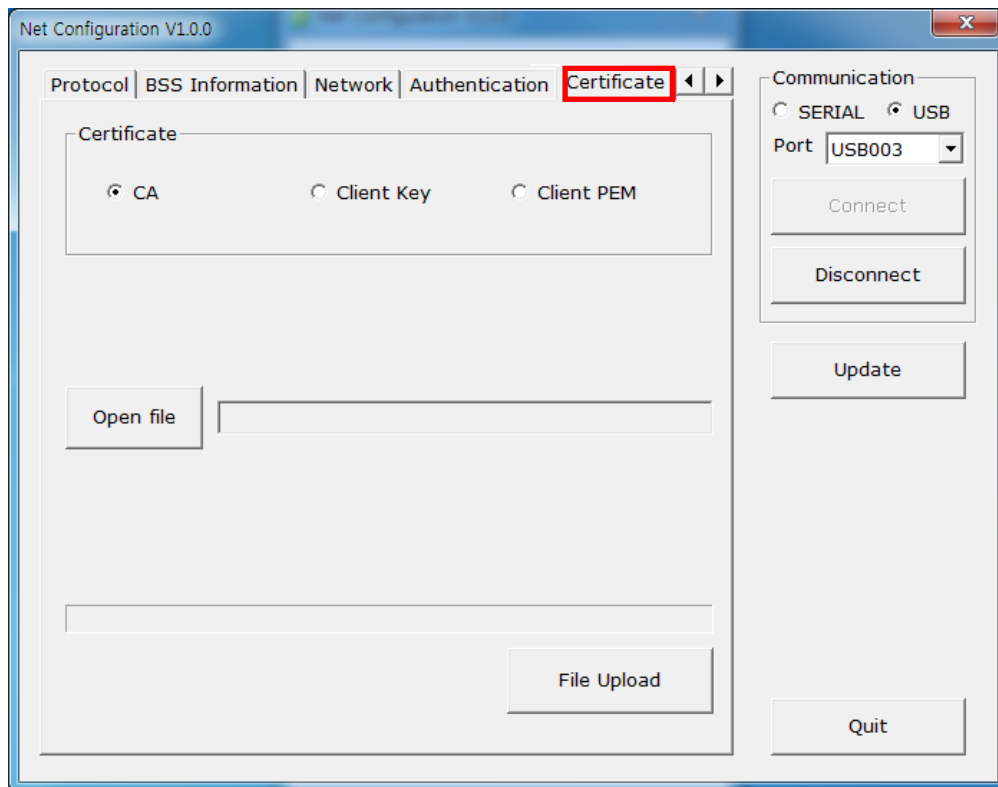
You can set Authentication and Cryptograph. If it is Infrastructure mode, you need to set Cryptograph with AP for proper connection. Then if it is Adhoc mode, you need to set Cryptograph with host device.



7) Certificate

Printer can save the certificate file for EAP-TLS certification.

When you use TLS certification, CA certificate(PEM, Client Key(KEY/PEM), and client certificate(PEM) file should be uploaded. The key size of certificate recommended is 512. If the size of certificate is more than 512, it will take some time for EAP certification.

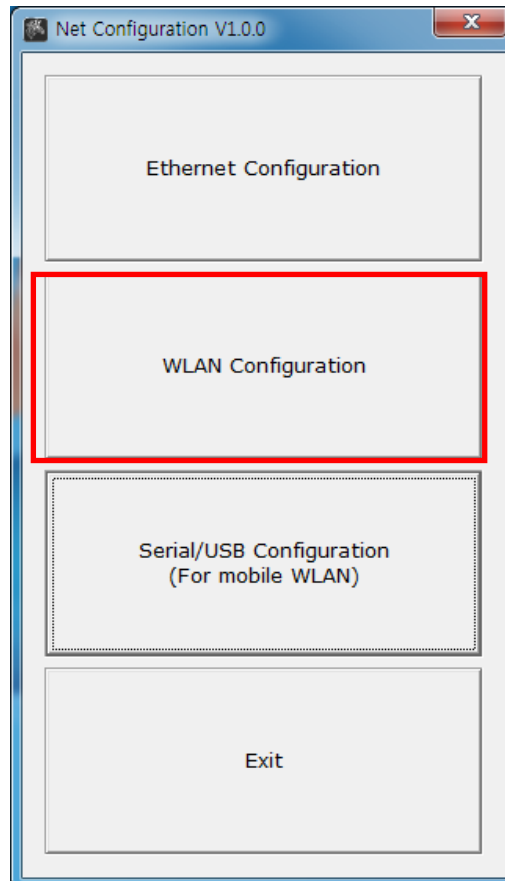


4-2 WLAN Configuration

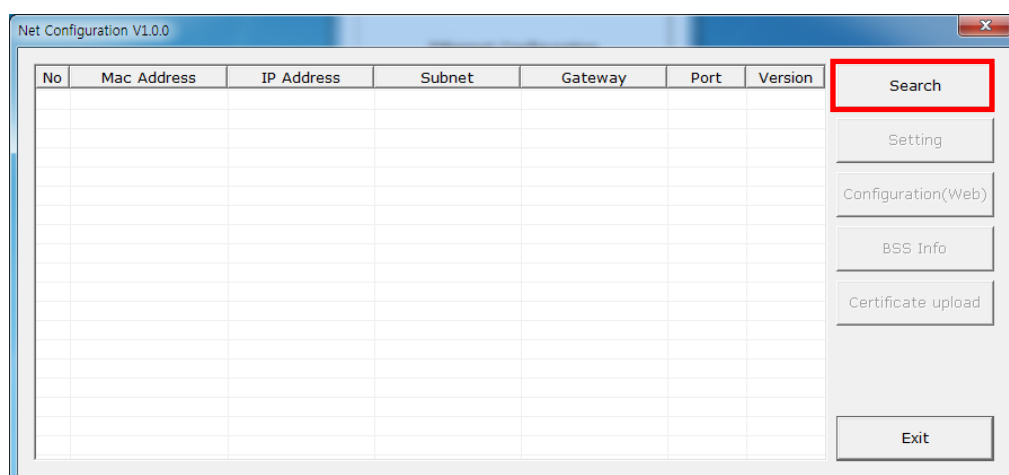
To set the WLAN, PC and Printer should be in a same network.

(AP, PC, Printer network mode, SSID, encryption, authentication has to be set the same way)

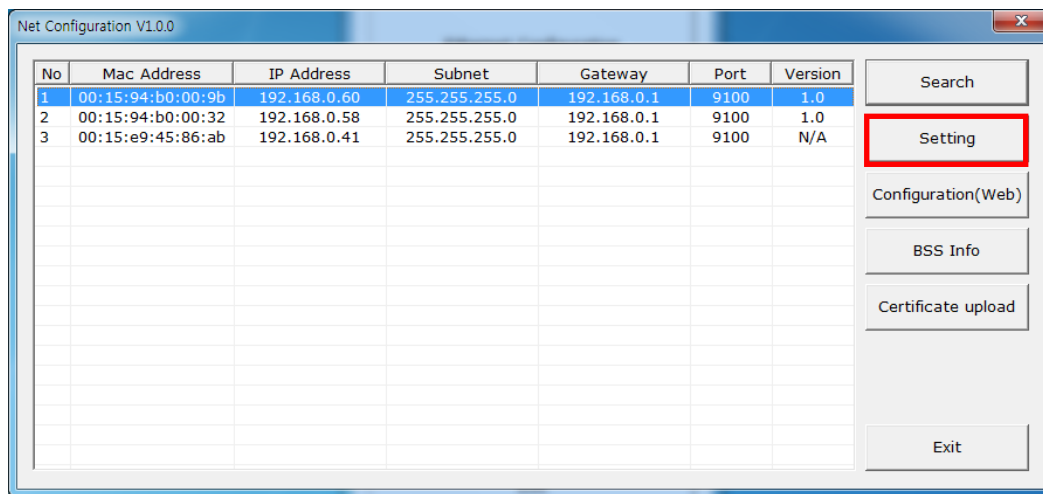
Connect to WLAN cable, then click “WLAN Configuration”.



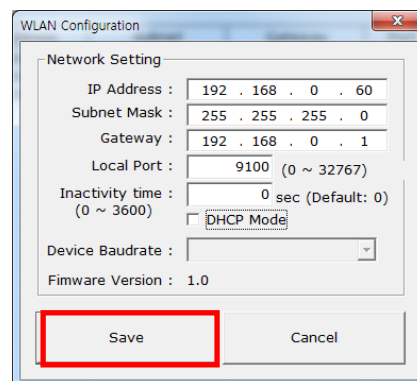
- 1) When you press the Search button, the printer connected to the network will be shown in the list.



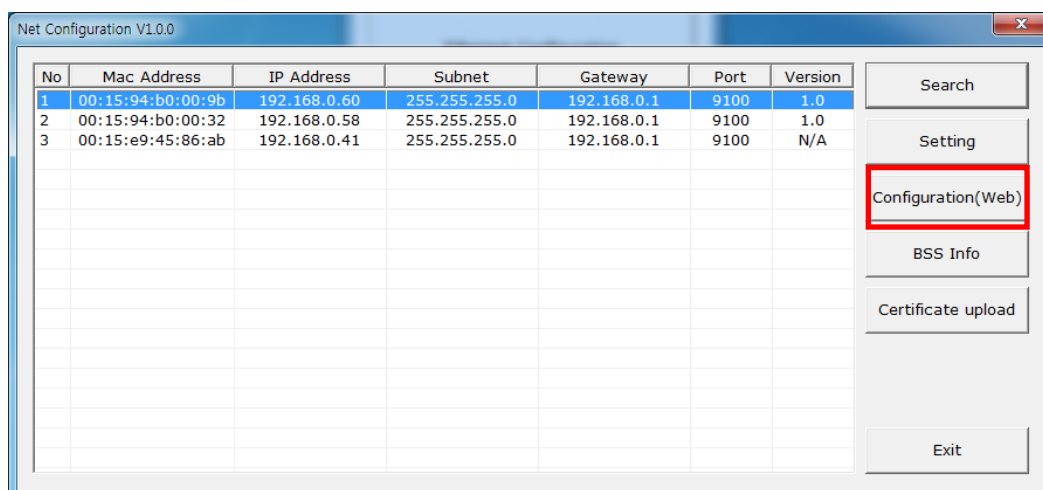
- 2) Select the printer from the list and press the [Setting] button, and then the following window for changing the WLAN settings will pop up.



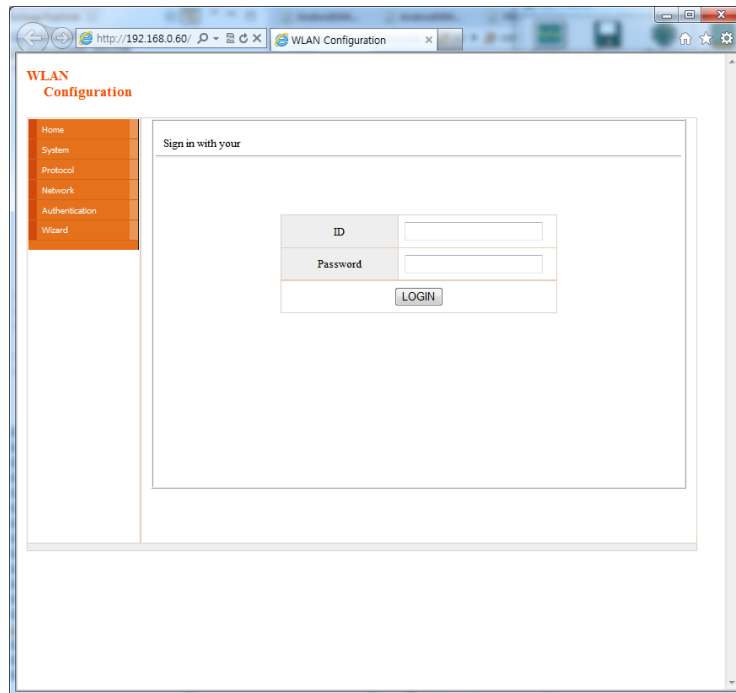
- 3) Enter the proper IP Address, Subnet Mask, and Gateway of the currently used network, and then click the [Save] button to save the settings.
(Device Baudrate setting, which is used for other models, is not necessary for our printer.)



- 4) Select the printer from the list and press the [Configuration(web)] button, and then the Login window will pop up.

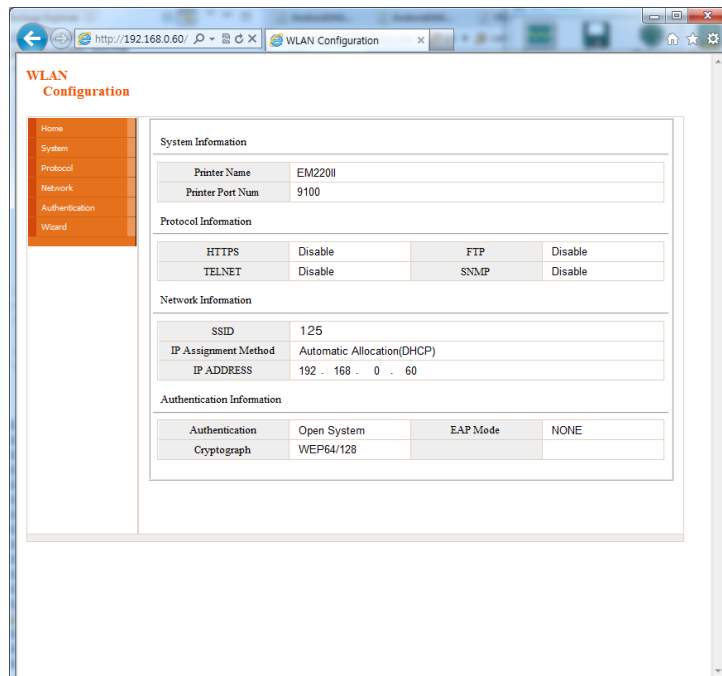


- 5) Enter the ID and Password set in the printer, and click OK.
(Default settings are ID: "admin", Password: "password")



The screenshot shows a web browser window with the address bar displaying "http://192.168.0.60/" and the title "WLAN Configuration". The page has a sidebar menu with options: Home, System, Protocol, Network, Authentication, and Wizard. The main content area is titled "WLAN Configuration" and "Sign in with your". It contains a login form with fields for "ID" and "Password", and a "LOGIN" button.

- 6) When you log in, you will see the web browser for changing the WLAN settings as shown below.



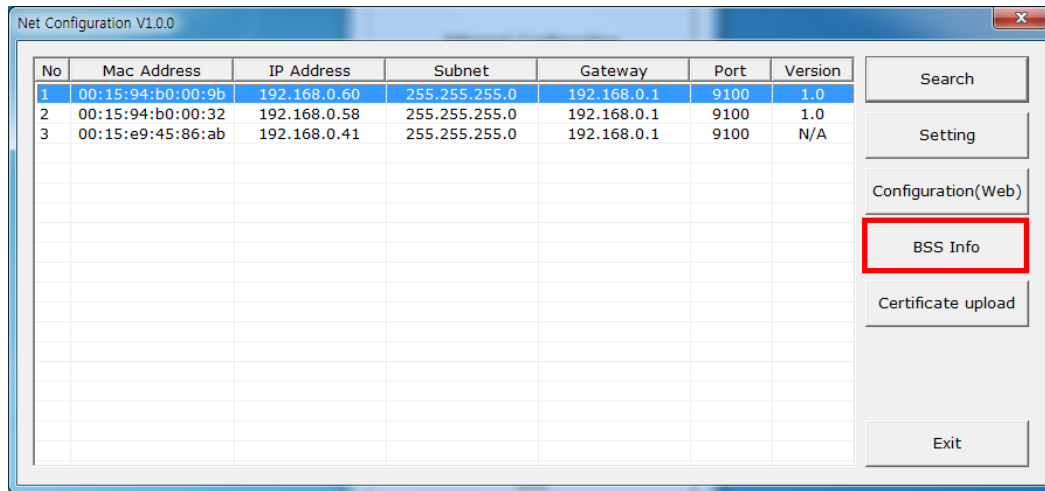
The screenshot shows the same web browser window, but now displaying the configuration page. The sidebar menu is the same. The main content area is titled "WLAN Configuration" and contains several sections:

- System Information**
 - Printer Name: EM220II
 - Printer Port Num: 9100
- Protocol Information**

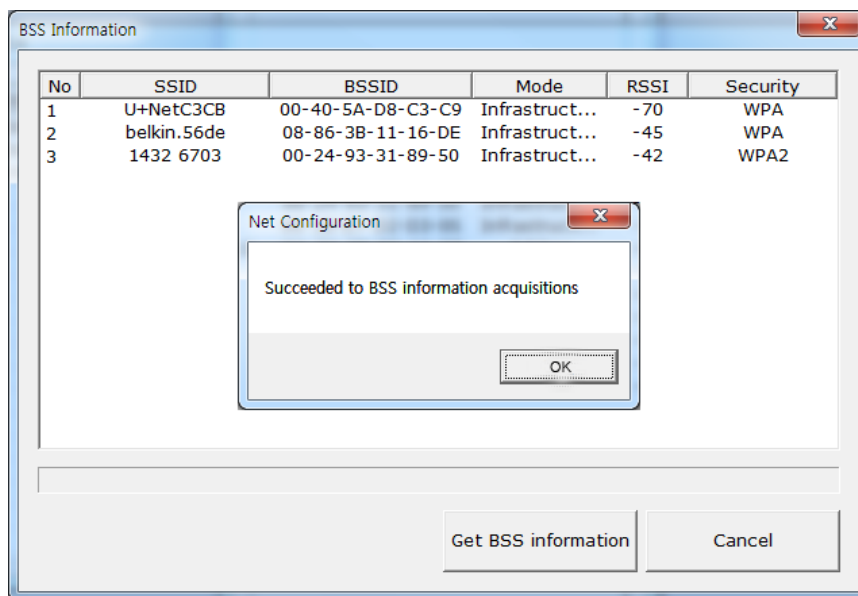
HTTPS	Disable	FTP	Disable
TELNET	Disable	SNMP	Disable
- Network Information**
 - SSID: 125
 - IP Assignment Method: Automatic Allocation(DHCP)
 - IP ADDRESS: 192 . 168 . 0 . 60
- Authentication Information**

Authentication	Open System	EAP Mode	NONE
Cryptograph	WEP64/128		

- 7) You can search for the information of the wireless network by pressing the BSS Info button.



- 8) When you press the BSS Info button, information about the SSID, BSSID, Network Model, and Encryption information of the network in close range will be shown as follows.

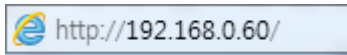


4-3 Web browser

Our printer supports the security enhanced https protocol as well as http. When SSL of the webserver of our printer is enabled, you must enter the address with “https” instead of “http” in the address bar to connect to the web-server.

(Automatic connection will be made when connecting with the configuration tool.)

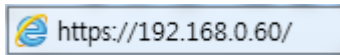
When SSL of the web-server is enabled,



* a security warning window will pop when you try to connect with https.

Accept the certificate provided by the printer in the warning window and continue.

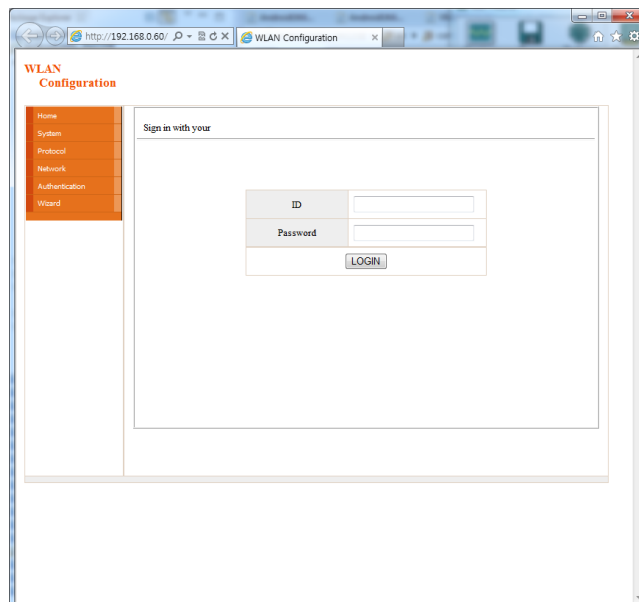
When SSL of the web-server is disabled,



1) Enter the IP address of the printer in the address bar, and the following login window will pop up.

Enter the ID and Password set for the printer, and then click [OK]

(Default setting values are ID: “admin”, Password: “password”.)



2) When the ID and Password match the ones registered in the printer, the following window will be opened.

WLAN configuration is possible.

Home, System, Protocol, Network (WLAN), and Authentication can be configured from this window, and the wizard mode is also provided for easier step by step configuration.

WLAN Configuration

Home
System
Protocol
Network
Authentication
Wizard

System Information

Printer Name	EM220II
Printer Port Num	9100

Protocol Information

HTTPS	Disable	FTP	Disable
TELNET	Disable	SNMP	Disable

Network Information

SSID	125
IP Assignment Method	Automatic Allocation(DHCP)
IP ADDRESS	192 . 168 . 0 . 60

Authentication Information

Authentication	Open System	EAP Mode	NONE
Cryptograph	WEP64/128		



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