

# **Modbus Web Manager**

## User Manual

Including

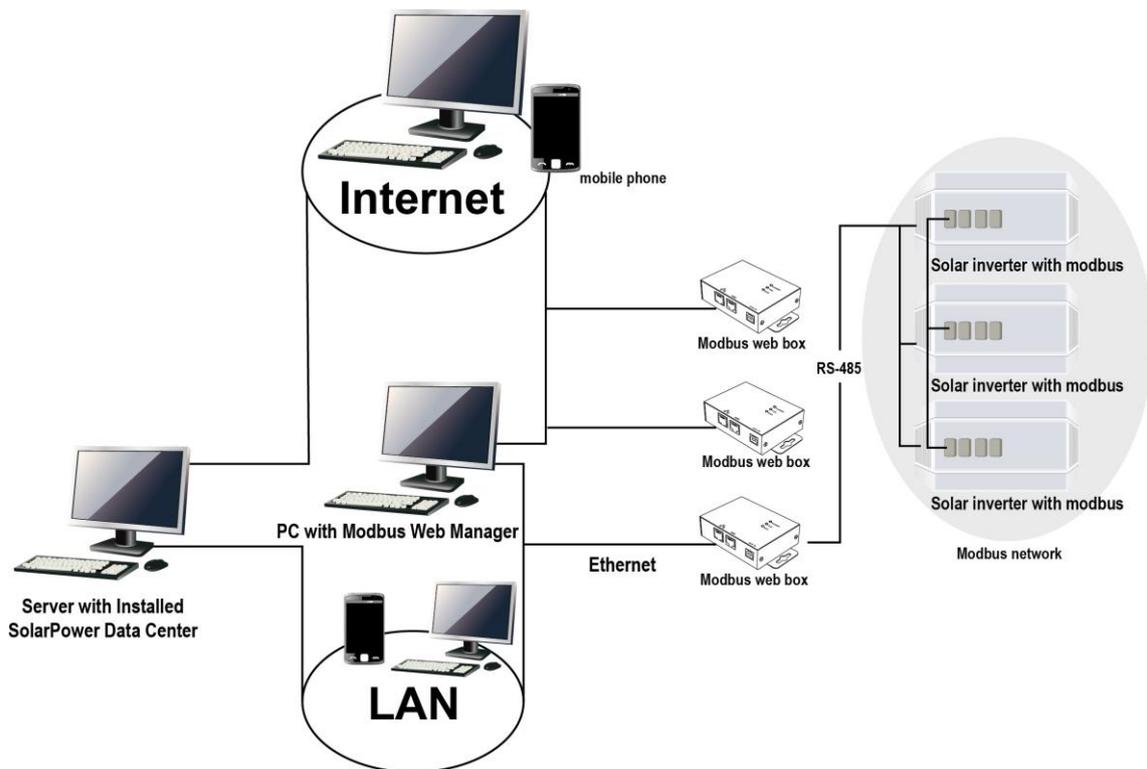
- Modbus Web Manager
- Webpage of Modbus web box

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# 1. Introduction

Modbus Web Manager is a management and monitoring software for Modbus web box. Users can search and operate all Modbus web box devices in the LAN or Internet. Then, user can double click device in Modbus Web Manager to access monitoring webpage of each Modbus web box. In the monitoring webpage, it can monitor and operate up to 247 modbus devices. The major function of Modbus Web Manager includes parameter setting for modbus devices, password change and Modbus setting.



## 2. Install, Quick Start and Uninstall

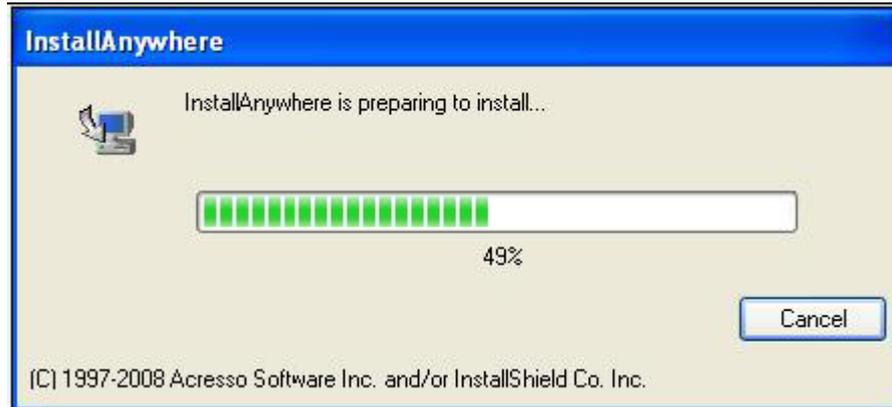
Supported OS:

- Windows 2000
- Windows XP/2003/Vista/2008/2012 (32-bit & x64-bit)
- Windows 7 (32-bit & x64-bit)
- Windows 8 (32-bit & x64-bit)

### 2.1 Software Installation

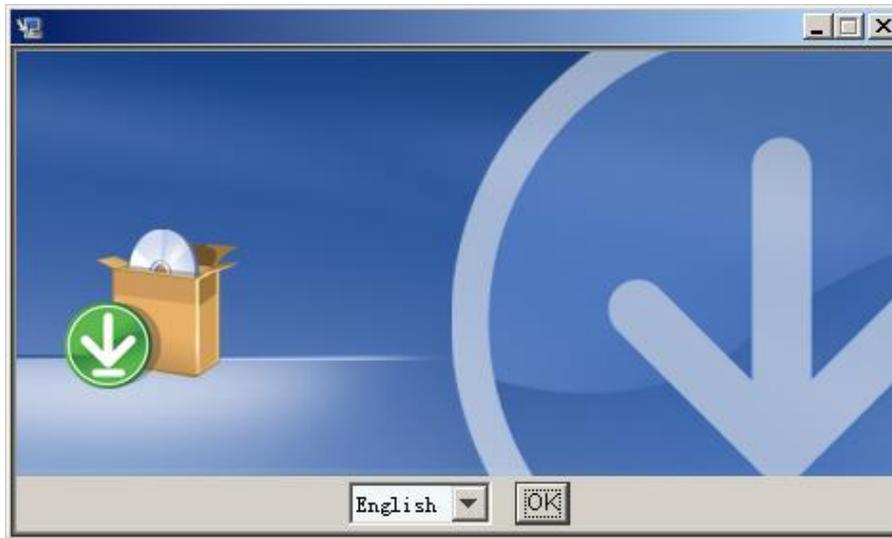
Step 1: Click install file, it will display the installation in process. Refer to the diagram

2-1.



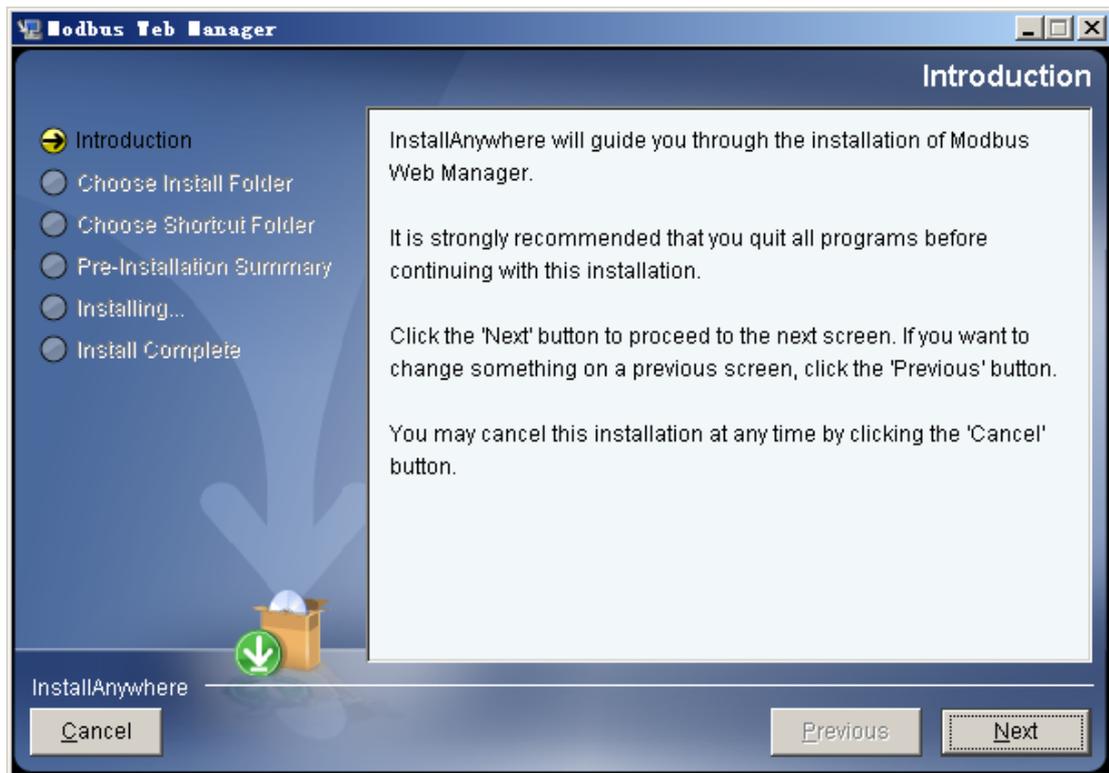
**Diagram 2-1**

Step 2: Choose wanted language and click "OK" as diagram 2-2.



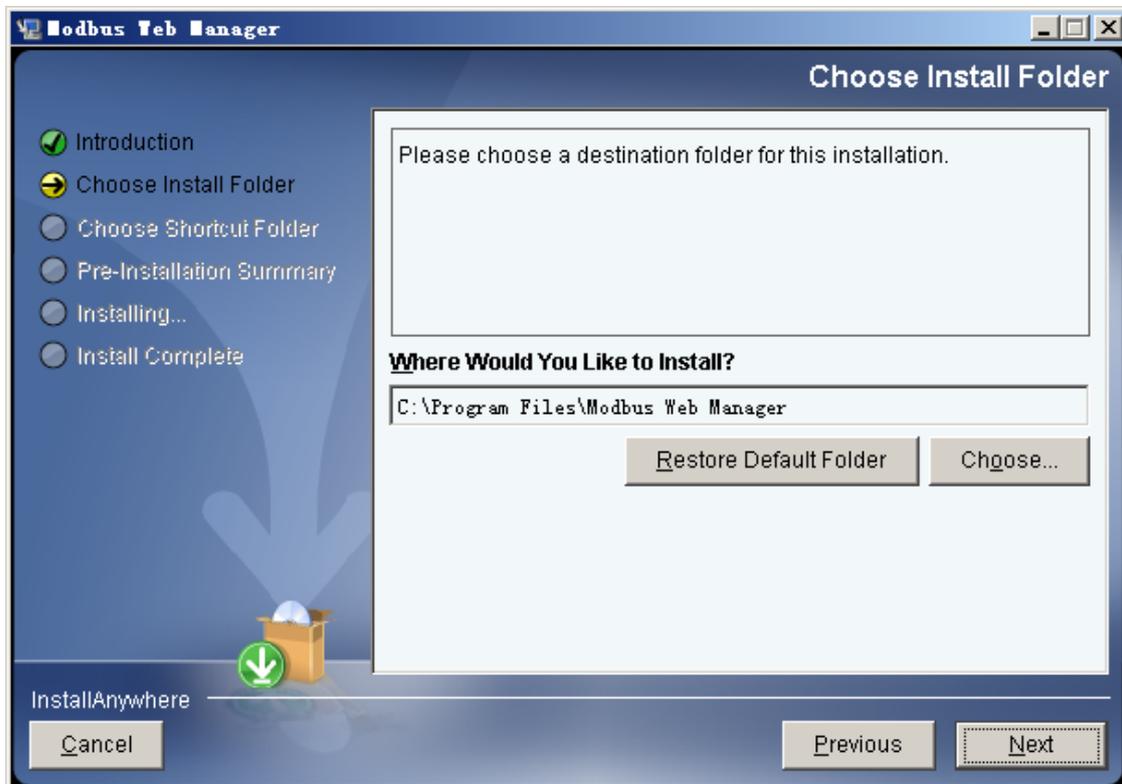
**Diagram 2-2**

Step 3: Click "Next" to proceed to the next screen as Diagram 2-3.



**Diagram 2-3**

Step 4: Click "Choose" button to change the default folder. After choosing the installed folder, click "Next" button. Refer to the following diagram 2-4.



**Diagram 2-4**

Step 5: Choose the shortcut folder and click "Next" button. Refer to the following

diagram 2-5.

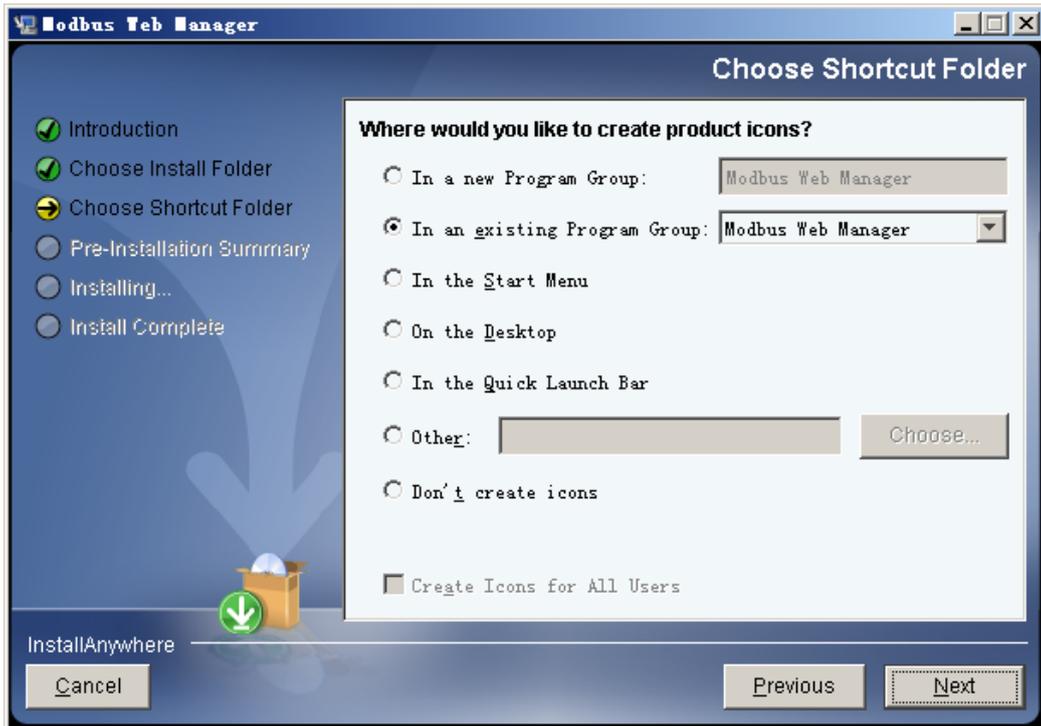


Diagram 2-5

Step 6: It will display the software summary before installation. Click "Install" button to start the installation and refer to Diagram 2-6.

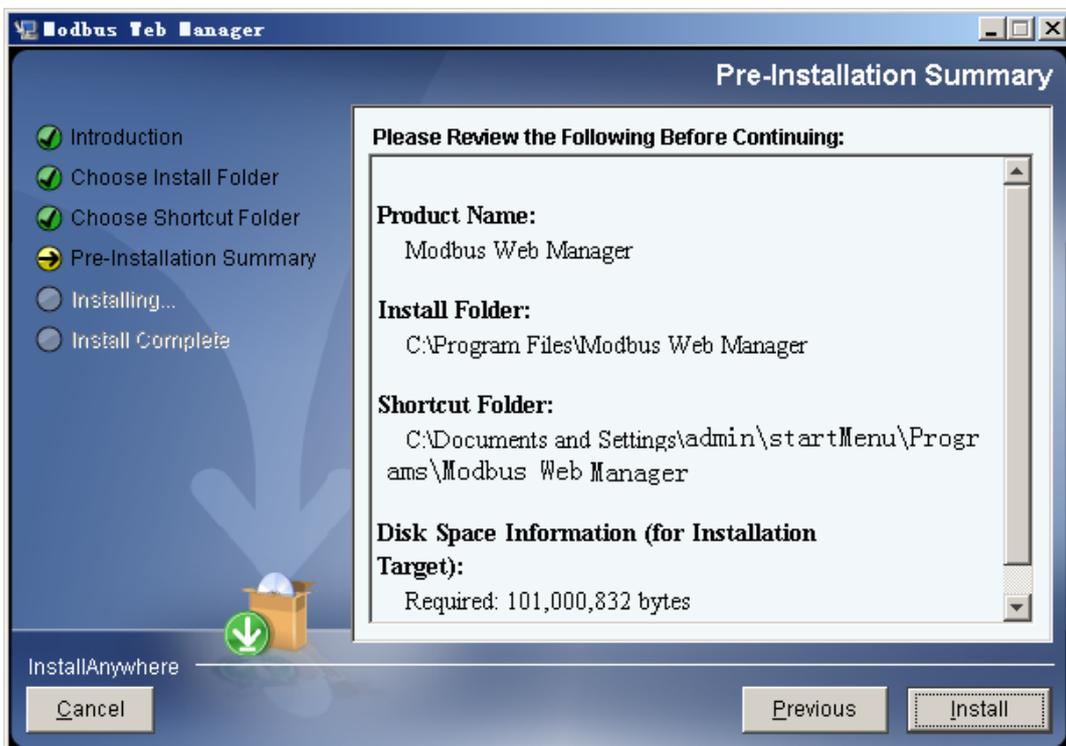
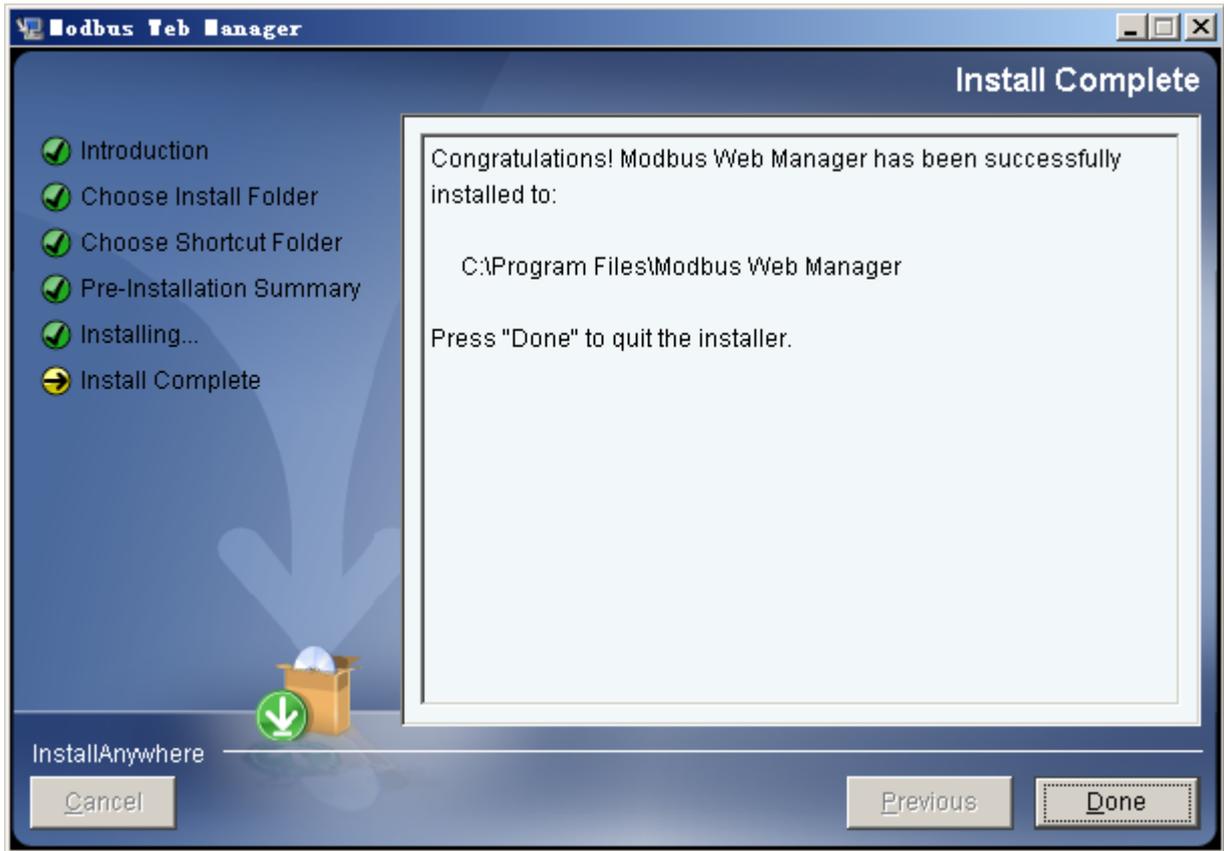


Diagram 2-6

Step 7: Click "Done" button to confirm the installation completely.

Refer to Diagram 2-7.



**Diagram 2-7**

**Note:** Please uninstall the previous version before install the new version software.

## 2.2 Software Quick Start

The Installer will leave a shortcut icon on your desktop. Simply click the shortcut. Then it will start the software. Refer to below diagram. Or, click Start Menu >> All Programs >> Modbus Web Manager >> Modbus Web Manager.



**Shortcut icon**

## 2.3 Software Uninstall

**Note:** Before uninstall software, you must stop all software programs first and then log out as "Administrator"! Otherwise it can't be uninstalled completely.

Please choose Start >> All Programs >> SNMP Web Manager >> Uninstall. Then follow the on-screen instruction to uninstall the software.

# 3. Modbus Web Manager GUI

The GUI has four sections as marked in the illustration below:

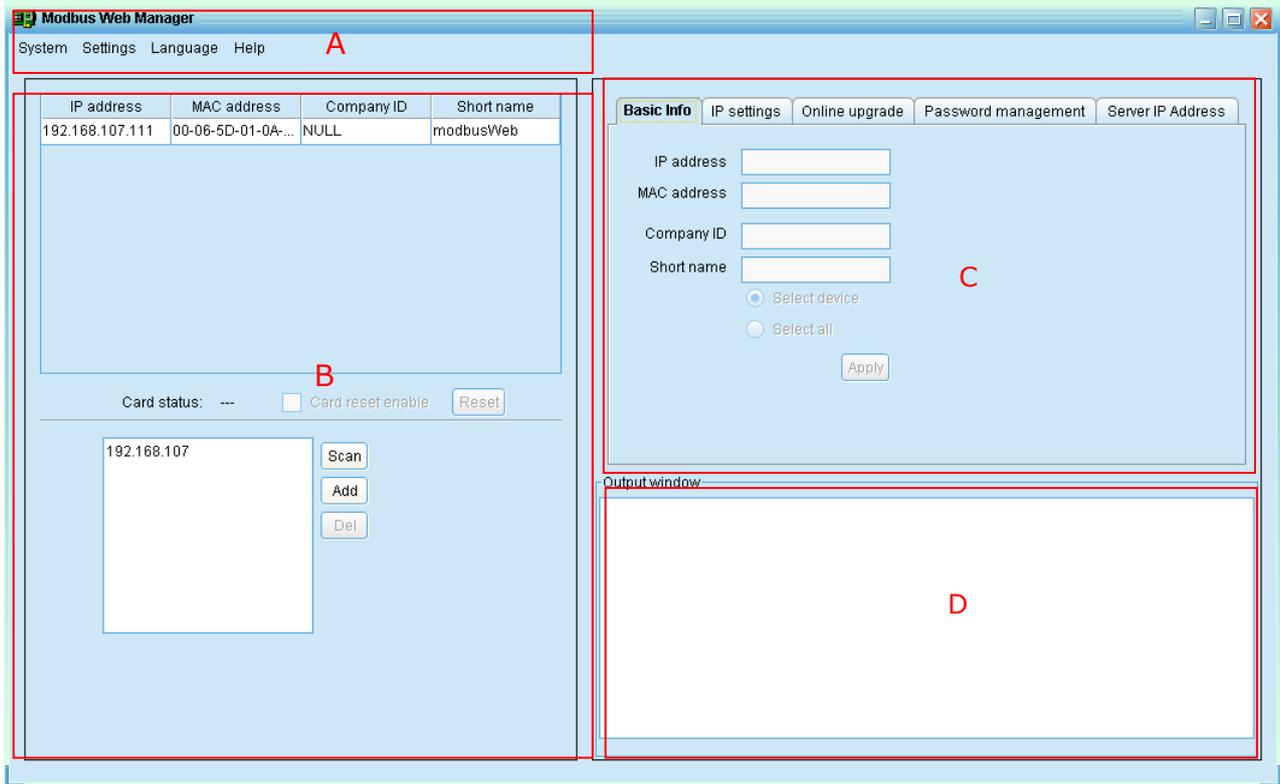


Diagram 3-1

**A. Function menu** offers complete tool-set for navigating and setting the GUI.

**B. Device list** can list down all Modbus web box devices.

**C. Configuration area** includes basic Info, IP settings, online upgrade, password management and server IP address.

**D. Output window** displays all messages for operations

## 3.1 Device List

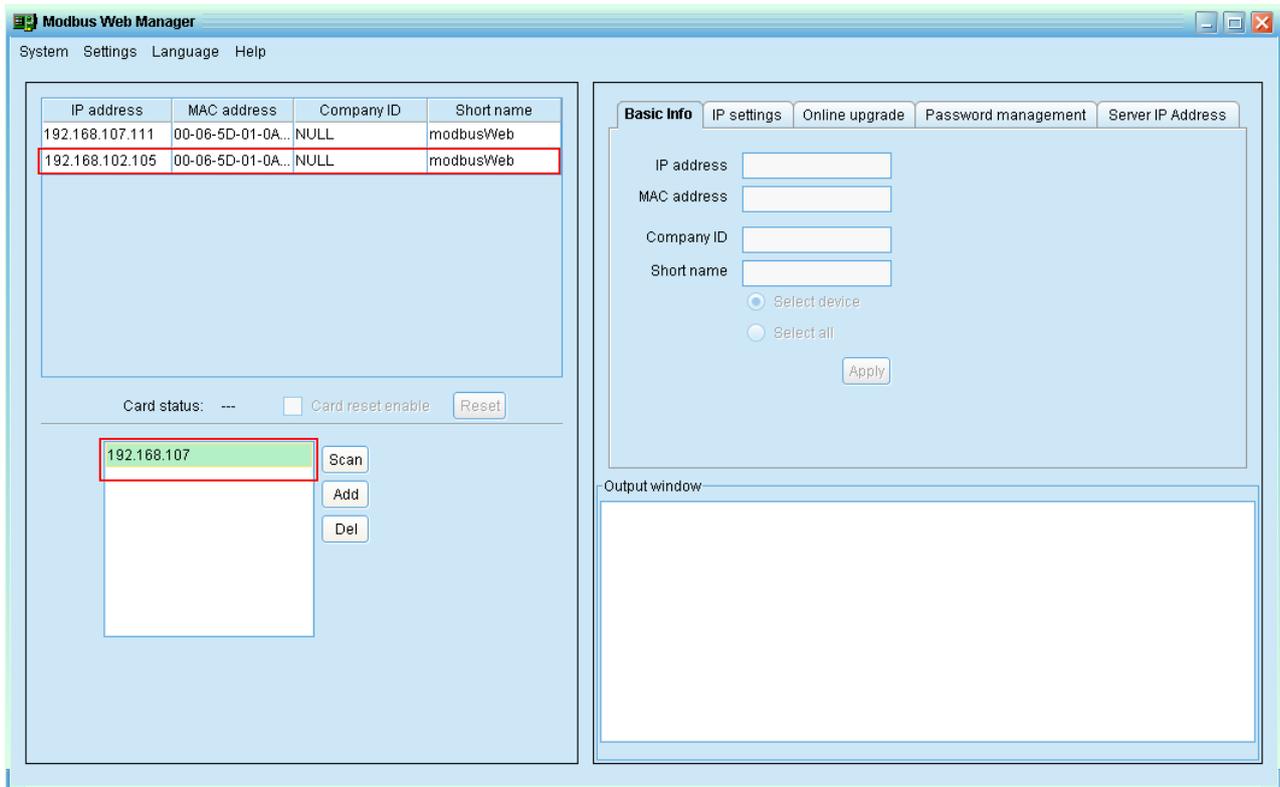
The default value in device list would be current PC IP address. For example, if IP address of current PC is "192.168.102.10", it will display "192.168.102" in list when first enabling Modbus Web Manager

## 3.2 Scan

You may enter specific IP address or IP subnet. Then, click "Scan" button to search.

- Multiscan Scan: You may find physically connected device in another IP subnet. For

example, you may use multiscan method to find the device located in 192.168.102.105 from 192.168.107 IP subnet. If so, you only can configure IP settings for this device. Refer to diagram 3-2.



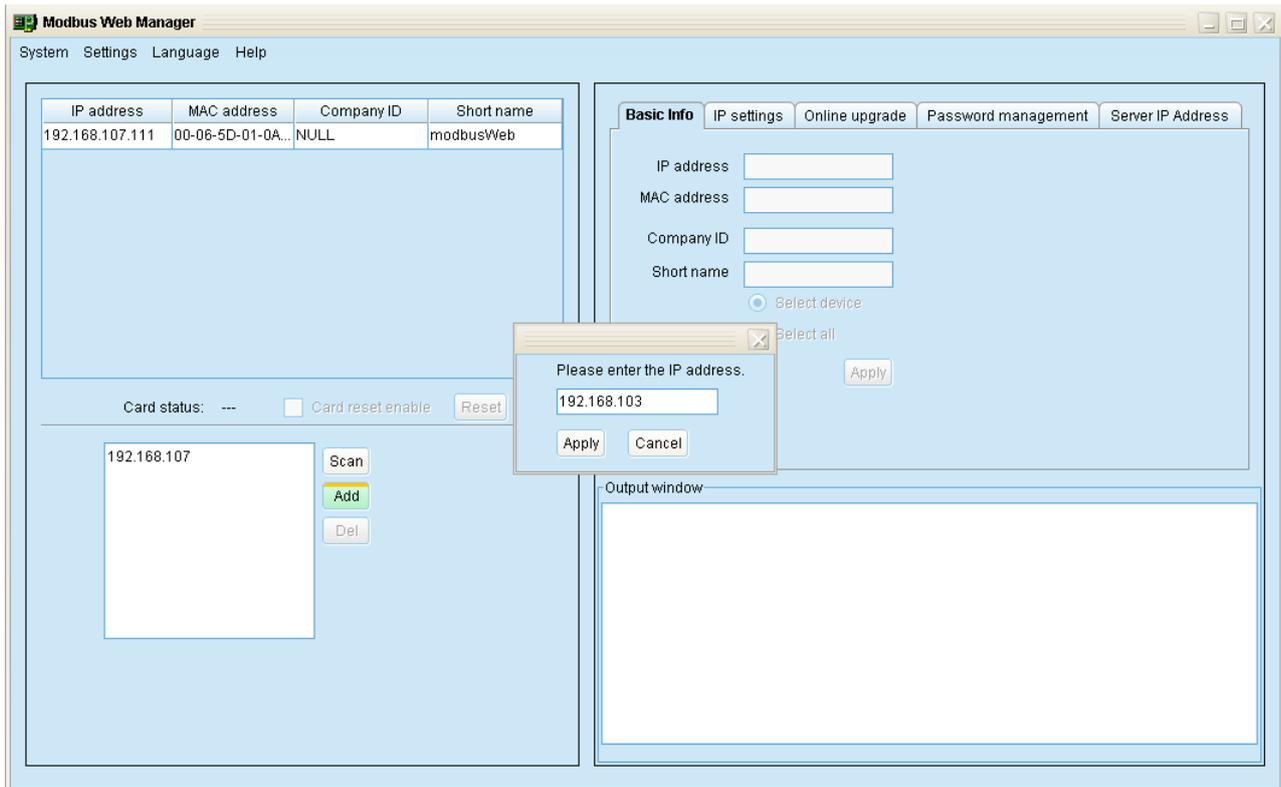
**Diagram 3-2**

- Normal scan: It can scan all devices in the same IP subnet.

**NOTE:** Modbus web box is able to be scanned via 41222, 41220 and 51220 ports in Modbus Web Manager. Please be sure that UPD protocol is allowed to through firewall via these ports.

### 3.3 Add IP Address

Click "Add" button and it will pop up a window to ask for entering specific IP address. Then, click "Apply" button to add IP address (Subnet). Refer to Diagram 3-3.



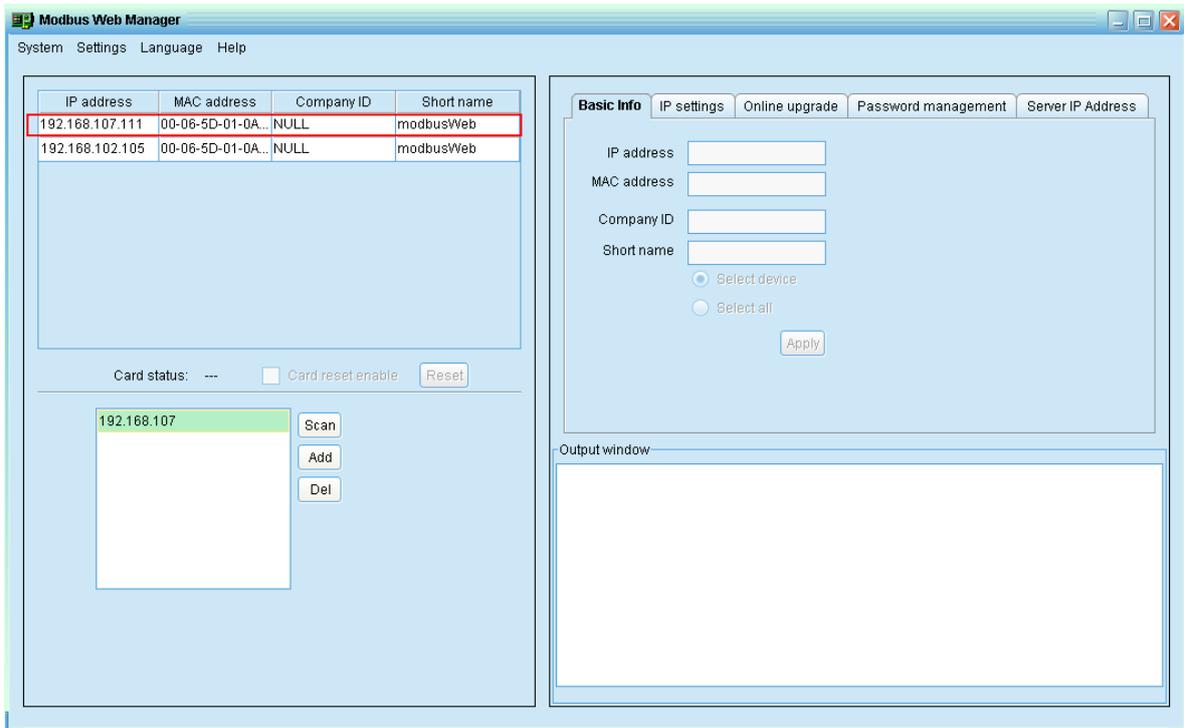
**Diagram 3-3**

### **3.4 Delete IP Address**

Select unnecessary IP address from list and click "Del" button to delete from list.

### **3.5 Open Web Server Page**

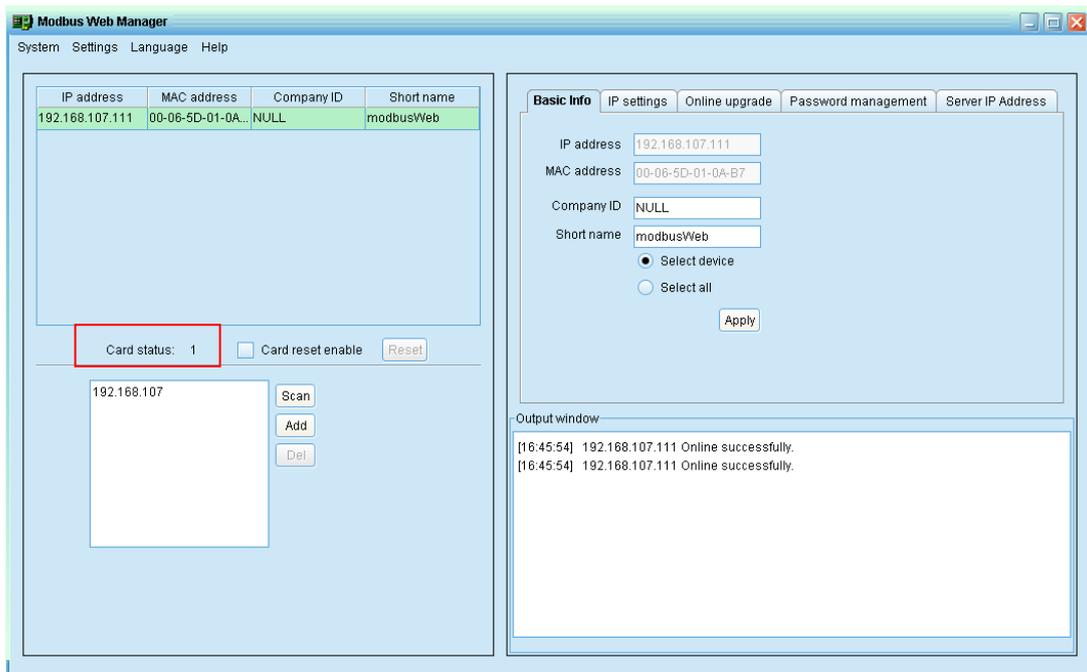
Double click device from list to open web server page. Refer to Diagram 3-4. Please also refer to Chapter 5. Modbus Webs Server Page for the details.



**Diagram 3-4**

### 3.6 Card Status

If selected one IP from IP list, it will display 0 or 1 for card status. If Modbus web box is operated normally, it will display 1. If it is requested program upgrades, it will display 0. If none is selected, it will display "---" as default. Refer to diagram 3-5.

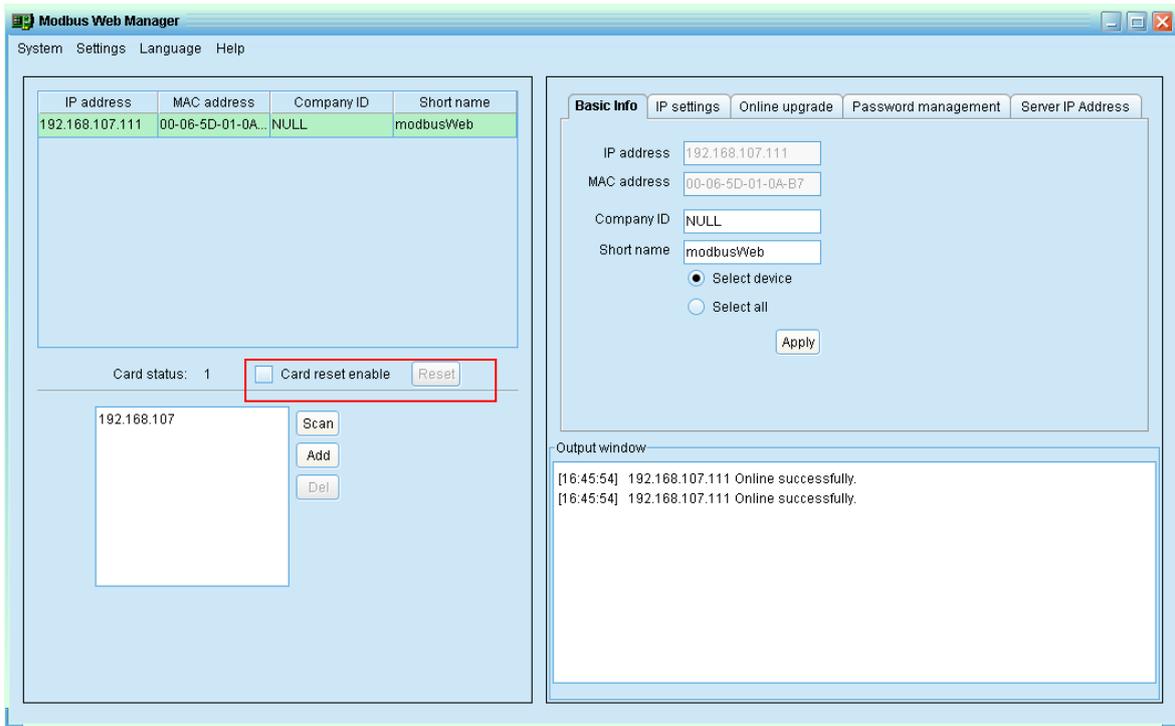


**Diagram 3-5**

### 3.7 Reset

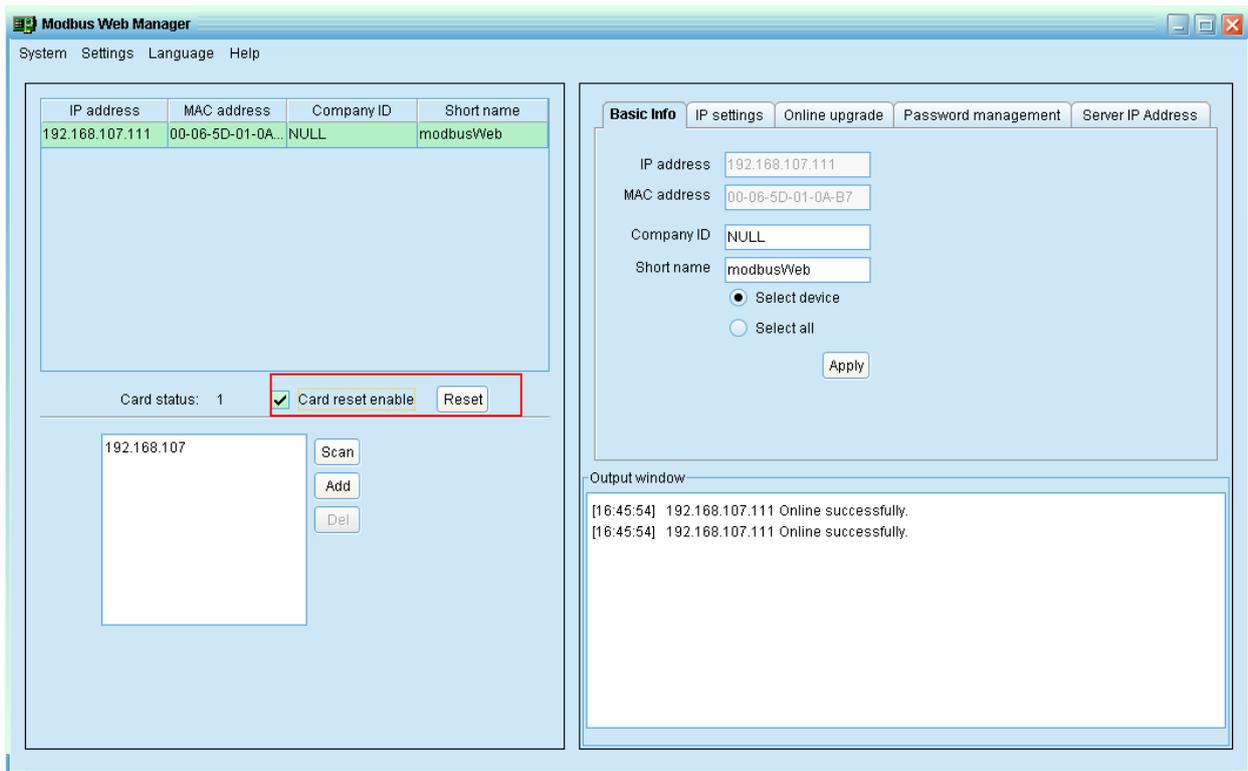
If it's necessary to reset selected device, please select the "Card reset enable" and click on the "Reset" button. Then, after confirming the login, it can be reset the device. Steps are as follows:

**Step1:** Selected device which is needed to reset from IP list. Refer to Diagram 3-6.



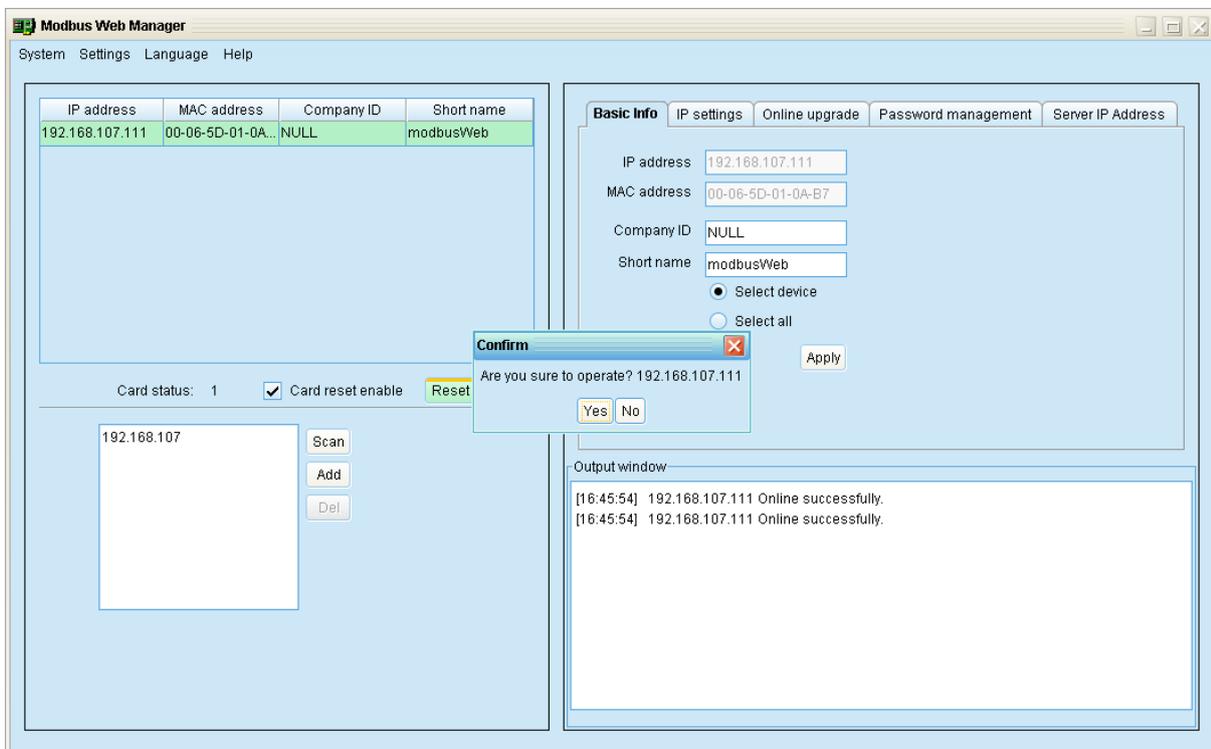
**Diagram 3-6**

**Step2:** Click "Card reset enable". Then, "Reset" button will become available to click. Refer to Diagram 3-7.



**Diagram 3-7**

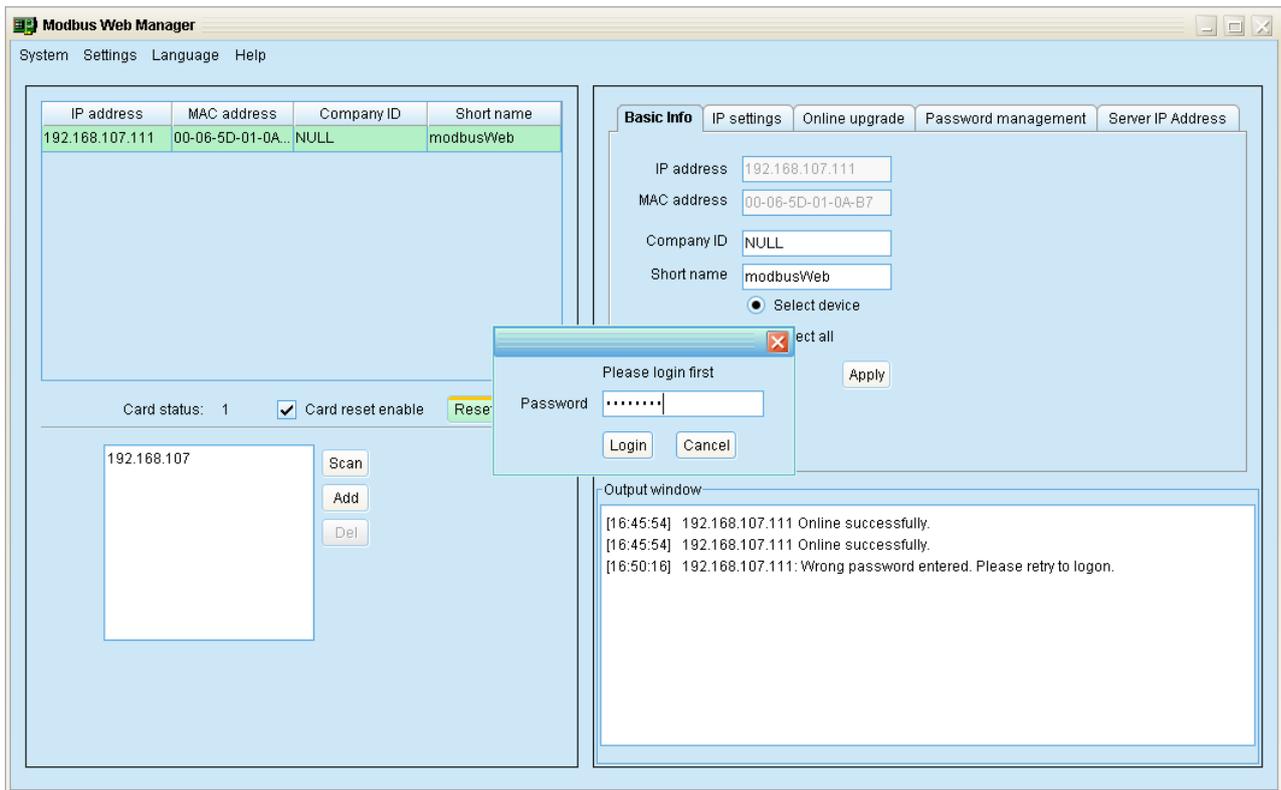
**Step 3:** Click "Reset" button and it will prompt to confirm this operation. Refer to Diagram 3-8.



**Diagram 3-8**

**Step 4:** Click "Yes". Then, it will prompt to ask log in first. If clicking "Cancel", it will stop this

operation. Refer to Diagram 3-9.



**Diagram 3-9**

**Step 5:** Please enter password and click "Login" button. Then, selected device will be reset.

# 4. Modbus Web Manager Function Menu

## 4.1 System

### 4.1.1 Login

When remote access Modbus web box devices, it's requested to verify password first. The default password is "12345678".

**Step 1:** Select system >> Login

**Step 2:** Enter default password and click "Login" button. Or click "Cancel" button to stop. Refer to Diagram 4-1.

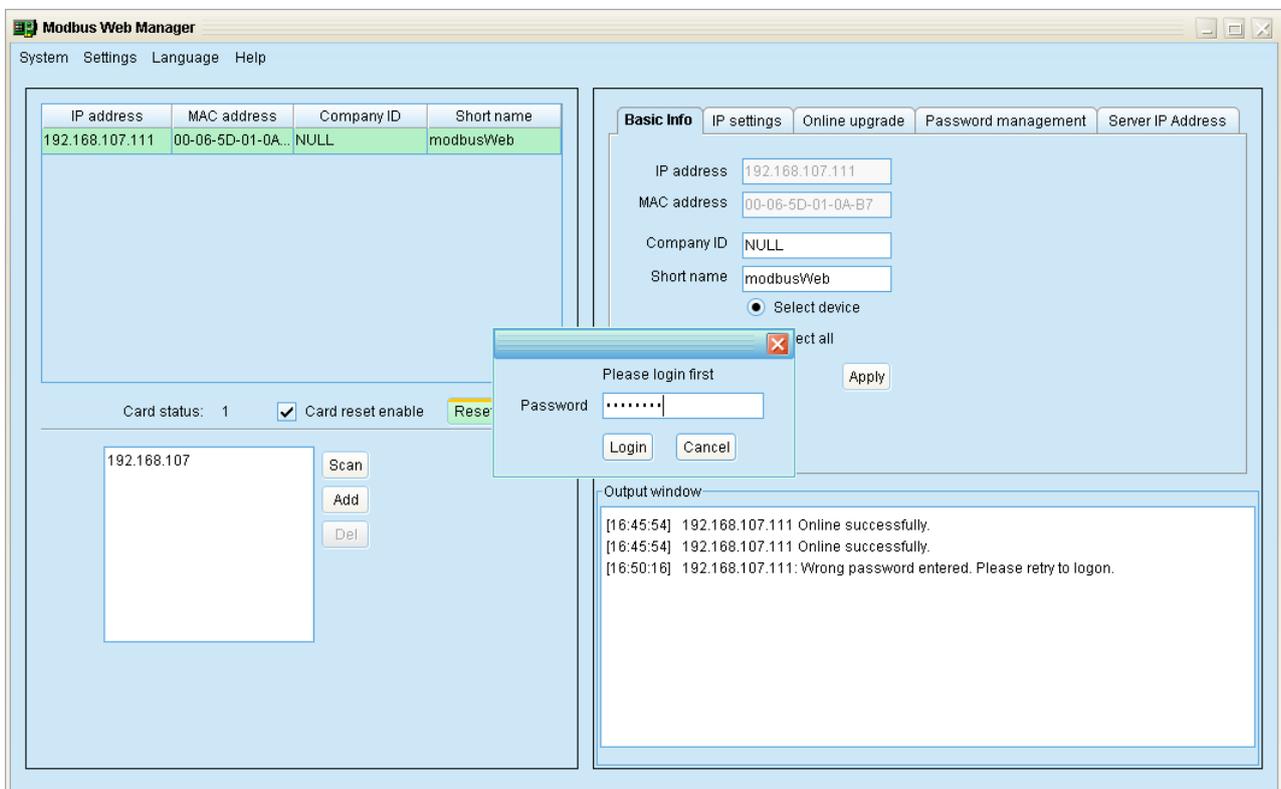


Diagram 4-1

### 4.1.2 Logout

Select System >> Logout to log out the software.

### 4.1.3 Quit

Select "Quit" to exit Modbus Web Manager.

## 4.2 Setting

### 4.2.1 Basic Info

Basic information includes IP address, Mac address, company ID and short name. You may enter company ID and short name to set up basic information. Refer to Diagram 4-2.

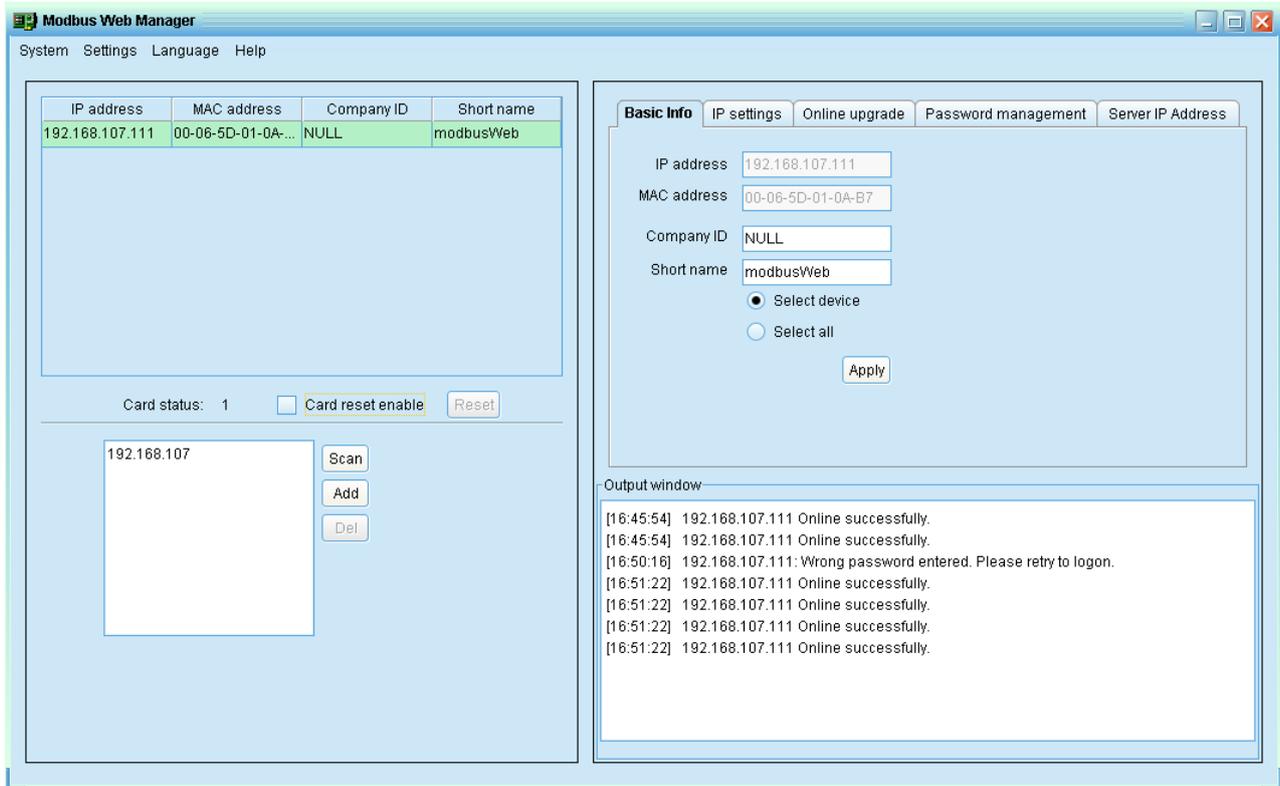


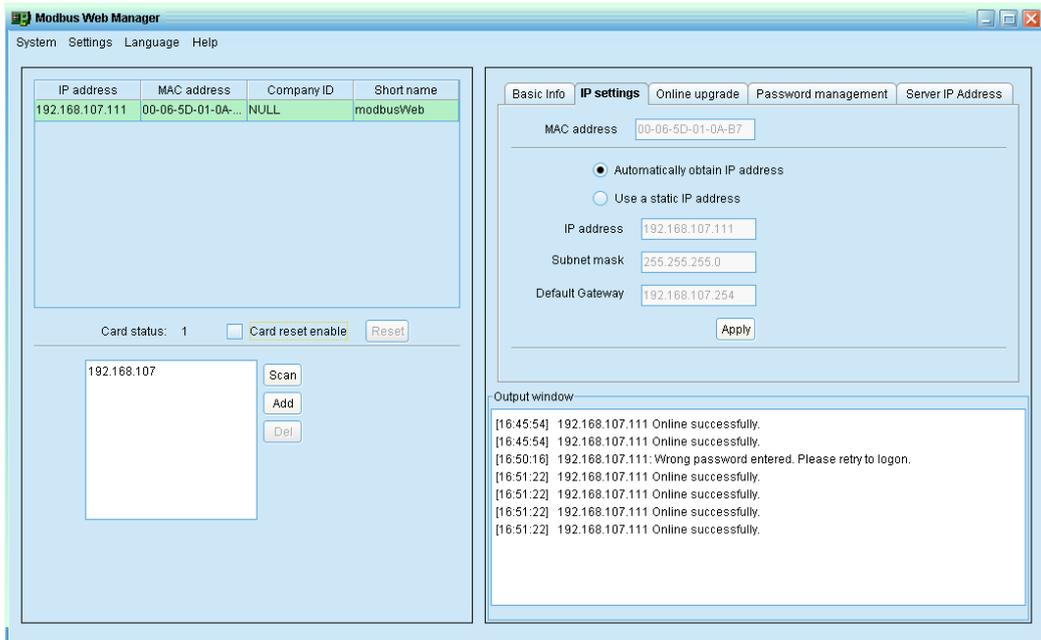
Diagram 4-2

### 4.2.1 IP Setting

There are two methods to obtain IP address:

- Automatically obtain IP address (DHCP)
- Using a static IP address

System will use DHCP as default setting. If this of service is not provided in LAN, the initial IP address will be default displayed as "192.168.102.230", Net mask as "255.255.255.0" and default gateway as "0.0.0.0". Refer to Diagram 4-3.

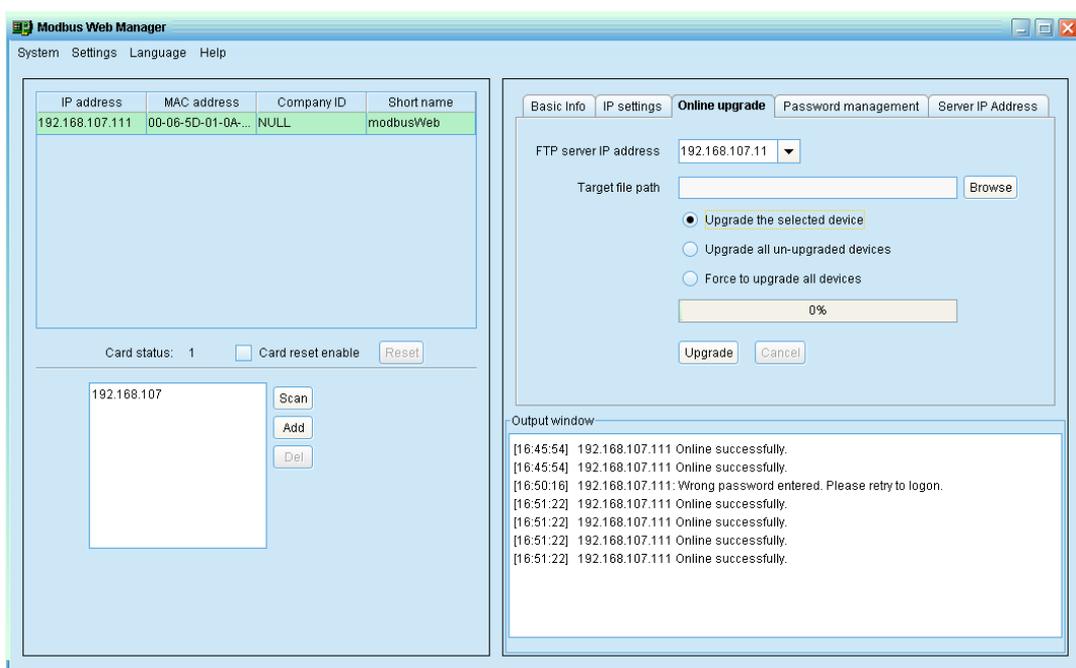


**Diagram 4-3**

## 4.2.2 Online Upgrade

There are three methods for online upgrade:

- Upgrade the selected devices: It will upgrade selected devices listed on the window.
- Upgrade all un-upgraded devices: It will only upgrade devices which are not using the same version as current one.
- Force to upgrade all devices: No matter what kinds of version are used for devices listed in the window list, it will upgrade all devices. Refer to Diagram 4-4.

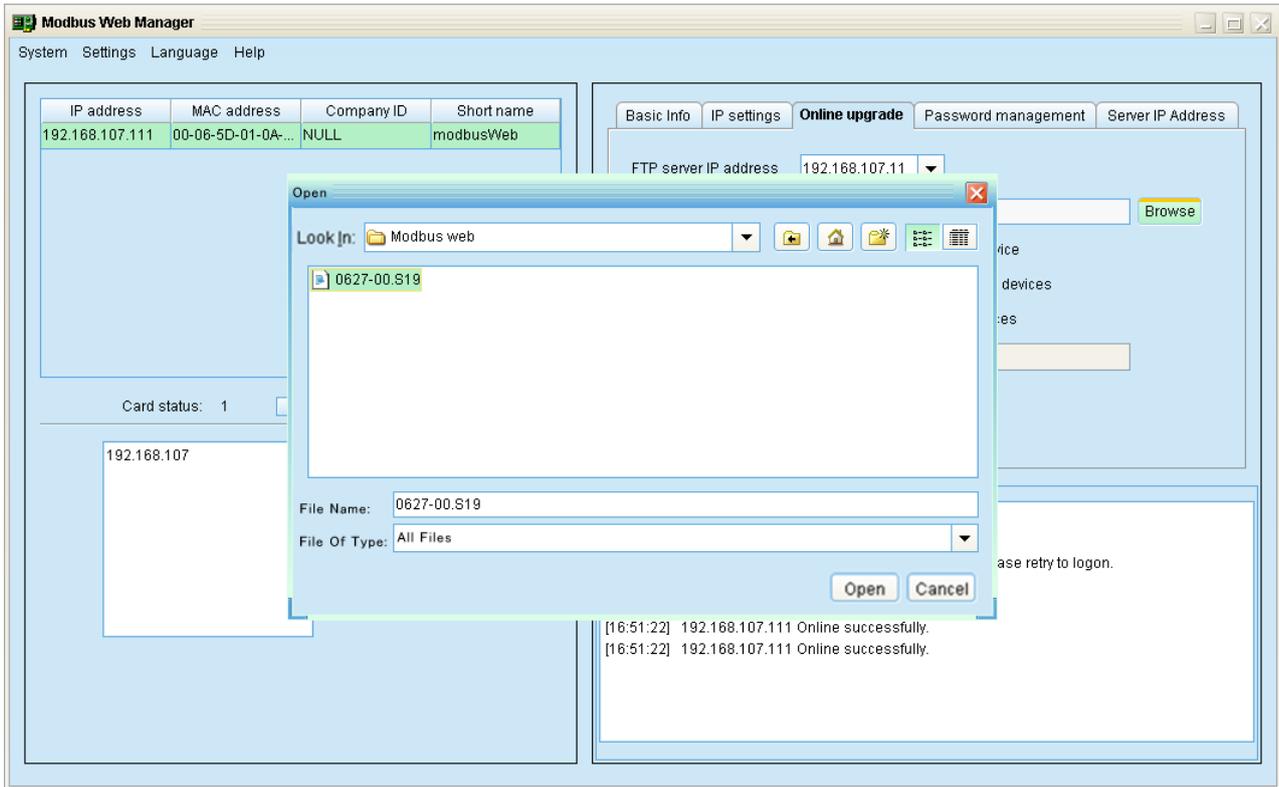


**Diagram 4-4**

**Step 1:** Enter IP address of FTP server

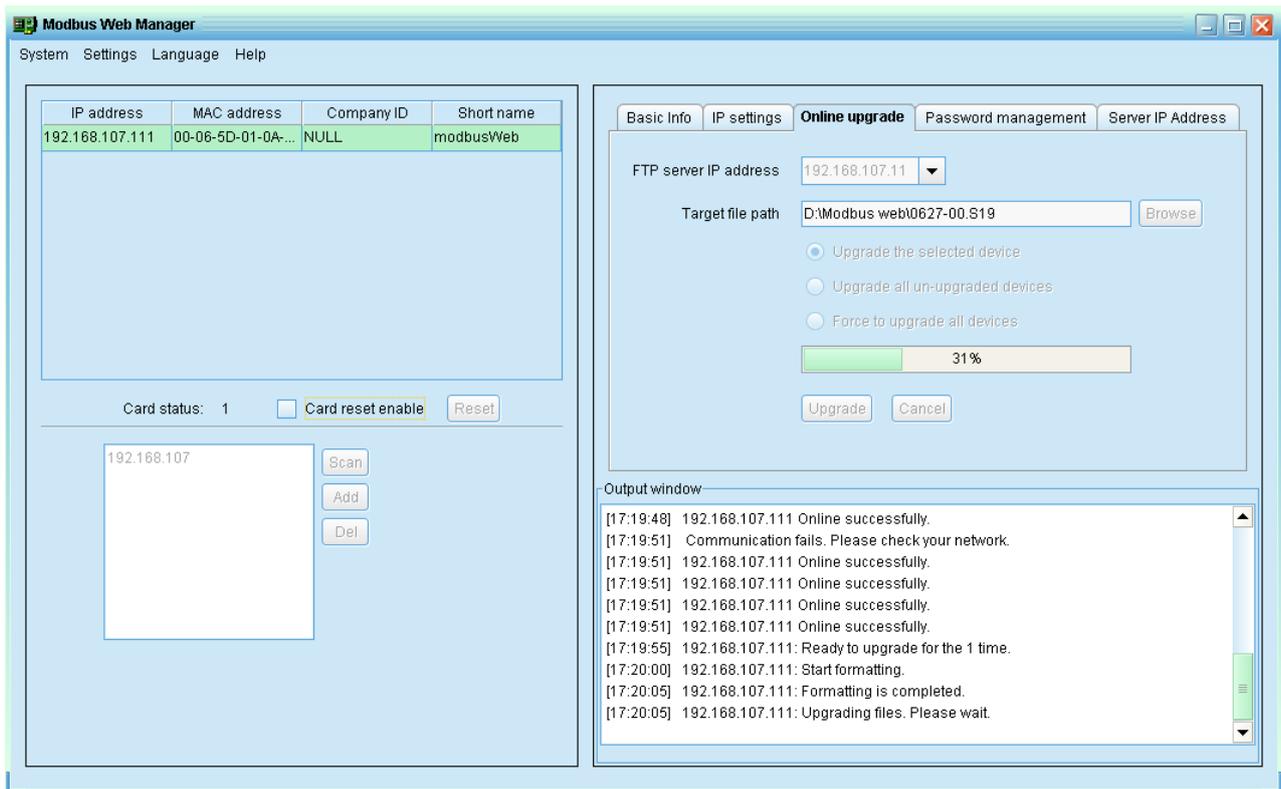
**NOTE:** If Modbus web box is located in the same LAN with current computer, simply enter IP address of current computer into the IP address column. If Modbus web box is located in the same domain with current computer, simply enter internet address of current computer.

**Step 2:** Click “Browse” to select file. Refer to Diagram 4-5.



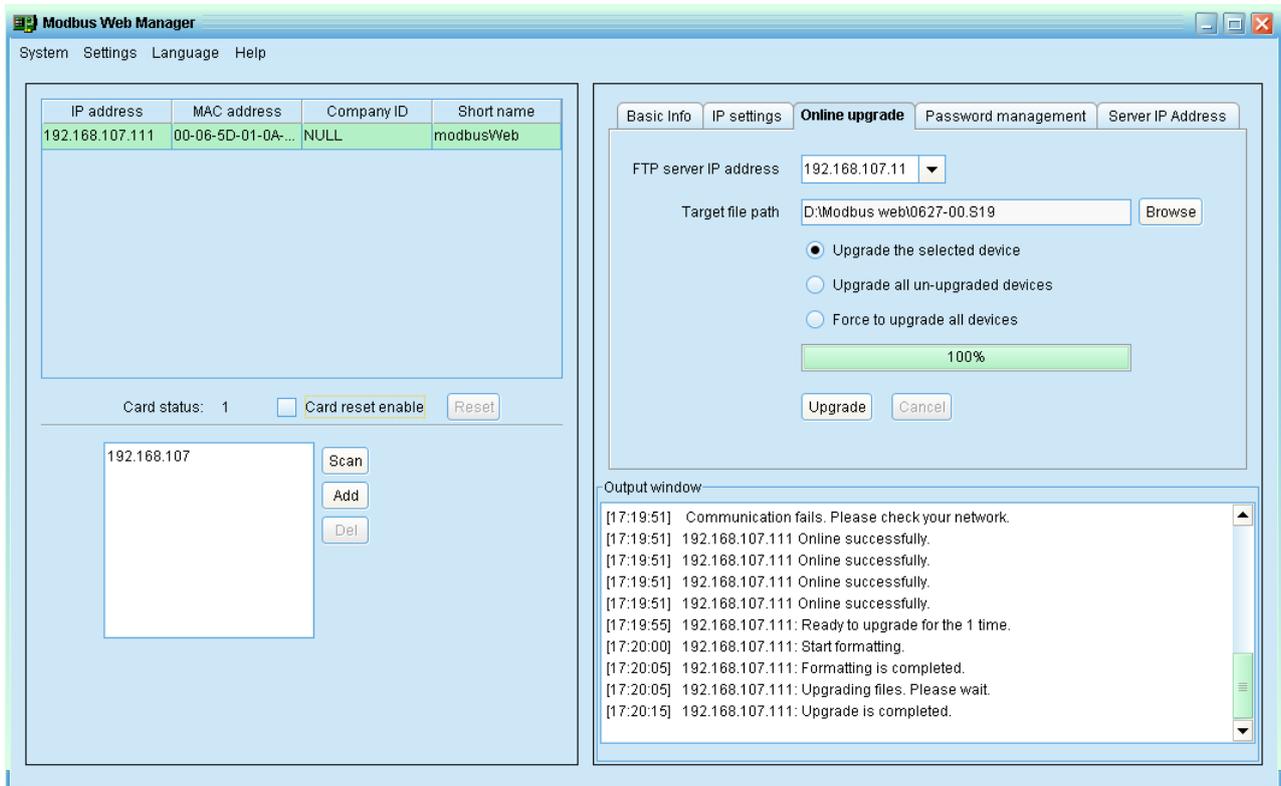
**Diagram 4-5**

**Step 3:** Click “Upgrade” button to execute upgrade action. Refer to Diagram 4-6.



**Diagram 4-6**

**Step 4:** You can see the upgrade is progressed. When upgrade is complete, you may check the message in output window. Refer to Diagram 4-7,



**Diagram 4-7**

**NOTE:** If abnormal situation occurs during upgrade process, the system will automatically re-start the upgrade operation. If this interruption occurs five times, then system

will automatically stop this operation. At this time, please check if LAN is working fine.

### 4.2.3 Password Management

You may modify single password for one Modbus web box device or all passwords for all Modbus web box devices. Refer to Diagram 4-8.

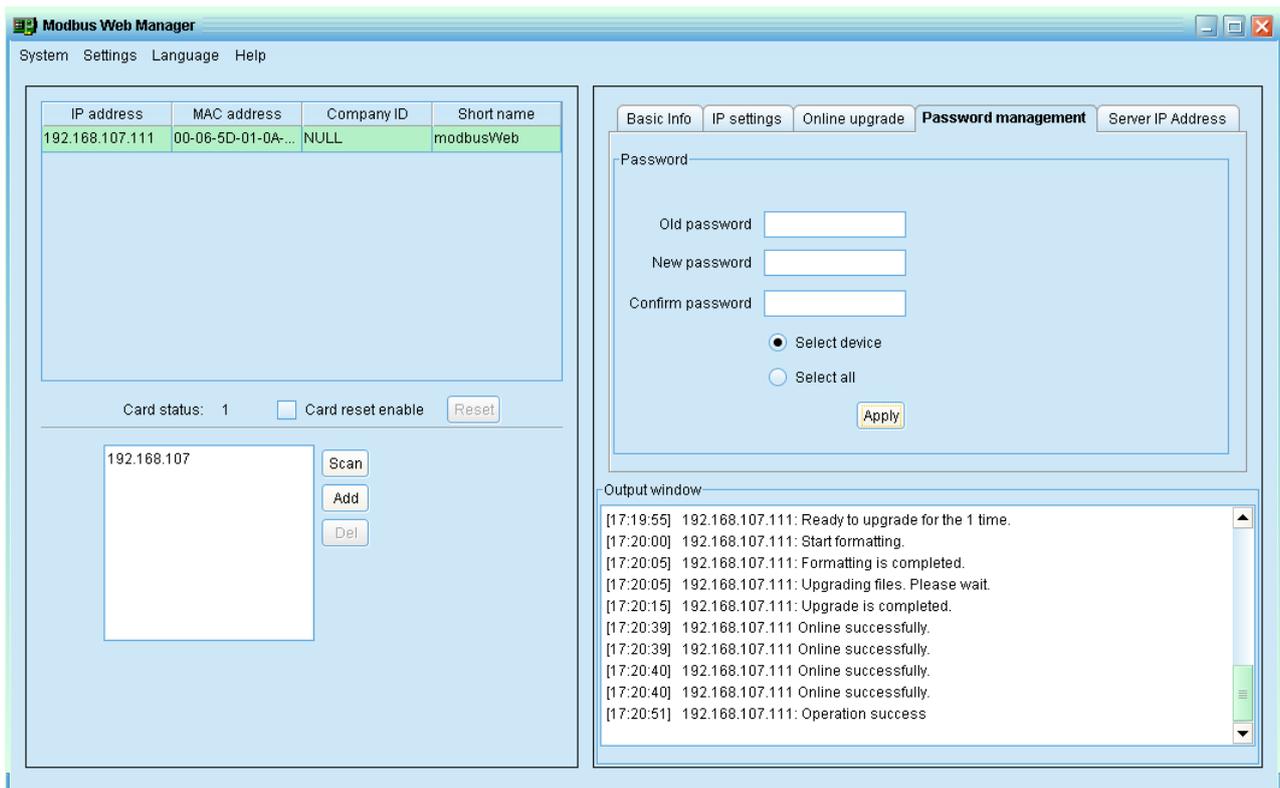


Diagram 4-8

Two methods to modify password.

- Select device: Choose to change password for selected Modbus web box device in the window list.
- Select all: Choose to change passwords for all Modbus web box devices in the window list.

Operation step: Enter original password, new password, and re-enter new password to confirm. Then, click "Apply" button to complete password change.

NOTE: The length of password is 8~15 digits. If the password change is applied to all Modbus web box devices, the original passwords for all Modbus web box devices must be consistent.

## 4.2.4 IP Address of Server

It's to allow Modbus web box devices to send data to Data Center. And this data center should be installed with SolarPower Data Center software. For details, please refer to "Data Center user manual". Refer to Diagram 4-9.

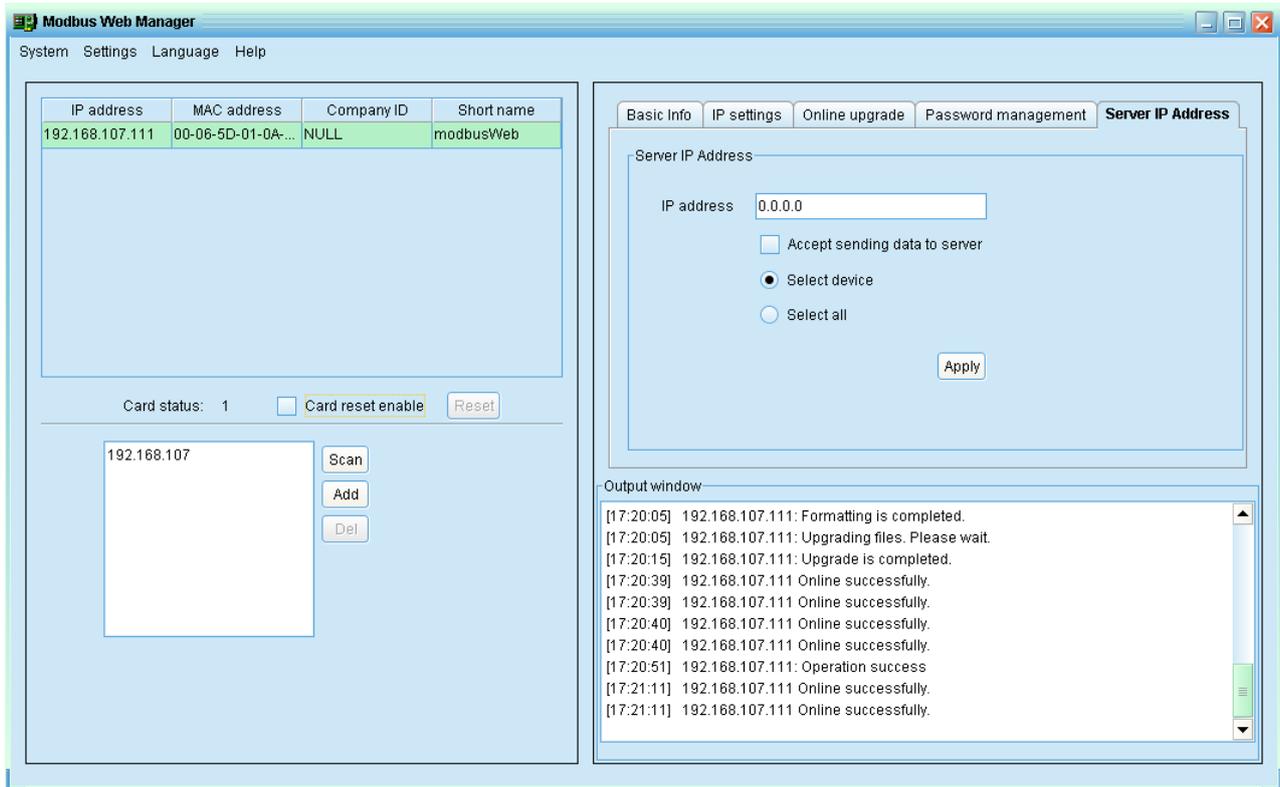
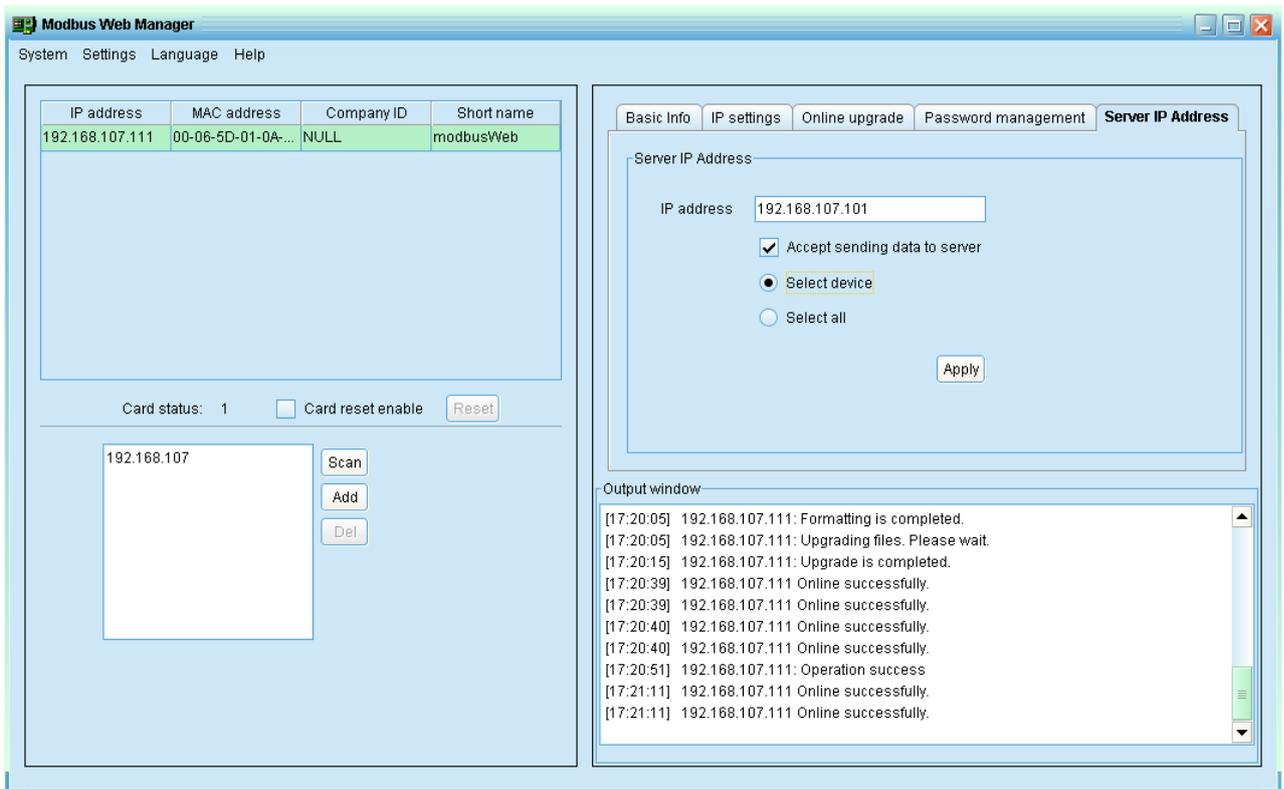


Diagram 4-9

### Server IP Setting:

Enter server IP address and click "Accept sending data to server". Then, click "Apply" button. Refer to diagram 4-10.

- Select device: Choose selected device to send data to server.
- Select all: Choose all devices to send data to server.



**Diagram 4-10**

**NOTE:** Modbus web box is able to communicate with Data Center Server via 52330 and 52331 ports. Please be sure that UPD protocol is allowed to through firewall via these ports.

### 4.3 Language

12 languages are supported in Modbus Web Manager software:

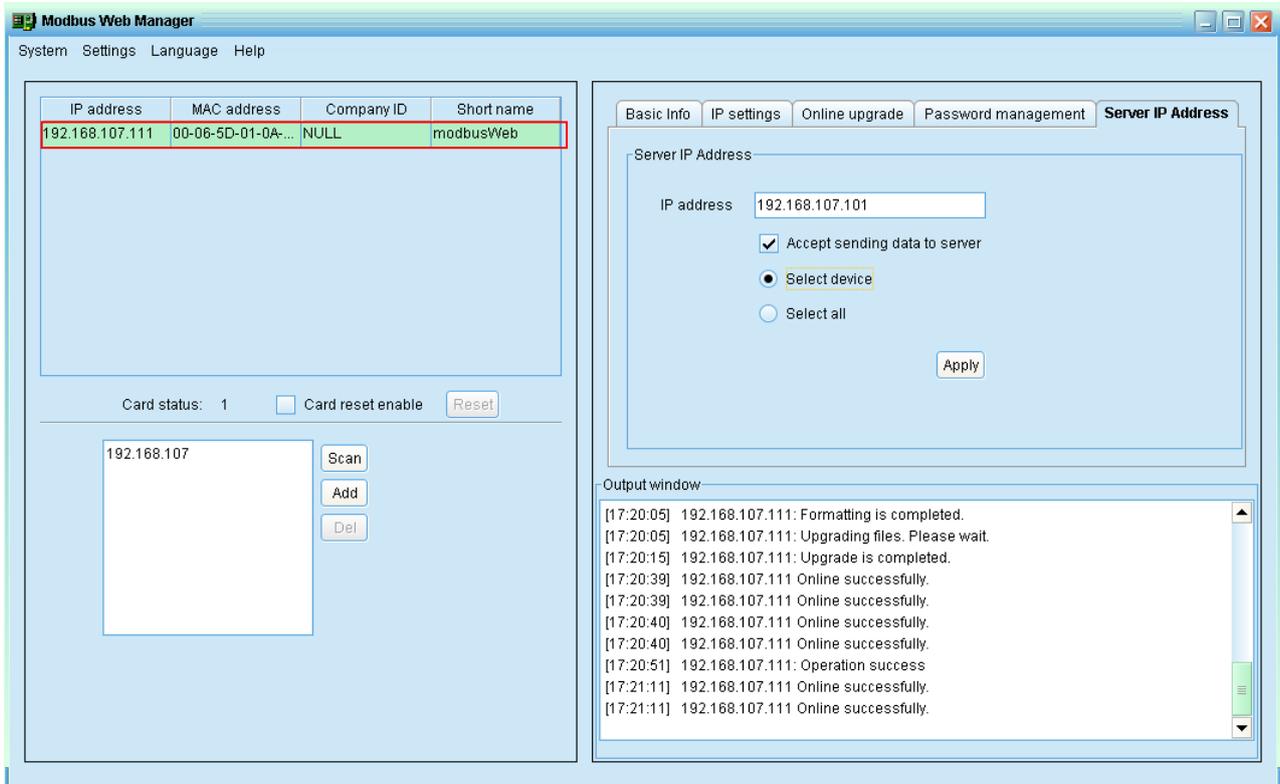
- ✓ Chinese(Simplified)
- ✓ Chinese(Traditional)
- ✓ English
- ✓ German
- ✓ Italian
- ✓ Polish
- ✓ Portuguese
- ✓ Russian
- ✓ Spanish
- ✓ Turkish
- ✓ Ukrainian
- ✓ French

## 4.4 Help

- **About:** Click "Help" menu and select "About". It will present the version and copyright information about software
- **Help:** Click "Help" menu and select "System help". It will access user manual. Before operating software, please read manual carefully.

# 5. Webpage of Modbus web box

Please double click Modbus web box device. Refer to Diagram below. Then, it will enter webpage of each Modbus web box.



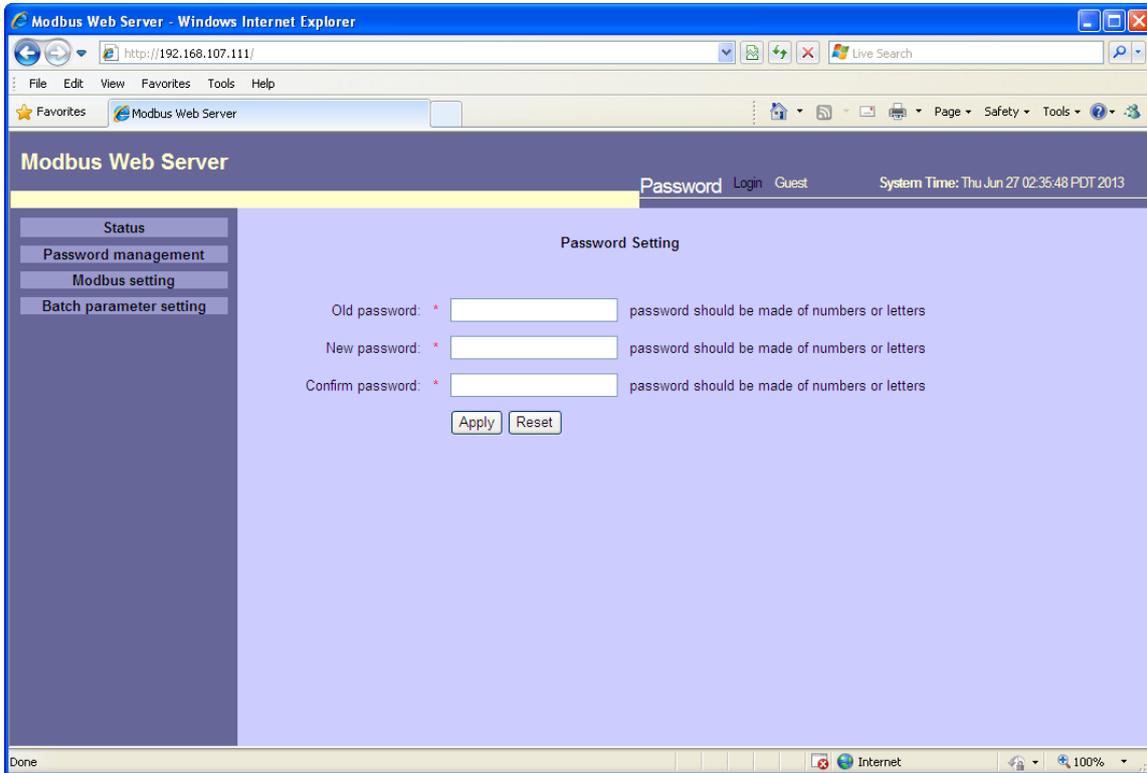
## 5.1 Status

Select "Status" from left tool bar. It will display basic information of this unit, including modbus ID, device status, PV voltage, today total grid power, today total energy, total accumulated energy and so on. Refer to Diagram 5-1.



## 5.2 Password Management

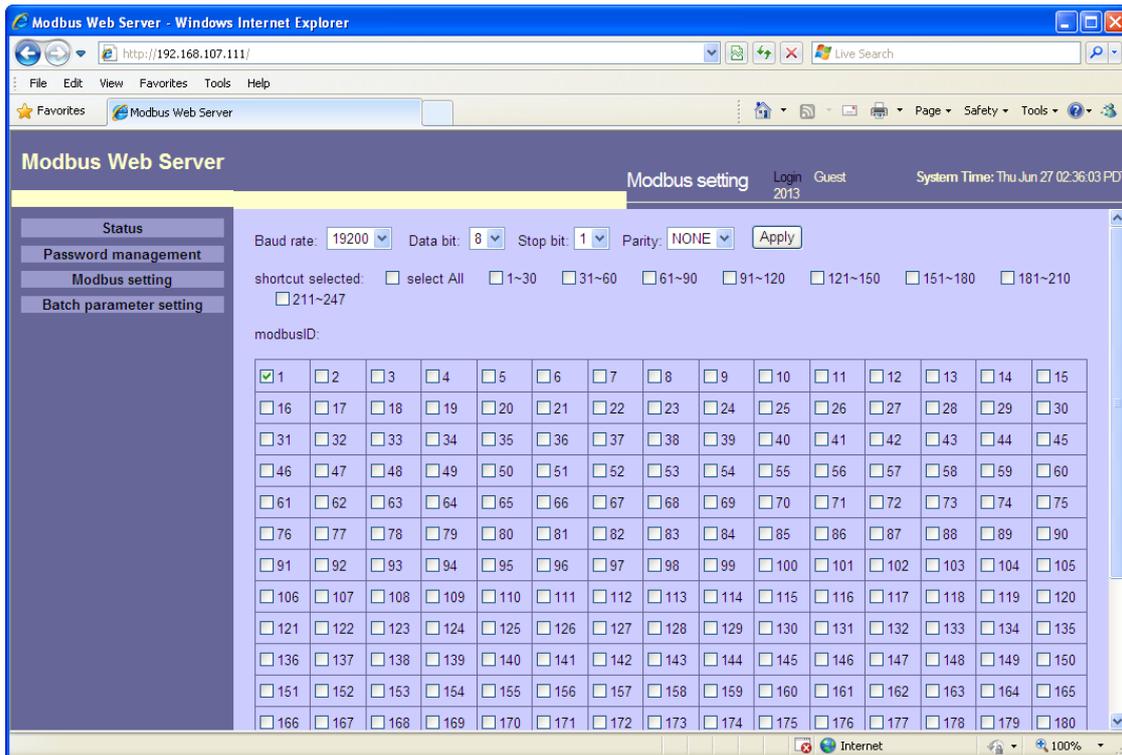
Select “Password management” from left tool bar. It’s to modify password. Refer to Diagram 5-3.



**Diagram 5-3**

## 5.3 Modbus Setting

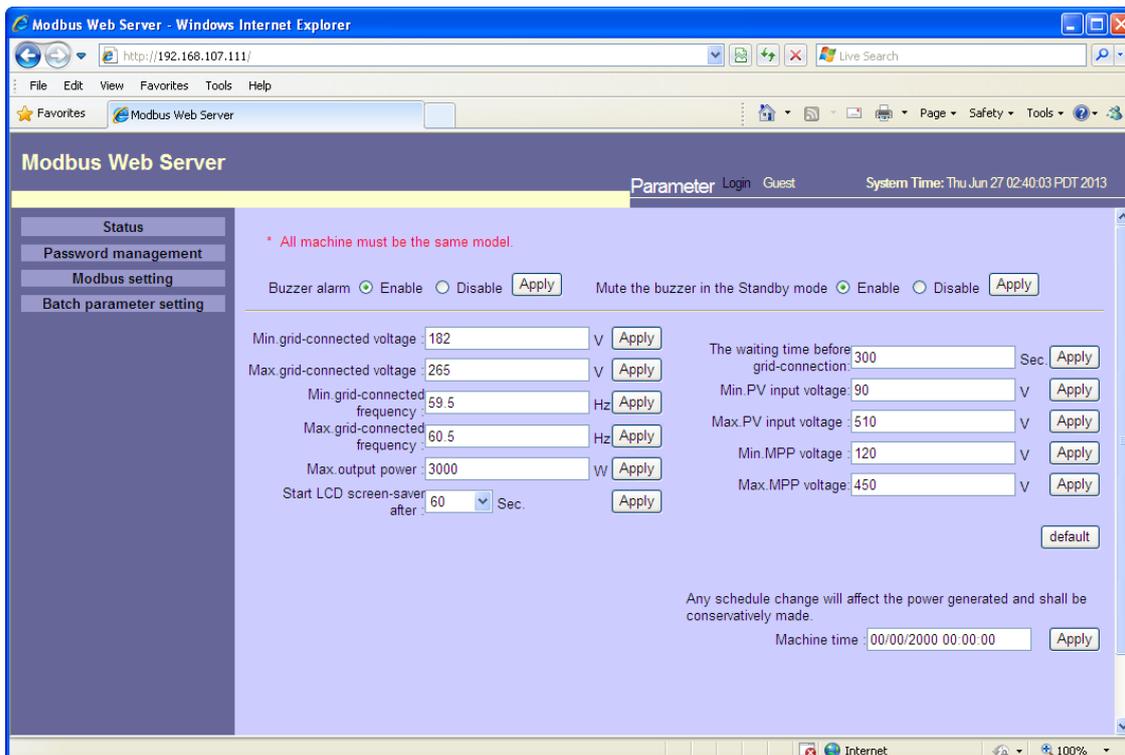
Select “Modbus setting” from left tool bar. It’s to set up Baud rate, Data bit, Stopbit and Parity for selected modbus ID. There are shortcut groups from certain range (1~30, 31~60 and so on) to all for quick selection. Refer to Diagram 5-4.



**Diagram 5-4**

## 5.4 Batch Parameter Setting

Select “Batch parameter setting” from left tool bar. For detailed setting, please check local dealer. Refer to Diagram 5-5.



**Diagram 5-5**

# 6. Mobile Monitoring

Users can remote access this webpage of web server via mobile phone. Simply open browser and enter <http://XXX.XXX.XXX.XX>. For example, you may enter "<http://192.168.107.97>". Refer to Diagram 6-1.

**Modbus Web Server**

Status: Login Guest System Time: Thu Jan 17 2013 15:28:35 GMT+0800 (CST)

Today total grid power: 21155 W Today total energy: 3273.22 kWh Total accumulated energy: 16522 kWh

CO<sub>2</sub> emission reduction: 758643.64 kg Relative forest area: 1954048.48% Save money on electricity: 12869.8 NTD

No.	Modbus ID	Status	PV1 Voltage	PV2 Voltage	Grid Power	Today Energy	Accumulated Energy
1	modbus[1]	●	234.2 Vdc	123 Vdc	615 W	13.42 kWh	11652 kWh
2	modbus[2]	●	234.1 Vdc	122.8 Vdc	614 W	13.419 kWh	11651 kWh
3	modbus[3]	●	234 Vdc	122.6 Vdc	613 W	13.418 kWh	11650 kWh
4	modbus[4]	●	233.9 Vdc	122.4 Vdc	612 W	13.417 kWh	11649 kWh
5	modbus[5]	●	233.8 Vdc	122.2 Vdc	611 W	13.416 kWh	11648 kWh
6	modbus[6]	●	233.7 Vdc	122 Vdc	610 W	13.415 kWh	11647 kWh
7	modbus[7]	●	233.6 Vdc	121.8 Vdc	609 W	13.414 kWh	11646 kWh
8	modbus[8]	●	233.5 Vdc	121.6 Vdc	608 W	13.413 kWh	11645 kWh
9	modbus[9]	●	233.4 Vdc	121.4 Vdc	607 W	13.412 kWh	11644 kWh
10	modbus[10]	●	233.3 Vdc	121.2 Vdc	606 W	13.411 kWh	11643 kWh
11	modbus[11]	●	233.2 Vdc	121 Vdc	605 W	13.41 kWh	11642 kWh
12	modbus[12]	●	233.1 Vdc	120.8 Vdc	604 W	13.409 kWh	11641 kWh
13	modbus[13]	●	233 Vdc	120.6 Vdc	603 W	13.408 kWh	11640 kWh
14	modbus[14]	●	232.9 Vdc	120.4 Vdc	602 W	13.407 kWh	11639 kWh
15	modbus[15]	●	232.8 Vdc	120.2 Vdc	601 W	13.406 kWh	11638 kWh
16	modbus[16]	●	232.7 Vdc	120 Vdc	600 W	13.405 kWh	11637 kWh
17	modbus[17]	●	232.6 Vdc	119.8 Vdc	599 W	13.404 kWh	11636 kWh
18	modbus[18]	●	232.5 Vdc	119.6 Vdc	598 W	13.403 kWh	11635 kWh
19	modbus[19]	●	232.4 Vdc	119.4 Vdc	597 W	13.402 kWh	11634 kWh
20	modbus[20]	●	232.3 Vdc	119.2 Vdc	596 W	13.401 kWh	11633 kWh
21	modbus[21]	●	232.2 Vdc	119 Vdc	595 W	13.4 kWh	11632 kWh
22	modbus[22]	●	232.1 Vdc	118.8 Vdc	594 W	13.399 kWh	11631 kWh
23	modbus[23]	●	232 Vdc	118.6 Vdc	593 W	13.398 kWh	11630 kWh
24	modbus[24]	●	231.9 Vdc	118.4 Vdc	592 W	13.397 kWh	11629 kWh
25	modbus[25]	●	231.8 Vdc	118.2 Vdc	591 W	13.396 kWh	11628 kWh
26	modbus[26]	●	231.7 Vdc	118 Vdc	590 W	13.395 kWh	11627 kWh
27	modbus[27]	●	231.6 Vdc	117.8 Vdc	589 W	13.394 kWh	11626 kWh
28	modbus[28]	●	231.5 Vdc	117.6 Vdc	588 W	13.393 kWh	11625 kWh
29	modbus[29]	●	231.4 Vdc	117.4 Vdc	587 W	13.392 kWh	11624 kWh
30	modbus[30]	●	231.3 Vdc	117.2 Vdc	586 W	13.391 kWh	11623 kWh
31	modbus[31]	●	231.2 Vdc	117 Vdc	585 W	13.39 kWh	11622 kWh

Diagram 6-1