# 1. Package Contents

Thank you for purchasing PLANET Industrial RS232/422/485 Modbus Gateways. The table below shows the models with the number of serial ports:

| Model Name | Serial Port | Ethernet Port | Power Input | DI/DO |
|---|---|---|---|---|
| IMG-2100T | 1 x DB9 + 1 x 4-pin terminal block | 1 x 10/100TX RJ45 | DC 9~48V or AC 24V | - |
| IMG-2105AT | | 1 x 100FX SFP | | - |
| IMG-2200T | 2 x DB9 | 2 x 10/100TX RJ45 | DC 12~48V | - |
| IMG-2400T | 4 x DB9 | | | ∎ |

**"Industrial Modbus Gateway"** is used as an alternative name in this Quick Installation Guide.

Open the box of the Industrial Modbus Gateway and carefully unpack it. The box should contain the following items:

| The Industrial Modbus Gateway x 1 | |
|---|---|



| Quick Installation Guide x 1 | Wall Mounting Kit x 1 |
|---|---|



| DIN-rail Bracket w/Screws x 1 | Dust Cap (RJ45/SFP) |
|---|---|



If any item is found missing or damaged, please contact your local reseller for replacement.

# 2. Requirements

The Industrial Modbus Gateway provides remote login interface for management purposes. The following equipment is necessary for further management:

- Workstations running Windows XP/2003/Vista/7/8/2008/10, MAC OS X or later, Linux, UNIX, or other platforms are compatible with TCP/IP Protocols.

- Ethernet Port Connection
  - ➢ Workstations are installed with Ethernet NIC (Network Interface Card)
  - ➢ Network cables
    - ♦ Use standard network (UTP) cables with RJ45
    - ♦ Use Multi-mode or Single-mode fiber patch cord with LC connector and 100BASE-FX SFP transceiver (IMG-2105AT only).
  - ➢ The above PC is installed with Web browser
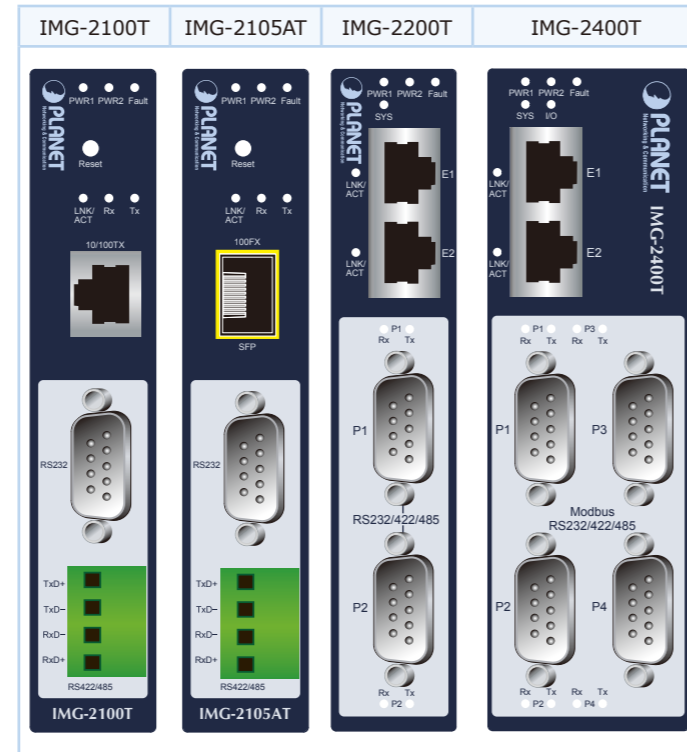


It is recommended to use Internet Explorer 8.0 or above to access the Industrial Modbus Gateway.



If the Web interface of the Industrial Modbus Gateway is not accessible, please turn off the anti-virus software or firewall and then try it again.

# 3. Hardware Introduction

## 3.1 Front Panels

| IMG-2100T | IMG-2105AT | IMG-2200T | IMG-2400T |
|---|---|---|---|



## 3.2 Wiring the Power Inputs

The upper panel of the Industrial Modbus Gateway indicates a DC inlet power socket and consists of one terminal block connector within 6 contacts. Please follow the steps below to insert the power wire.

1. Insert positive/negative DC power wires into **Contacts 1 and 2** for **Power 1**, or **Contacts 5 and 6** for **Power 2**. Figures 3-1 to 3-3 show PWR1 and PWR2 of the Industrial Modbus Gateway.

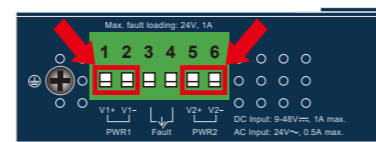**IMG-2100T/IMG-2105AT: 9~48V DC/24V AC**



**Figure 3-1:** IMG-2100T/IMG-2105AT Upper Panel

**IMG-2200T: 12~48V DC**



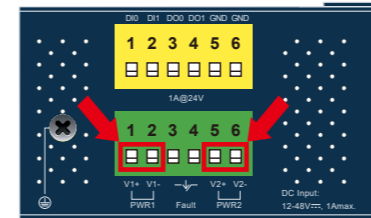**Figure 3-2:** IMG-2200T Upper Panel

**IMG-2400T: 12~48V DC**



**Figure 3-3:** IMG-2400T Upper Panel

2. Tighten the wire-clamp screws for preventing the wires from loosening.



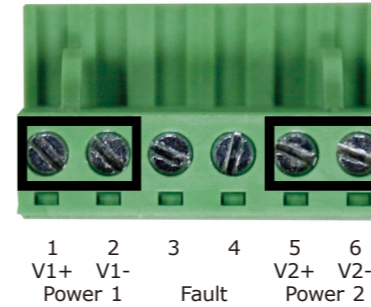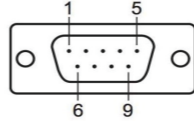| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| V1+ | V1- | | | V2+ | V2- |
| Power 1 | | Fault | | Power 2 | |

**Figure 3-4:** PWR1 & PWR2 pins of terminal block.



The wire gauge for the terminal block should be in the range from 12 to 24 AWG.

## 3.3 Serial Port PIN Assignment

| Male DB9 | | Pin | RS232 | RS422 RS485-4W | RS485-2W |
|---|---|---|---|---|---|
| | | 1 | DCD | TxD+ | -- |
| | | 2 | RxD | TxD- | -- |
| | | 3 | TxD | RxD- | Data- |
| | | 4 | DTR | RxD+ | Data+ |
| | | 5 | GND | GND | GND |
| | | 6 | DSR | -- | -- |
| | | 7 | RTS | -- | -- |
| | | 8 | CTS | -- | -- |
| | | 9 | -- | -- | -- |

# 4. Web Login

## 4.1 Starting Web Management

The following shows how to start up the **Web Management** of the Industrial Modbus Gateway. Note the Industrial Modbus Gateway is configured through an Ethernet connection. Please make sure the manager PC must be set to the same **IP subnet address**.

For example, the default IP address of the Industrial Modbus Gateway is **192.168.0.100**, then the manager PC should be set to **192.168.0.x** (where x is a number between 1 and 254, except 100), and the default subnet mask is 255.255.255.0.
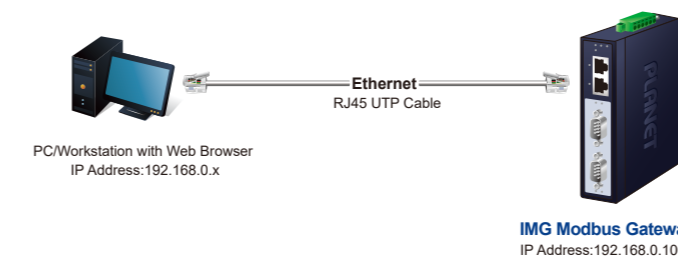


PC/Workstation with Web Browser
IP Address:192.168.0.x

Ethernet
RJ45 UTP Cable

**IMG Modbus Gateway**
IP Address:192.168.0.100

**Figure 4-1:** IP Management Diagram

## 4.2 Logging in to the Industrial Modbus Gateway

1. Use Internet Explorer 8.0 or above for Web browser and enter IP address **http://192.168.0.100** (the factory-default IP address) to access the Web interface.

2. When the following dialog box appears, please enter the default user name **"admin"** and password **"admin"** (or the password you have changed before) as shown in Figure 4-2.

Default IP Address: **192.168.0.100**
Default User Name: **admin**
Default Password: **admin**



**Figure 4-2:** Login Screen

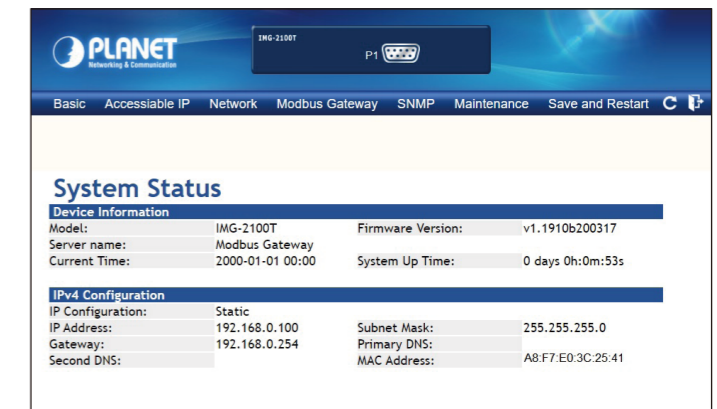3. After entering the password, the main screen appears as shown in Figure 4-3.



**Figure 4-3:** Web Main Screen of Industrial Modbus Gateway

4. The Server Menu on the middle of the Web page lets you access all the functions and statuses the Industrial Modbus Gateway provides.

Now, you can use the Web management interface to continue the Modbus Gateway management. Please refer to the user manual for more.



1. For security reason, **please change and memorize the new password after this first setup**.

2. Only accept command in lowercase letter under web interface.

# 5. Remote Telnet Login

## 5.1 Logging in to the Remote Command Line Interface

The Industrial Modbus Gateway also supports Telnet for remote management. You can use Telnet to open a terminal session over one of the Ethernet ports. The Modbus Gateway asks for user name and password for remote login when using Telnet; please use the following default IP address, username and password for the first-time login.

> Default IP Address: **192.168.0.100**
> Default Username: **admin**
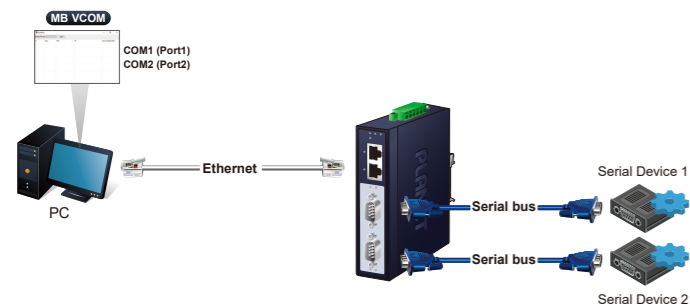> Default Password: **admin**

You will be presented with a text menu displaying the Industrial Modbus Gateway's general settings, which you will be able to view and modify. Please refer to User Manual for a description of the available settings.

```
Telnet 192.168.0.100
---------------------------------------------
UserName: admin
Password: *****

   * Corporation        : PLANET
   * Model              : IMG-2100T
   * MAC Address         : A8:F7:E0:3C:25:41
   * Firmware Version    : v1.1910b200317
   * Ethernet IP Address : 192.168.0.100

                 Main Menu
   ---------------------------------------------

            [1] Basic
            [2] Accessible IP
            [3] Network
            [4] SNMP
            [5] Change password
            [6] Load factory default
            [s] Save and Restart
            [q] Quit

            Enter your choice: _
```

# 6. Getting Started with MB VCOM Utility

With MB VCOM Utility, you can easily search one or multiple IMG device servers over the network from a remote location.

## 6.1 Installation of MB VCOM Utility

The MB VCOM Utility can be downloaded from PLANET Web site. Please locate and run the setup program **"mbgsetup.exe"** and follow the on-screen instructions.

---

download link:
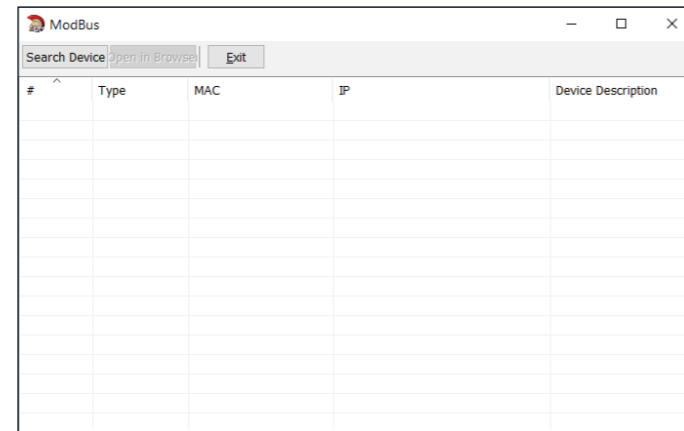https://www.planet.com.tw/en/support/downloads?&method=keyword&keyword=IMG&view=6#list

After installing, rebooting your workstation/PC is required.

> **Note**
> If you have difficulty in downloading or executing MB VCOM Utility, turn off the firewall and anti-virus software first.

## 6.2 Searching Modbus Gateway

First click **"Add Device"** and then click **"Search"** if Modbus Gateway has access to network, as shown below.

| ModBus | | | | |
|---|---|---|---|---|
| Search Device | Open in Browser | Exit | | |
| # | Type | MAC | IP | Device Description |
| | | | | |

# 7. Recovering Back to Default Configuration

## ■ IP Address has been changed or admin password has been forgotten -

To reset the IP address to the default IP address **"192.168.0.100"** or reset the login username and password to default value, press the hardware-based reset button on the bottom panel for about 5 seconds. After the device is rebooted, you can log in the management Web interface within the same subnet of 192.168.0.xx and default password. Be noted that all the previous setups will be disappeared after the factory default reset is made.
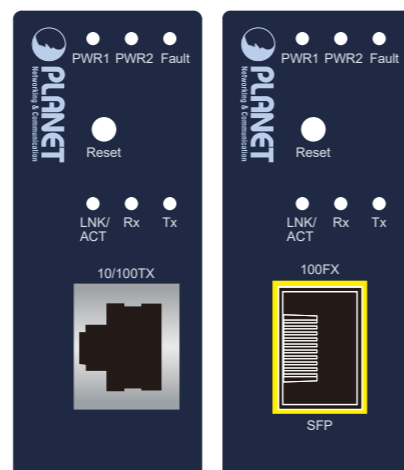
**Figure7-1:** IMG-2100T/IMG-2105AT Hardware-based Reset Button

---

**Industrial RS232/RS422/RS485 Modbus Gateway**

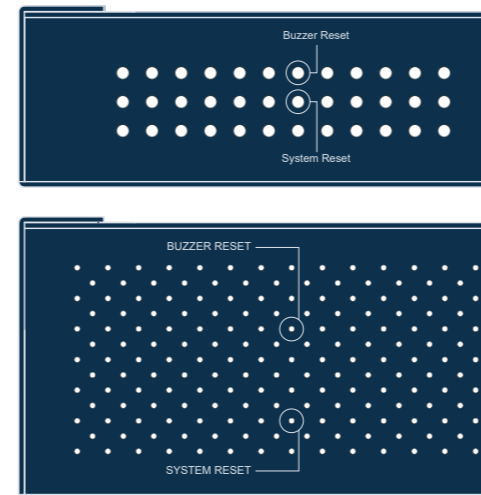▶ IMG-2x00T Series

*www.PLANET.com.tw*

**Figure7-2:** IMG-2200T/IMG-2400T Hardware-based Reset Button

# 8. Customer Support

Thank you for purchasing PLANET products. You can browse our online FAQ resource on PLANET web site first to check if it could solve your issue. If you need more support information, please contact PLANET switch support team.

PLANET online FAQs:
http://www.planet.com.tw/en/support/faq

Switch support team mail address:
support@planet.com.tw

IMG-210x_220x series User's Manual:
https://www.planet.com.tw/en/support/download.php?&method=keyword&keyword=IMG&view=3#list

(Please select your Industrial Modbus Gateway model from the Product Model drop-down menu)