

300Mbps Hotspot Wireless Subscriber Gateway

WSG-500

Quick Installation Guide

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1. Requirements

- Cable modem or DSL/ADSL modem.
- Network cables.
- Use standard 10/100Base-TX network (UTP) cables with RJ45 connectors.
- Subscriber PC installed with Wireless adapter that complied with 802.11b, 802.11g or 802.11n.
- Workstations of subscribers running Windows 2000/XP, MAC OS9 or later.
- Linux, UNIX or other platform compatible with TCP/IP protocols.
- <Optional> Account generator (Model No.: WSG-ACG5).



Hint

Mac platform should be OS9 or later in order to have DHCP client support.

2. Package Contents

- 1 x WSG-500 unit
- 1 x Power Adaptor
- 1 x User's Manual CD
- 1 x Quick Installation Guide
- 1 x RJ-45 Cable
- 1 x RS-232
- 2 x Antenna
- 1 x Ground Wire
- 1 x Screw Package

3. WSG-500

<p>Overview</p> 	<p>Top Panel</p> <p>The top panel of PLANET WSG-500 is shown below.</p> 
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Front Panel

The Front panel of PLANET WSG-500 is shown below.



LED Definition

LED	Color	Status	LED Description
 PWR	Blue	Off On	The device is turned off The device is turned on
WAN	Blue	Off On Flashing	The WAN is not connected. The WAN has a successful (10/100Mbps) Ethernet connection. The WAN is sending or receiving packet.
LAN 1 LAN 2	Blue	Off On Flashing	The LAN is not connected. The LAN has a successful (10/100Mbps) Ethernet connection. The LAN is sending or receiving packet.
WLAN	Blue	Off On Flashing	The wireless is not ready. The wireless is ready. The wireless is sending or receiving packet.

 INTERNET	Blue	Off On	The WAN is not connected to the internet. The WAN is connected to the internet.															
 WES*	Blue	For indicating WES status during WES setup: <table border="1" data-bbox="389 310 1024 678"> <thead> <tr> <th></th> <th>Master</th> <th>Slave</th> </tr> </thead> <tbody> <tr> <td>WES Start</td> <td>LED flashing slowly</td> <td>LED flashing quickly</td> </tr> <tr> <td>WES Negotiate</td> <td>LED flashing slowly</td> <td>LED flashing quickly</td> </tr> <tr> <td>WES Fail (Negotiate Timeout)</td> <td>LED OFF</td> <td>LED OFF</td> </tr> <tr> <td>WES Success</td> <td>LED ON for over 5 seconds</td> <td>LED ON for over 5 seconds (after Master displays WES Success)</td> </tr> </tbody> </table>			Master	Slave	WES Start	LED flashing slowly	LED flashing quickly	WES Negotiate	LED flashing slowly	LED flashing quickly	WES Fail (Negotiate Timeout)	LED OFF	LED OFF	WES Success	LED ON for over 5 seconds	LED ON for over 5 seconds (after Master displays WES Success)
	Master	Slave																
WES Start	LED flashing slowly	LED flashing quickly																
WES Negotiate	LED flashing slowly	LED flashing quickly																
WES Fail (Negotiate Timeout)	LED OFF	LED OFF																
WES Success	LED ON for over 5 seconds	LED ON for over 5 seconds (after Master displays WES Success)																
 USB*	Blue	N/A	For future usage only.															

Remark: WES is a future supported feature.

Port Indication

	Power	Reset	WAN	LAN 2	LAN 1	Console	WES	USB
Printed on Housing	12V/1A	Reset	WAN (PoE)	LAN2	LAN1	Console	WES	USB
Interface	Power	Button	RJ-45	RJ-45	RJ-45	RS-232	Button	USB

Power	The power adaptor plugs here.
Reset	Used for restarting the system.
WAN (PoE)	One RJ-45 port is used for connecting xDSL or Cable Mode to the Internet/Intranet.
LAN2	Used for Connecting to the public LAN. It can be chosen to require authentication to access network resource and the Internet.
LAN1	Used for Connecting to the private LAN. Authentication is not required to access the network resource from here.
Console	Used for configuring the system via Hyper Terminal.
WES*	Used for starting WES (WDS Easy Setup) process. For future usage.
USB*	For future usage only.

4. Installation

The followings are instructions for setting up PLANET WSG-500. Refer to the illustration and follow the simple steps below to quickly install your Wireless Subscriber Gateway.

Connecting the Antennas

PLANET WSG-500 provides two antenna connectors on the rear of the unit for wireless subscribers.

Installation Requirement

Before installing PLANET WSG-500, make sure your network meets the following requirements.

System Requirements

PLANET WSG-500 requires one of the following types of software:

- Windows 95/98/NT/2000/XP
- Any TCP/IP-enabled systems like Mac OS and UNIX (TCP/IP protocol installed)
- Standard phone line for xDSL modem or coaxial cable for Cable modem for Internet access
- Web Browser Software
- (Microsoft I.E 4.0 or later version or Netscape Navigator 5.0 or later version)
- One computer with an installed 10Mbps, 100Mbps or 10/100Mbps Ethernet card
- UTP network Cable with a RJ-45 connector (Package contents)



Hint

Mac platform should be OS9 or later in order to have DHCP client support.

5. Hardware Connection and Installation

Physical Installation



Physical connection of WSG-500

1. Ensure the WSG-500 and the Cable/DSL modem are powered OFF before commencing. Leave your Cable/DSL modem connected to its wall socket (phone line or cable input).
2. Use Ethernet cables to connect to the **LAN2** port on the front panel. Connect the other end of the Ethernet cable to an AP or Switch. (Note: Authentication is required for the clients to access the network via **LAN2** port. The LAN port with authentication function is referred to as Public **LAN**).
3. Use Ethernet cables to connect to the **LAN1** port on the front panel. Connect the other end of the Ethernet cable to a PC. (Note: Authentication is **NOT** required for the clients to access the network via **LAN1** port. The LAN port with authentication function is referred to as Private **LAN**).
4. Connect your Cable/DSL Modem to the **WAN** port on the front panel. Use the cable supplied with your Cable/DSL modem. If no cable was supplied with your modem, use a standard network cable. Please make sure the connection is established (LED is on).
5. Connect the Power Adapter. Use only the unit provided.
6. Power ON. The **PWR** LED should stay on (If your network is connected, the WAN/WLAN/LAN LED will be on, too).
7. Power on the PC that connected to the WSG-500.



Hint

1. Please consult your ISP personnel to obtain proper Internet connection related information, and input carefully.
2. If Internet connection cannot be established, please check the WAN LED display, inserted parameters or contact the ISP service staff for support information.
3. Account Generator WSG-ACG5 is an optional device.
4. It is recommended that you leave IP settings on subscriber PC as automatically assigned. By machine default configurations, WSG-500 will act as a DHCP server, and it will assign PC the necessary IP settings.

6. Configuration of Your WSG-500

Getting Started

The WSG-500 supports web-based configuration. After completing the hardware installation, WSG-500 can be configured through a PC by using web browser.

To access the web management interface, connect the PC and WSG-500 in advance via the Private Port of WSG-500. Then, launch the web browser and enter the IP address of the gateway for that port in the address field then press **Enter**. Default IP address of the default gateway of the Private Port is <https://192.168.1.254> (Note: **https** is used for a secured connection).

The administrator login page will appear. Enter default username "**admin**" & default password "**admin**" in the User Name and Password fields. Click **Enter** to login.



After logging into WSG-500 successfully, a web management interface with a welcome message will appear.

Click **Setup Wizard** to help you complete the configuration.



Setup Wizard

Step 1: General

- Enter a new password for the admin account and retype it in the verify password field (Twenty characters maximum and no spaces allowed).

- Select a proper time zone in the drop-down menu, and enter the URL of a NTP server to set up the system time.
- The clients will be redirected after logging into the system successfully. Enable portal URL and configure a desired website here.

The screenshot shows the PLANET Setup Wizard interface. At the top left is the PLANET logo with the tagline 'Networking & Communication'. At the top right are 'Home' and 'Logout' links. The main heading is 'Setup Wizard'. On the left side, there are four step buttons: 'Step 1' (highlighted in orange), 'Step 2', 'Step 3', and 'Step 4'. Below these is an 'Exit' button. A text box next to Step 1 provides instructions: 'It is recommended to change administrator's password, and select an appropriate time zone and NTP server for the system.' The main content area is titled 'Step 1. General' and contains the following fields:

- Administrator's Password:** Two input fields for 'New Password' and 'Verify Password', both containing six dots.
- Time:** A 'Time Zone' dropdown menu set to '(GMT+08:00)Taipei' and an 'NTP Server' input field containing 'tock.usno.navy.mil' with a red asterisk and a note '(e.g. tock.usno.navy.mil)'.
- Portal URL:** A 'Status' section with 'Enable' selected and 'Disable' unselected. Below it is an 'URL' input field containing 'http://www.google.com'.

 A 'Next' button is located at the bottom right of the form area.

- Click "Next" to continue.

Step 2: WAN and Wireless Interfaces

- Select a proper type of Internet connection for WAN interface from the following three available connections: Static, Dynamic, or PPPoE. The following example is for Dynamic.

The screenshot shows the PLANET Setup Wizard interface for Step 2. The PLANET logo and navigation links are at the top. The main heading is 'Setup Wizard'. On the left side, the step buttons are 'Step 1', 'Step 2' (highlighted in orange), 'Step 3', and 'Step 4'. Below these is an 'Exit' button. A text box next to Step 2 provides instructions: 'Select a connection type for WAN interface and configure related setting. In addition, Band, Channel, and ESSID of wireless interface can be configured in this step of Setup Wizard as well.' The main content area is titled 'Step 2. WAN and Wireless Interfaces' and contains the following options:

- Interface:** Radio buttons for 'WAN' (selected), 'Wireless', and 'PPPoE'.
- Static (Use the following IP settings):** Unselected radio button.
- Dynamic (IP settings assigned automatically):** Selected radio button.
- PPPoE:** Unselected radio button.

 'Back' and 'Next' buttons are located at the bottom of the form area.

- Select desired wireless Band, Channel, and ESSID for public zone.

PLANET
Networking & Communication

Home Logout

Setup Wizard

Step 2. WAN and Wireless Interfaces

Interface: WAN Wireless

Band: 802.11g+n

Channel: 1

ESSID (Public): WSG500-2

Back Next

Step 1
Step 2
Step 3
Step 4
Exit

Select a connection type for WAN interface and configure related setting. In addition, Band, Channel, and ESSID of wireless interface can be configured in this step of Setup Wizard as well.

- Click **"Next"** to continue.

Step 3: Authentication Settings for Public Zone

- The clients in public zone shall log in the system before using network service if Auth Required is enabled.
- When Auth Required is enabled, a default authentication server shall be configured. Select Server 1 (LOCAL) in Default Auth Server for example.
- Use default or set your desired Postfix, apply a Policy if needed.

PLANET
Networking & Communication

Home Logout

Setup Wizard

Step 3. Authentication Settings for Public Zone

Auth Required: Enable Disable

Default Auth Server: Ondemand (ONDEMAND)

On-demand User Authentication Settings

Postfix: Ondemand

Policy: Policy 1

On-demand Account Quick Creation (Optional): Create

Back Next

Step 1
Step 2
Step 3
Step 4
Exit

You can choose an authentication option as default or disable authentication.

- Click Create button to add an on-demand account to the database.

- Enter the Username (e.g. "testuser") and Password (e.g. testuser), then click Create button.

Creating an On-demand Account	
Plan : Account Type	1 : Duration-time
Username/Password Creation	Manual created <input type="button" value="v"/>
Username	<input type="text" value="testuser"/>
Password	<input type="text" value="testuser"/>
Activation Time	From account creation time
Elapsed Time	4 hour(s)
Total Price	0
Reference	<input type="text"/> Add a reference related to this account (for example, the customer's name)
External ID	<input type="text"/> Enter an external ID such as Library ID No.
Please confirm the information and press Create button to create an account.	
<input type="button" value="Create"/> <input type="button" value="Cancel"/>	

- Click "Close" and "Next" to continue.

Welcome!

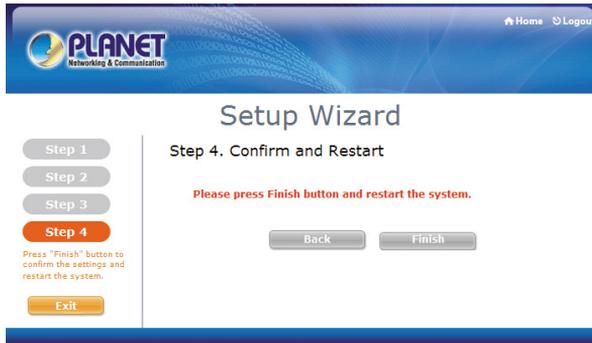
Username	testuser@Ondemand
Password	testuser
Plan : Account Type	1 : Duration-time
Elapsed Time	Valid for 4 hour(s) elapsed time
Total Price	0
Reference	
External ID	
ESSID : WSG500-2	
Shared Wireless Key: None (Open System)	
Your account is activated at 2010/12/14 14:21	
Your first time login must be done before 2010/12/14 18:21	
The account will be expired in 4 hours after account activation.	

Thank You!

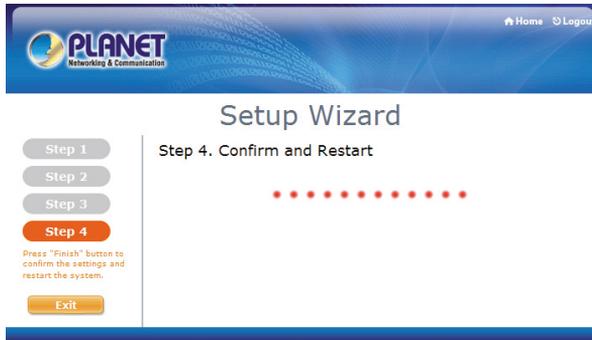
Note: To make a better print-out ticket, you may need to configure the browser settings (for example, Page Setup) as well as the printer settings (for example, Preferences) before printing out the page.

Step 4: Confirm and Restart

- Click Finish to save current settings and restart the system.



A Confirm and Restart message will appear on the screen during the restarting process. Please do not interrupt the system until the Administrator Login Page appears.



User Login

1. Connect a client device (e.g. laptop, PC) to the LAN2 port or wireless interface of WSG-500.
2. The client device will obtain an IP address automatically via DHCP from WSG-500. Open a web browser on a client device, access any URL, and then the default User Login Page will appear.
3. Enter the Username and Password of an on-demand account previously generated via Setup Wizard (e.g. "testuser@ondemand" as the Username and "testuser" as the Password), then click Submit.



Planet
Networking & Communications

User Login Page

Welcome To User Login Page

Please Enter Your Name and Password to Sign In

Username: testuser@ondemand

Password: ●●●●●●

Remember Me

Submit Clear Credit Balance

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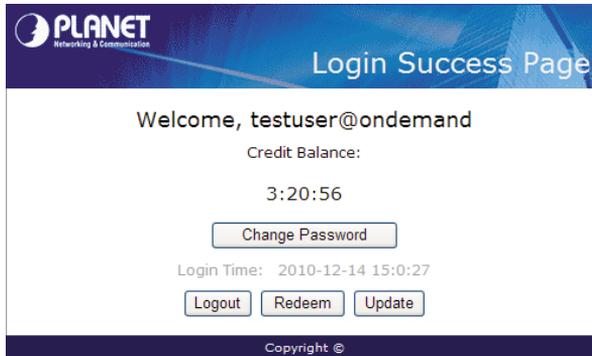
Hint

1. The format of a full (valid) username is `userid@postfix`, where "userid" is the user ID and "postfix" is the name of the selected authentication option.
2. Exception: The postfix can be omitted only when the default authentication option is used. For example, "ONDEMAND" is the default authentication option at this system; therefore, you may enter either "testuser" or "testuser@ondemand" in the Username field.

Congratulations!

The Login Success Page will appear after a client has successfully logged into WSG-500 and has been authenticated by the system.

The appearance of Login Success Page means that WSG-500 has been installed and configured properly.



After these steps, your WSG-500 is able to establish Internet connection. More machine configurations and information can be found in the user's manual CD, please be sure to check the user's manual for more understandings. If you have any other questions, please contact the local dealer where you purchasing this product.