



**DSA-1000 / PRT-1000
Device Server / Thermal Printer**

User Manual

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Package Contents

• DSA-1000	x 1
• Power Adapter DC12V 1.5A	x 1
• Quick Installation Guide	x 1



It is highly recommended to use all the supplies in the package instead of substituting any components by other suppliers to guarantee best performance.

- ✓ Web Browser : Internet Explorer (8.0 or above), Firefox, Safari
- ✓ A Computer with a network adapter properly installed.
- ✓ 1 X RJ-45 Ethernet cable.

Preface

With the growth of the Internet age and ever increasing demand for wireless Internet access in public locations ranging from places such as airports, hotels, conventions, stadiums, restaurants or coffee shops, this has revolutionized the Hotspot application and becoming more and more apparent in our daily lives.

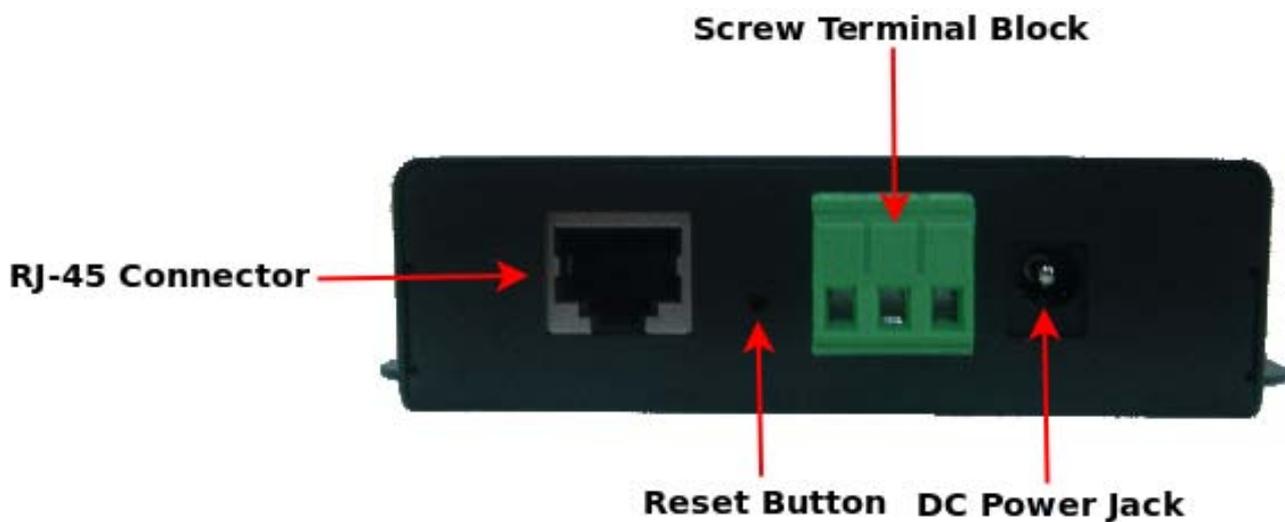
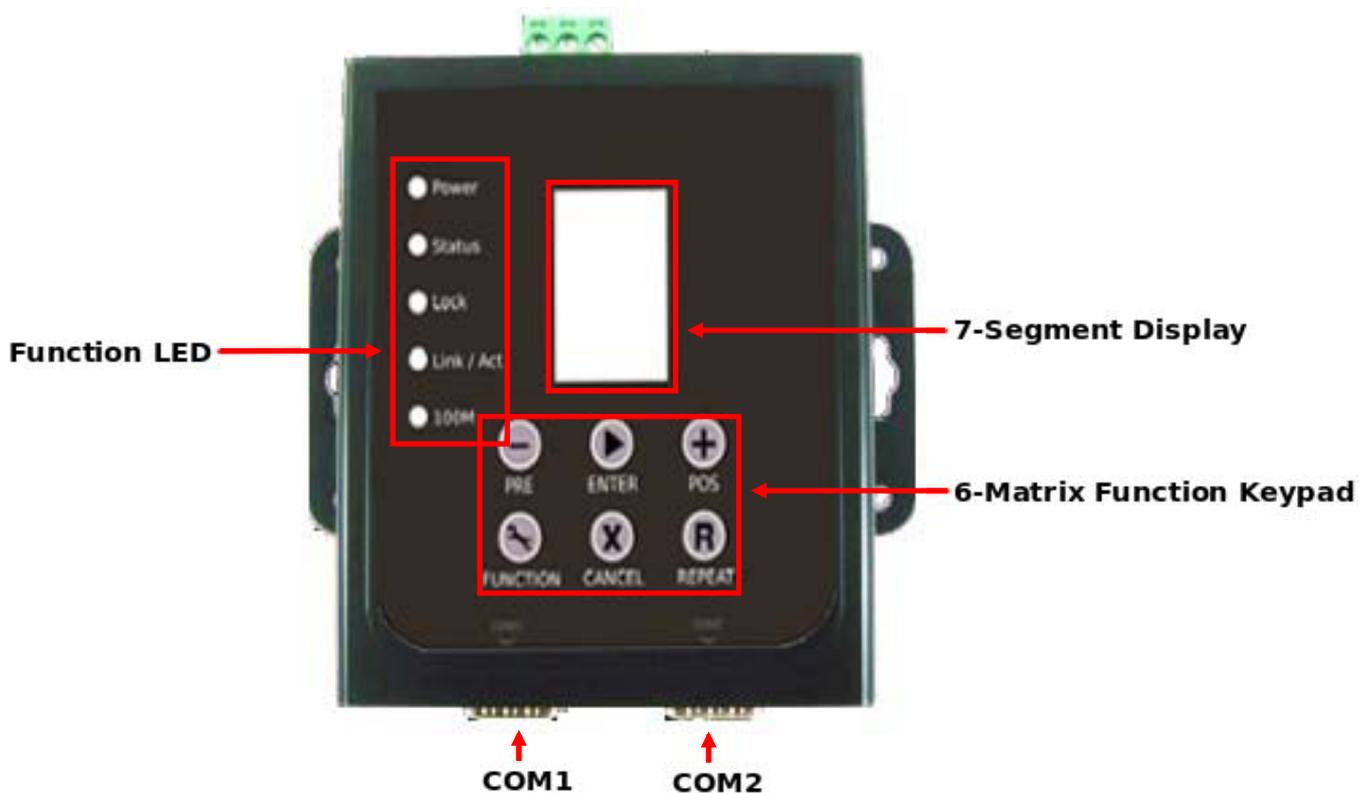
WHG-1000 WiFi-N Hotspot Access Controller provides the perfect opportunity to generate added revenue for your business and ensuring quality of service for customers within a secured network and prevent unwelcomed users to access the Internet. **The hotspot on-demand ticket billing kits** containing **PRT-1000 Line Thermal Printer** and **DSA-1000 Network Device Server** provides instant ticketing for users and comes with two COM ports for redundancy where two Line Thermal Printers can

be attached at the same time. **The hotspot on-demand billing kit** is designed with ease of use for account generation via DSA-1000 Network Device Server from the built-in On-Demand billing plan from WHG-1000 WiFi-N Hotspot Access Controller and then prints the account ticket via PRT-1000 Line Thermal Printer.

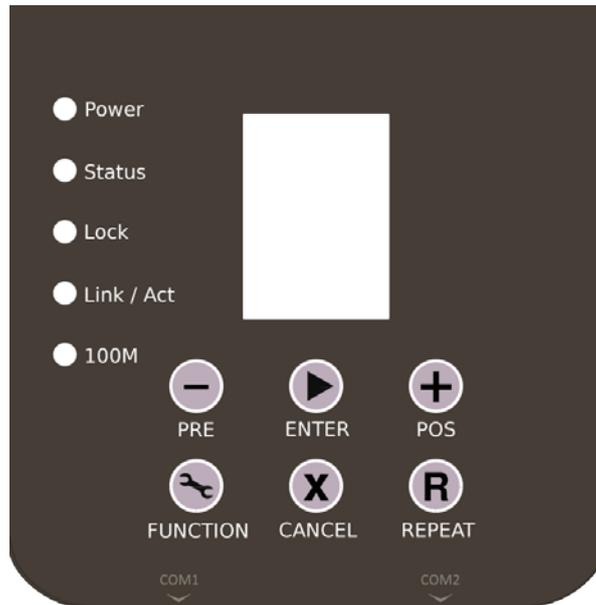
The hotspot on-demand ticket billing kits is easy to installation and setup where the Line Thermal Printer connects directly to DSA-1000 Network Device Server with serial port (RS-232) COM1 and COM2 (for redundancy) and standard TCP/IP (RJ45) interface to connect to WHG-1000 WiFi-N Hotspot Access Controller. It is simple to operate with just a few clicks on the DSA-1000 Network Device Server and out comes the ticket from the Line Thermal Printer . .

This Quick Installation Guide provides instruction for installing the DSA-1000 for Thermal Printer(**PRT-1000**)

DSA-1000 Overview



LED and Keypad Description



LED Indicate :

- **Power** : LED **ON** indicates power on, and **OFF** indicates power off.
- **Status** : LED **ON** indicates the device **associated** with WHG-1000; LED **OFF** indicates the device **unassociated** with WHG-1000; LED **FLASH** indicates the **FUNCTION** key activated.
- **Lock** : LED **ON** indicates the Keypad **locked**; LED **OFF** indicates the Keypad **unlocked**; LED **FLASH** indicates input digit number key for unlocking.
- **Link/Act** : Link and activity of Ethernet port
- **100M** : Link speed of Ethernet port.

Keypad :

- **/** : **Increase** (POS) and **Decrease**(PRE) number for selecting *Plan* or *Function* option. **Press and Hold two** button for more than **5** seconds(until **Status LED FLASH**) to reset the device to default configurations.
- **Enter** : Click to printer On-Demand Account Tickets or Function selected.
- **FUNCTION** :
 - ➔ **Lock Keypad function**: Press and Hold button until **Lock LED ON**.
 - ➔ **Unlock Keypad function**: Press button until **Lock LED FLASH**, then input key for unlocking.
 - ➔ **Link Test function** : Click button, then select in number **1** and click Enter.
 - ➔ **Statement Printing** : Click button, then select in number **9** and click Enter, the PRT-1000 will print Statement of "**Current Balance**"; select in number **8** and click Enter, the PRT-1000 will print Statement of "**Early Balance**".
- **CANCEL**: Stop to print Statement, Clear input key for unlocking or cancel other event...
- **REPEAT**: Repeat to print **previous** Tickets.



How to reset the Network Serial Server back to factory default setting

- 1) First unplug the Ethernet Cable connected to the network serial server and press the reset button
- 2) Then press and Hold the “PRE” and “POS” buttons simultaneously for more than 5 seconds (until Status LED FLASH) to reset the device to default configurations.



How to Lock and Unlock Keypad for On-Demand Authentication

In WHG-1000 web UI:

- 1) Select a Service Domain's Authentication Type as On-Demand.
- 2) Under Service Domain → Authentication → On-Demand → Billing Plan Setup: Enable and save a billing plan.
- 3) Under Service Domain → Authentication → On-Demand → Thermal Printer Setup: Edit a thermal printer. After enabling it, provide a 4 to 8 –digit **Lock Password**. Save everything and reboot the WHG-1000.

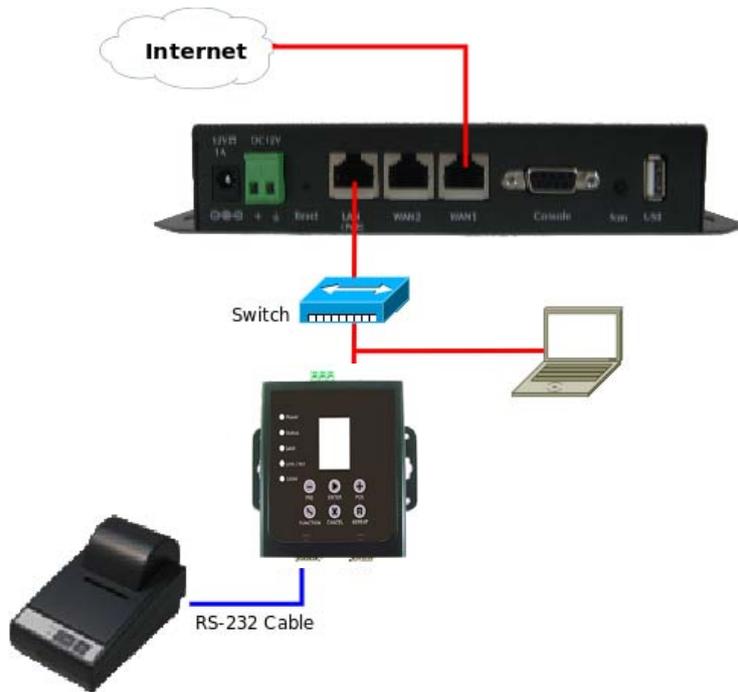
On the DSA-1000 keypad:

- 4) After WHG-1000 reboots, press the **Function button** (left-down) for a while until the **Lock LED** turns solid on. Now the keypad is locked.
- 5) To Unlock the keypad, press the **Function button** (left-down) for a while until the **Lock LED** starts to blink.
- 6) Select the Lock password digits one by one by pressing the **PRE (-)** or **POS (+)** buttons and then pressing **Enter button** after each digit. After all the keys are input, the **Lock LED** will turn off, which denotes the keypad is unlocked.



The default password for the Network Serial Server is “1111”

Please follow the steps mentioned below to install the hardware of DSA-1000 with **WHG-1000** and **PRT-1000**



1. Connect DSA-1000 to your WHG-1000 via Ethernet cable.

Connect one end of the Ethernet cable to the LAN port of DSA-1000 on the front panel. In your environment, connect the other end of the cable to your network.



DSA-1000 also can connect to WAN1/WAN2 port of WHG-1000, but DSA-1000's network subnet must be same with WHG-1000's WAN1/WAN2

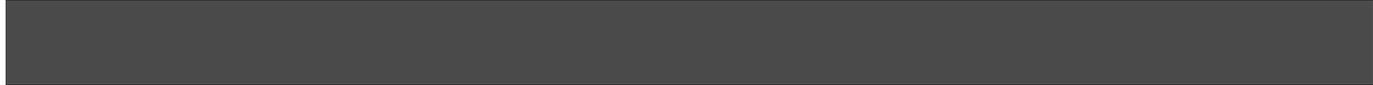
2. Connect DSA-1000 to your PRT-1000 via the provided RS-232(DB9 to DB25) cable.

Connect one end of the RS-232 cable to **COM1** port of DSA-1000 on the front panel. Connect the other end of RS-232 cable to PRT-1000's **DB25 Connector** for communicating with Thermal Printer.

3. Connect the DC power adapter to the DSA-1000 power socket on the rear panel.



Please only use the power adapter supplied with the DSA-1000 package. Using a different power adapter may damage this system

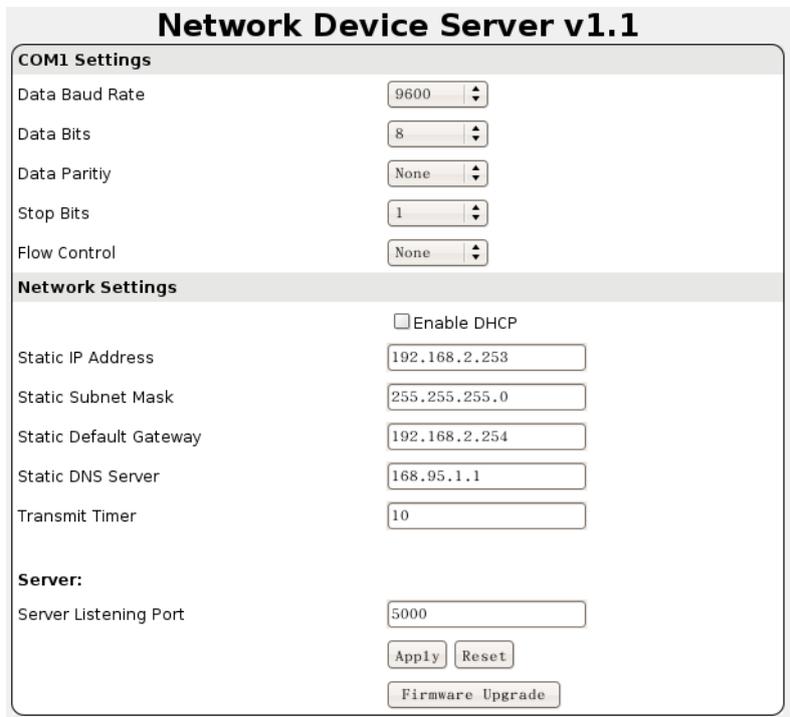


Step :

1. Once the hardware installation is done, set the IP segment of the administrator's computer to be in the subnet of **192.168.2.x**. Since the DSA-1000's default IP address is **192.168.2.253**, make sure no other network devices are assigned an IP address of **192.168.2.253**.

2. Launch a web browser to access the web GUI of DSA-1000 by entering "**http://192.168.2.253/setting.htm**" in the address field.

3. After a successful login, the "**Setting Page**" will appear on the screen.



4. Set **COM1 Settings** for communicating with **PRT-1000** Thermal Printer.(The default COM1 Setting already matched with PRT-1000)

5. Configure IP Address in the same range of **WHG-1000**.(The default WHG-1000's LAN IP address is **192.168.2.254**)

6. Select desired **Server Listening Port**, default is **5000**.

7. Click **Apply** button to enable New setting.

WHG-1000 provides wireless and wired network service with On-Demand authentication for clients in Service Domain. Administrator can select Billing Plan on each PRT-1000 Thermal Printer. If *Billing Plan* is enabled, the Thermal Printer can generate On-Demand's tickets. The clients are required to get authenticated successfully before access the Internet.

Configuration Steps :

Step 1 : Create Billing Plans.

→ Click **Service Domain -> Authentication -> On-Demand -> Billing Plans Setup**, the Billing Plans List page

🏠 Service Domain > **Billing Plans Setup**

Billing Plans List							
#	Status	Plan Name	Type:Quota	Price	Edit	Info	
0	On	Package 0	Unlimited Until End Time	10.00 USD	Edit	Info	
1	On	Package 1	Multiple Times: 60 Minutes	5.00 USD	Edit	Info	
2	On	Package 2	One Time: 60 Minutes	3.00 USD	Edit	Info	
3	Off	Package 3	Unlimited Until End Time	10.00 USD	Edit	Info	
4	Off	Package 4	Unlimited Until End Time	10.00 USD	Edit	Info	
5	Off	Package 5	Unlimited Until End Time	10.00 USD	Edit	Info	
6	Off	Package 6	Unlimited Until End Time	10.00 USD	Edit	Info	
7	Off	Package 7	Unlimited Until End Time	10.00 USD	Edit	Info	
8	Off	Package 8	Unlimited Until End Time	10.00 USD	Edit	Info	
9	Off	Package 9	Unlimited Until End Time	10.00 USD	Edit	Info	

will appear. Here provides **10** sets of independent billing plans.

→ Select desired Billing Plan and click **Edit**, then setup page will appear.

→ Enable Billing and set desired billing plan for uses used. Below depicts an example for Billing Plan 2 S

🏠 Service Domain > Billing Plans Setup > **Billing Plan0 Setup**

Billing Plan0 Setup

Service : Disable Enable

Plan Name :

Price : * *

Passcode Type : All Digit All Letters Mix Digit Letter

: No L/W/1 No O/O No U/V

Passcode Length :

Wireless Information :

Description :

PayPal Description :

Receipt Header :

Receipt Footer :

Billing Type

Type :

Effective Start Time : Days Hours Minutes

Effective End Time : Days Hours Minutes

Display Item Option

Plan Name :

Price :

Type :

Create Time :

Start Time :

End Time :

Wireless Information :

Description :

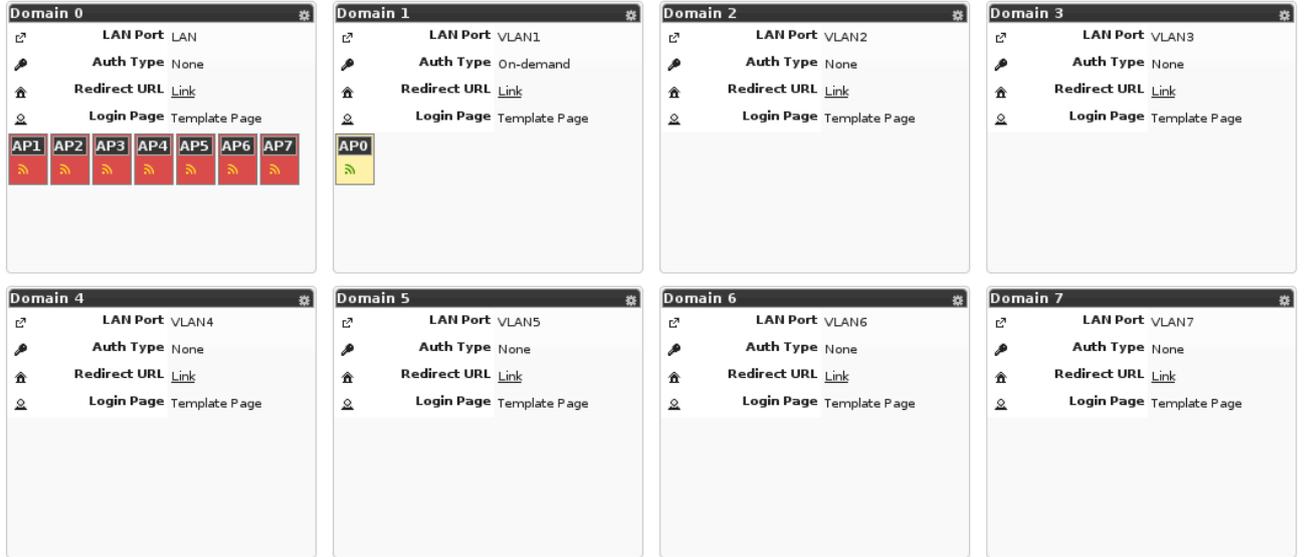
Receipt Header :

Receipt Footer :

Step 2 : Set Virtual AP and Select On-Demand's Authentication for Service Domain

- Click **Service Domain**, the Service Domain Setup page will appear.
- Set **VAP0** in Domain1 and select **On-Demand** in Authentication Type. Below depicts an example for Domain1 with AP0 and On-Demand's authentication.

🏠 Service Domain Setup



Step 3 : Select Billing Plans for Thermal Printer.

- Click **Service Domain -> Authentication -> On-Demand -> Thermal Printer Setup**, the Thermal Printer List page will appear.

🏠 Service Domain > Billing Plans Setup > Thermal Printer Setup

Thermal Printer List

#	Status	IP Address	Command Port	COM Port	Date	Description	Edit	Info
0	On	192.168.2.253	5000	COM1	23:59		Edit	Info
1	Off		5000	COM1	23:59		Edit	Info
2	Off		5000	COM1	23:59		Edit	Info
3	Off		5000	COM1	23:59		Edit	Info
4	Off		5000	COM1	23:59		Edit	Info
5	Off		5000	COM1	23:59		Edit	Info
6	Off		5000	COM1	23:59		Edit	Info
7	Off		5000	COM1	23:59		Edit	Info
8	Off		5000	COM1	23:59		Edit	Info
9	Off		5000	COM1	23:59		Edit	Info

- Select desired Thermal Printer and click **Edit**, then setup page will appear.
- Enable Thermal Printer and set related setting with **DSA-1000**. Then select desired Billing Plan for Thermal Printer. Below depicts an example.

🏠 Service Domain > Billing Plans Setup > Thermal Printer Setup > Thermal Printer0 Setup

Thermal Printer0 Setup

Service: Disable Enabled

IP Address: 192.168.2.253

Command Port: 5000

COM Port: COM1 COM2

New Lock Password: []

Confirm Lock Password: []

Balance Date: 23:59 *h:m

Description: []

Billing Plan Setup List

#	Enable	Plan Name	Type:Quota	Price
0	<input checked="" type="checkbox"/>	Package 0	Unlimited Until End Time	10.00 USD
1	<input checked="" type="checkbox"/>	Package 1	Multiple Times: 60 Minutes	5.00 USD
2	<input checked="" type="checkbox"/>	Package 2	One Time: 60 Minutes	3.00 USD
3	<input type="checkbox"/>	Package 3	Unlimited Until End Time	10.00 USD
4	<input type="checkbox"/>	Package 4	Unlimited Until End Time	10.00 USD
5	<input type="checkbox"/>	Package 5	Unlimited Until End Time	10.00 USD
6	<input type="checkbox"/>	Package 6	Unlimited Until End Time	10.00 USD
7	<input type="checkbox"/>	Package 7	Unlimited Until End Time	10.00 USD
8	<input type="checkbox"/>	Package 8	Unlimited Until End Time	10.00 USD
9	<input type="checkbox"/>	Package 9	Unlimited Until End Time	10.00 USD

Step 4 : Reboot WHG-1000.

- Click **Reboot** button to enable new setting.

Step 5 : DSA-1000 Link Test .

- After reboot, the DSA-1000's **Status** LED should be **ON**.
- Press **FUNCTION** button, the **Status** LED should be **FLASH**.
- Select in number **1** and press **Enter** button, the PRT-1000 Thermal Printer should be print "**Thermal Printer Link Test !**" message
- Press **CANCEL** button to stop function event, the **Status** LED should be **ON**.

Step 6 : Generate On-Demand's Ticket from Thermal Printer.

- Press **POS** or **PRE** button, select desired Billing Plan (e.g Plan **0~2** for this example)and click **Enter** button to print ticket for your visitor. This ticket contains a unique login **Passcode**.

```
Passcode: DF2T5TCB

Price: 3.00 USD
Type : One Time
Quota : 60 mins
Create Time: 2010/06/09 16:45:34
Start Time: 2010/06/09 16:45:34
End Time: 2010/06/14 16:45:34
Wireless ESSID:
Wireless Key:
Description:
```

```
Passcode: 547QNM3R

Price: 5.00 USD
Type : Multiple Time
Quota : 60 mins
Create Time: 2010/06/09 16:45:30
Start Time: 2010/06/09 16:45:30
End Time: 2010/06/14 16:45:30
Wireless ESSID:
Wireless Key:
Description:
```

```
Passcode: N8DYSNMC

Price: 10.00 USD
Type : Unlimited
Quota : Until End Time
Create Time: 2010/06/09 16:45:25
Start Time: 2010/06/09 16:45:25
End Time: 2010/06/14 16:45:25
Wireless ESSID:
Wireless Key:
Description:
```

Step 7 : User your Ticket to Access Internet.

- Connect a client device (e.g. Notebook) with wireless interface to scan the configured ESSID of WHG-1000 (e.g. **AP00**) and get associated with this ESSID.
- The client device will obtain an IP address automatically via DHCP from WHG-1000. Open a web browser on a client device, access any URL, and then the Domain1 **User Login Page** will appear.
- Enter the **Passcode** of a printer ticket previously generated via **PRT-1000 Thermal Printer** . Then Click **Login button**. Below depicts an example for login with Passcode.

300Mbps Wireless PoE Hotspot Gateway

300Mbps Wireless PoE Hotspot Gateway

Passcode :

i Please input Passcode/Username and Passwrod, then you can use our internet service. Thanks!

Congratulation !

The success page as below will appear after a client has successfully logged into WHG-1000 and has been authenticated by the system. Now, you are connected the network and Internet!

300Mbps Wireless PoE Hotspot Gateway

300Mbps Wireless PoE Hotspot Gateway

[Home](#)

Connection Time : 2010/6/9 17:41:51 GMT +0800
Expire Time : 2010/6/14 16:45:30 GMT +0800
Remaining Time : 0day 00:59:51

i Please Don't Close This Page.