

MBSSID

The WLAN ADSL Router supports up to four virtual AP (Vap0~Vap3) setting allows wireless users connect up to the WLAN ADSL Router through up to four different WLAN SSID and security settings.

The screenshot displays the MBSSID configuration page for a TRENDnet Wireless ADSL Modem Router (TEW-436BRM). The interface is organized into four sections, one for each virtual access point (Vap0, Vap1, Vap2, and Vap3). Each section includes an 'Enable' checkbox, an 'SSID' text box, and three radio button options for 'Authentication Type' (Open System, Shared Key, and Auto). Below these are two radio button options for 'Wireless Isolation' and 'Ethernet Isolation' (Enabled and Disabled). At the bottom of the page are 'Apply' and 'Reset' buttons. A copyright notice 'Copyright. © 2009 TRENDnet. All Rights Reserved.' is visible at the bottom right of the interface.

Enable: Enable or disable the Vap (Virtual AP) setting.

SSID: Type an SSID in the text box. The SSID of any wireless device must match the SSID typed here in order for the wireless device to access the LAN and WAN via the WLAN ADSL Router.

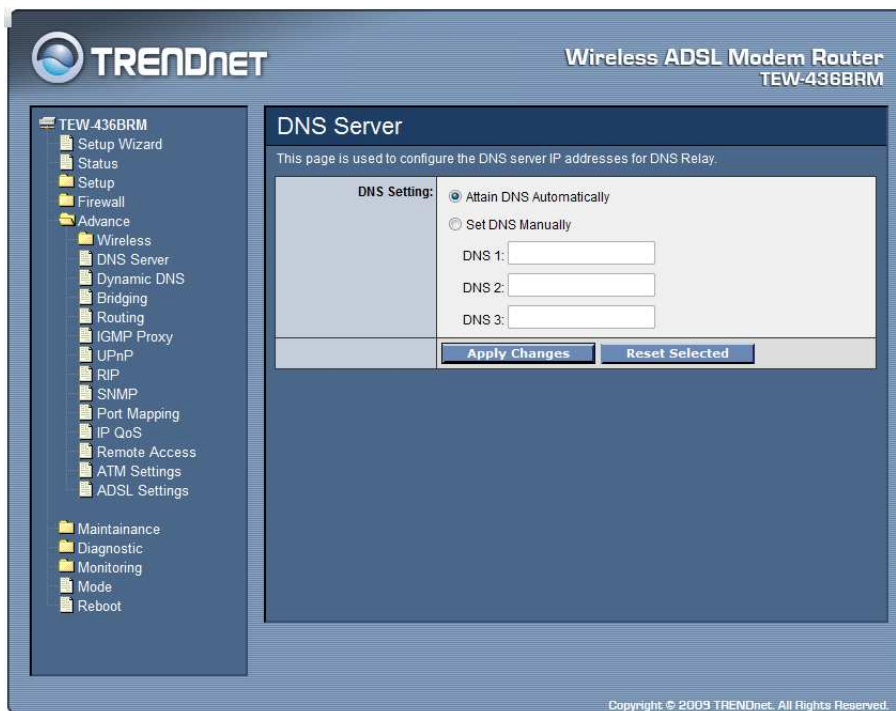
Authentication Type: Open System: Open System authentication is not required to be successful while a client may decline to authenticate with any particular other client. **Shared Key:** Shared Key is only available if the WEP option is implemented. Shared Key authentication supports authentication of clients as either a member of those who know a shared secret key or a member of those who do not. IEEE 802.11 Shared Key authentication accomplishes this without the need to transmit the secret key in clear. Requiring the use of the WEP privacy mechanism. **Auto:** Auto is the default authentication algorithm. It will change its authentication type automatically to fulfill client's requirement.

Wireless Isolation: Select to enable or disable the Wireless Isolation feature. When Wireless Isolation is enabled, wireless clients will not be able to access to the other wireless clients.

Ethernet Isolation: Select to enable or disable the Ethernet Isolation feature. When Ethernet Isolation is enabled, wireless clients will not be able to access to the Ethernet clients.

DNS Server

This page is used to select the way to obtain the IP addresses of the DNS servers.



Attain DNS Automatically: Select this item if you want to use the DNS servers obtained by the WAN interface via the auto-configuration mechanism.

Set DNS Manually: Select this item to configure up to three DNS IP addresses.

DNS 1~3: Ethernet the IP address of the DNS server.

Dynamic DNS

Each time your device connects to the Internet, your ISP assigns a different IP address to your device. In order for you or other users to access your device from the WAN-side, you need to manually track the IP that is currently used. The Dynamic DNS feature allows you to register your device with a DNS server and access your device each time using the same host name. The Dynamic DNS page allows you to enable/disable the Dynamic DNS feature.

The screenshot shows the DDNS configuration page for a TRENDnet Wireless ADSL Modem Router (TEW-436BRM). The page is titled 'DDNS' and includes a navigation menu on the left. The main configuration area contains the following fields and options:

- Enable:** A checkbox that is checked.
- DDNS provider:** A dropdown menu set to 'DyDns.org'.
- Hostname:** A text input field.
- DynDns Settings:** Fields for 'Username' and 'Password'.
- TZO Settings:** Fields for 'Email' and 'Key'.

Below the configuration fields are three buttons: 'Add', 'Modify', and 'Remove'. At the bottom, there is a 'Dynamic DDNS Table' with the following structure:

Select	state	Hostname	Username	Service
--------	-------	----------	----------	---------

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Enable: Checked to enable this registration account for the DNS server.

DDNS Provider: There are two DDNS providers to be selected in order to register your device with: DynDNS and TZO. A charge may occur depends on the service you select.

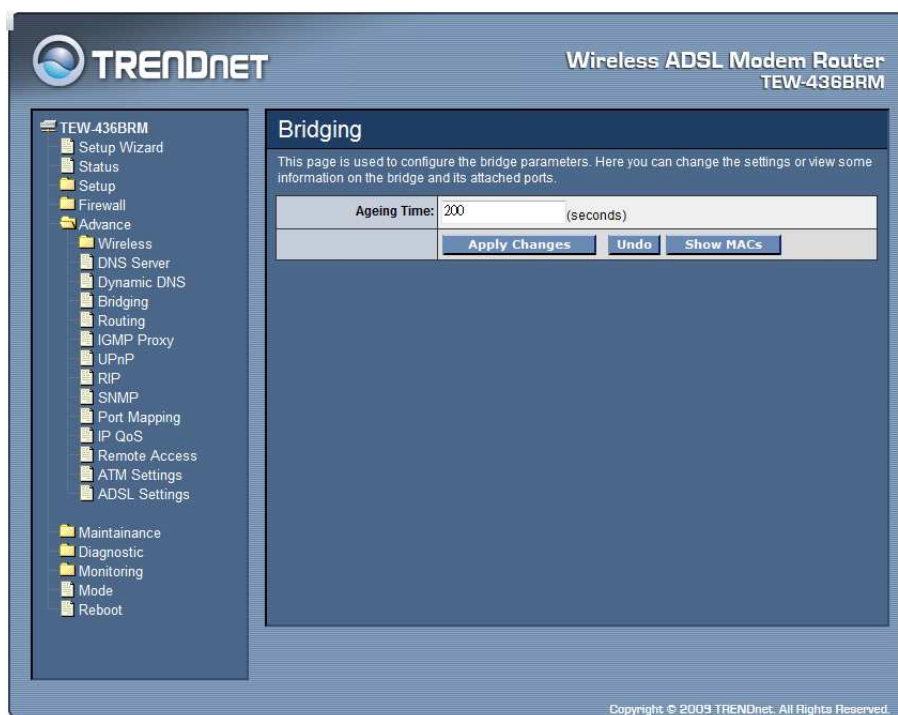
Hostname: Domain name to be registered with the DDNS server.

DynDns Settings: Enter the username and password for your registered DynDNS account.

TZO Settings: Enter the email address and key for your registered TZO account.

Bridging

This page is used to configure the bridge parameters. Here you can change the settings or view some information on the bridge and its attached ports.



Ageing Time: Set the Ethernet address ageing time, in seconds. After [Ageing Time] seconds of not having seen a frame coming from a certain address, the bridge will time out (delete) that address from Forwarding DataBase (fdb).

Show MACs: Click the “Show MACs” button to list MAC address in forwarding DataBase(fdb).

Bridge FDB Table			
This table shows a list of learned MAC addresses for this bridge.			
Port No	MAC Address	Is Local?	Ageing Timer
1	00-13-a9-f2-8f-7a	no	0.00
1	00-18-e7-5c-3c-4a	yes	---

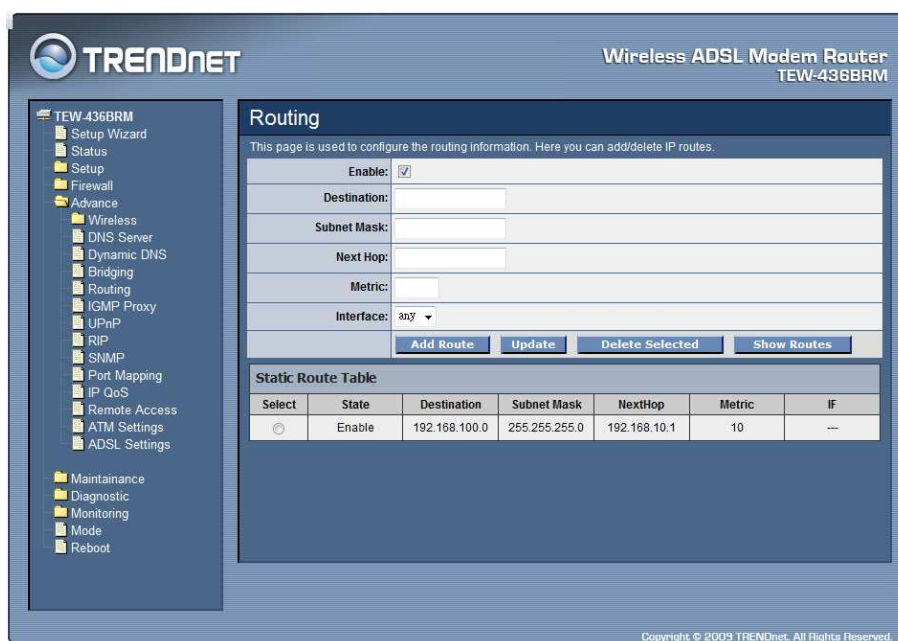
Refresh Close

Routing

The Routing page enables you to define specific route for your Internet and network data. Most users do not need to define routes. On a typical small home or office LAN, the existing routes that set up the default gateways for your LAN hosts and for the WLAN ADSL Router provide the most appropriate path for all your Internet traffic.

- On your LAN hosts, a default gateway directs all Internet traffic to the LAN port(s) on the WLAN ADSL Router. Your LAN hosts know their default gateway either because you assigned it to them when you modified your TCP/IP properties, or because you configured them to receive the information dynamically from a server whenever they access the Internet.
- On the WLAN ADSL Router itself, a default gateway is defined to direct all outbound Internet traffic to a route at your ISP. The default gateway is assigned either automatically by your ISP whenever the device negotiates an Internet access, or manually by user to setup through the configuration.

You may need to define routes if your home setup includes two or more networks or subnets, if you connect to two or more ISP services, or if you connect to a remote corporate LAN.



Enable: Checked to enable the selected route or route to be added.

Destination: The network IP address of the subnet. The destination can be specified as the IP address of a subnet or a specific host in the subnet. It can also be specified as all zeros to indicate that this route should be used for all destinations for which no other route is defined (this is the route that creates the default gateway).

Subnet Mask: The network mask of the destination subnet. The default gateway uses a mask of 0.0.0.0.

Next Hop: The IP address of the next hop through which traffic will flow towards the destination subnet.

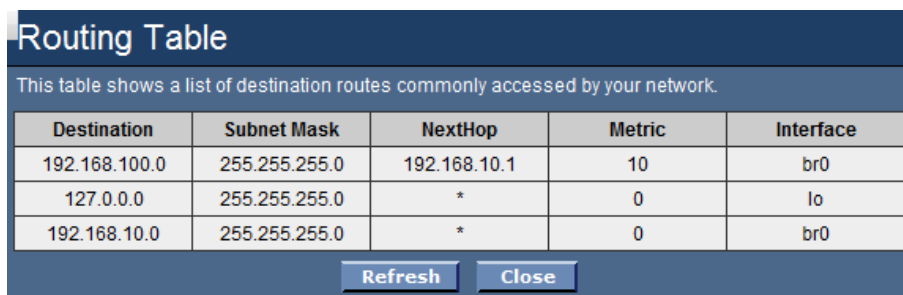
Metric: Defines the number of hops between network nodes that data packets travel. The default value is 0, which means that the subnet is directly one hop away on the local LAN network.

Interface: The WAN interface to which a static routing subnet is to be applied.

Add Router: Click the “Add Router” button to add a user-defined destination route.

Update: Click the “Update” button to modify the selected rule from the Static Route Table.

Show Routes: Click the “Show Routes” to display the routing table of the WLAN ADSL Router.



Routing Table

This table shows a list of destination routes commonly accessed by your network.

Destination	Subnet Mask	NextHop	Metric	Interface
192.168.100.0	255.255.255.0	192.168.10.1	10	br0
127.0.0.0	255.255.255.0	*	0	lo
192.168.10.0	255.255.255.0	*	0	br0

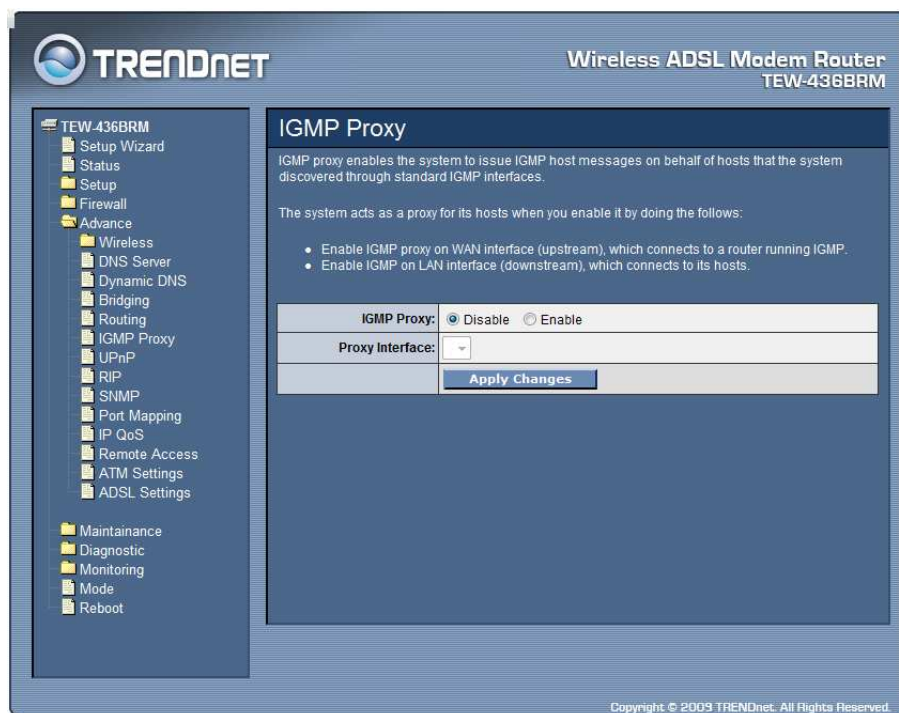
Refresh Close

IGMP Proxy

IGMP proxy enables the system to issue IGMP host messages on behalf of hosts that the system discovered through standard IGMP interfaces.

The system acts as a proxy for its hosts when you enable it by doing the follows:

- Enable IGMP proxy on WAN interface (upstream), which connects to a router running IGMP.
- Enable IGMP on LAN interface (downstream), which connects to its hosts.

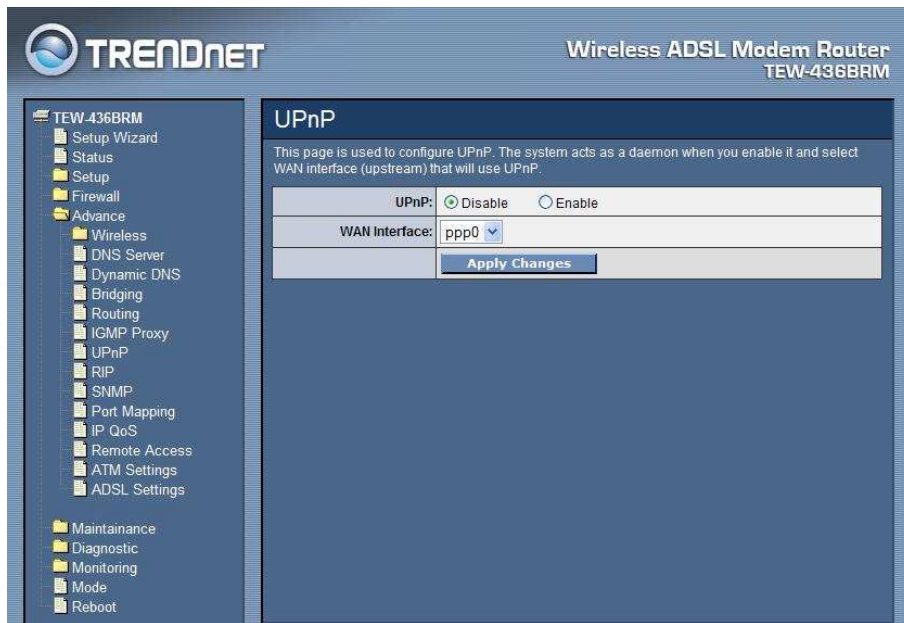


IGMP Proxy: Select to enable or disable the IGMP proxy feature on the WLAN ADSL Router.

Proxy Interface: The upstream WAN interface is selected here.

UPnP

The WLAN ADSL Router supports a control point for Universal Plug and Play (UPnP) version 1.0, and supports two key features: NAT Traversal and Device Identification. This feature requires one active WAN interface. In addition, the host should support this feature. In the presence of multiple WAN interfaces, select an interface on which the incoming traffic is present. With NAT Traversal, when an UPnP command is received to open ports in NAT, the application translates the request into system commands to open the ports in NAT and the firewall. The interface to open the ports on is given to UPnP when it starts up and is part of the configuration of the application. For Device Identification, the application will send a description of the WLAN ADSL Router as a control point back to the host making the request.

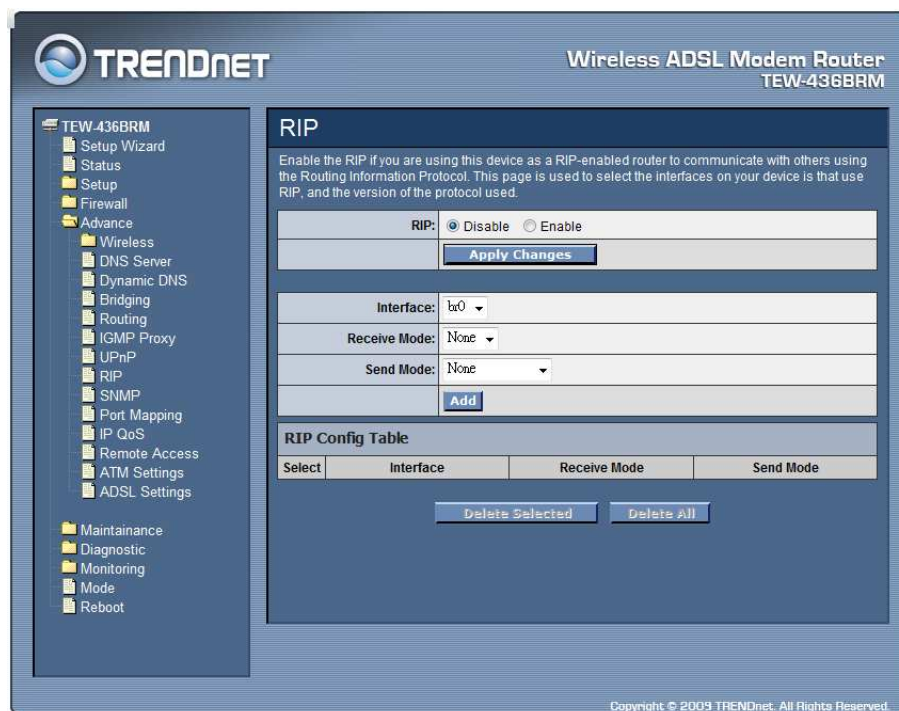


UPnP: Select to enable or disable the UPnP feature on the WLAN ADSL Router.

WAN Interface: Select WAN interface that will use UPnP from the drop-down lists.

RIP

Enable the RIP if you are using this device as a RIP-enabled router to communicate with others using the Routing Information Protocol. This page is used to select the interfaces on your device is that use RIP, and the version of the protocol used.



RIP: Select to enable or disable the RIP feature on the WLAN ADSL Router.

Receive Mode: Select which RIP version to be used for RIP listening, RIP1, RIP2 or Both (RIP1+RIP2), Selected None to disable the RIP listening.

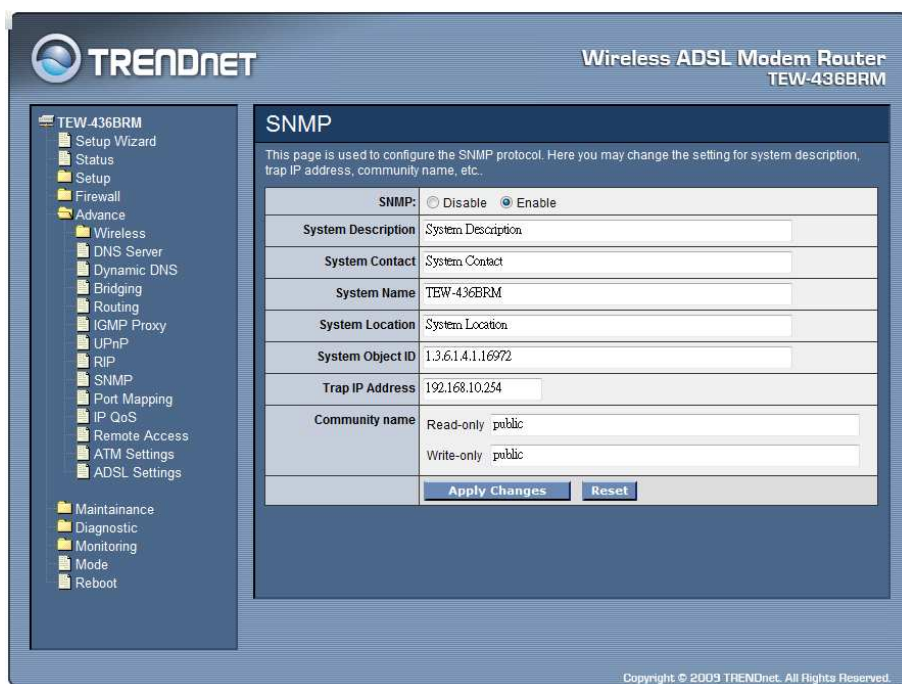
Send Mode: Select which RIP version to be used for RIP sending, RIP1, RIP2 or Both (RIP1+RIP2), Selected None to disable the RIP sending.

Delete Selected: Click the “Delete Selected” button to delete the selected RIP config from RIP Config Table.

Delete All: Click the “Delete All” button to delete the all of rule in the RIP config from RIP Config Table.

SNMP

Simple Network Management Protocol (SNMP) is a troubleshooting and management protocol that uses the UDP protocol on port 161 to communicate between clients and servers. The DSL device can be managed locally or remotely by SNMP protocol.



SNMP: Enable or Disable the SNMP feature on the WLAN ADSL Router.

System Description: System description of the WLAN ADSL Router.

System Contact: Contact person and/or contact information for the WLAN ADSL Router.

System Name: An administratively assigned name for the WLAN ADSL Router.

System Location: The physical location of the WLAN ADSL Router.

System Object ID: Vendor Object Identifier. The vendor’s authoritative identification of the network management subsystem contained in the entity.

Trap IP Address: Destination IP address of the SNMP trap.

Community name:

Read-only: Name of the read-only community. This read-only community allows read operation to all objects in the MIB.

Write-only: Name of the write-only community. This write-only community allows write operation to the objects defines as read-writable in the MIB.

Port Mapping

The WLAN ADSL Router provides multiple interface groups. Up to five interface groups are supported including one default group. The LAN and WAN interfaces could be included. Traffic coming from one interface of a group can only be flowed to the interfaces in the same interface group. Thus, the WLAN ADSL Router can isolate traffic from group to group for some application. By default, all the interfaces (LAN and WAN) belong to the default group, and the other four groups are all empty. It is possible to assign any interface to any group but only one group.



Port Mapping: Select to enable or disable the interface group feature. If disabled, all interfaces belong to the default group.

Interface Group

To manipulate a mapping group:

1. Select a group from the table.
2. Select interfaces from the available/grouped interface list and add it to the grouped/available interface list using the arrow buttons to manipulate the required mapping of the ports.
3. Click “Apply Changes” button to save the changes.

IP QoS

The WLAN ADSL Router provides a control mechanism that can provide different priority to different users or data flows. The QoS is enforced by the QoS rules in the QoS table. A QoS rule contains two configuration blocks: Traffic Classification and Action. The Traffic Classification enables you to classify packets on the basis of various fields in the packet and perhaps the physical ingress port. The Action enables you to assign the strictly priority level for and mark some fields in the packet that matches the Traffic Classification rule. You can configure any or all field as needed in these two QoS blocks for a QoS rule.

TRENDNET Wireless ADSL Modem Router
TEW-436BRM

TEW-436BRM
Setup Wizard
Status
Setup
Firewall
Advance
Wireless
DNS Server
Dynamic DNS
Bridging
Routing
IGMP Proxy
UPnP
RIP
SNMP
Port Mapping
IP QoS
Remote Access
ATM Settings
ADSL Settings
Maintenance
Diagnostic
Monitoring
Mode
Reboot

IP QoS

Entries in this table are used to assign the precedence for each incoming packet based on physical LAN port, TCP/UDP port number, and source/destination IP address/subnet masks.

IP QoS: Disabled Enabled

Default QoS: IP Pred

Apply Changes

Specify Traffic Classification Rules

Source:	IP Address: <input type="text"/>
	Netmask: <input type="text"/>
	Port: <input type="text"/>
Destination:	IP Address: <input type="text"/>
	Netmask: <input type="text"/>
	Port: <input type="text"/>
Protocol:	<input type="text"/>
Physical Port:	<input type="text"/>

Assign Priority and/or IP Precedence and/or Type of Service and/or DSCP

Outbound Priority: p3(lowest)

802.1p:

Precedence:

TOS:

Add

IP QoS Rules

Select	Status	Traffic Classification Rules					Mark			
		Src IP	Src Port	Dst IP	Dst Port	Protocol	Lan Port	Priority	IP Preced	IP ToS

Delete Selected Delete All

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IP QoS: Select to enable or disable the IP QoS function.

Default QoS: Select the QoS method IP Pred or 802.1p from list.

Source: The IP address, subnet mask and port number of the traffic source.

Destination: The IP address, subnet mask and port number of the traffic destination.

Protocol: The selections are TCP, UDP, ICMP and the blank for none. This field is required if the source port or destination port has been entered.

Physical Port: The incoming ports. The selections include LAN ports, wireless port, and the blank for not applicable.

Outbound Priority: The priority level for the traffic that matches this classification rule. The possible selections are (in the descending priority): p0, p1, p2, p3.

802.1p: Select this field to mark the 3-bit user-priority field in the 802.1p header of the packet that match this classification rule. Note that this 802.1p marking is workable on a given PVC channel only if the VLAN tag is enabled in this PVC channel.

Precedence: Select this field to mark the IP precedence bits in the packet that match this classification rule.

TOS: Select this field to mark the IP TOS bits in the packet that match this classification rule.

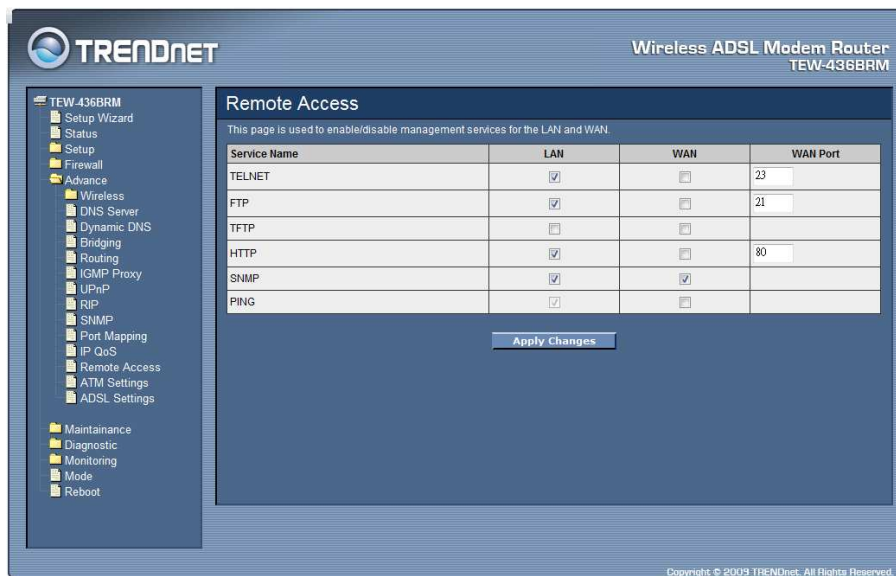
Add: Click to add the QoS rule to the UP QoS Rules.

Delete Selected: Click the “Delete Selected” button to delete the selected QoS rule from the IP QoS Rules.

Delete All: Click the “Delete All” button to delete the all of rule in the IP QoS Rules.

Remote Access

The Remote Access function can secure remote host access to your DSL device from LAN and WLAN interfaces for some services provided by the DSL device.



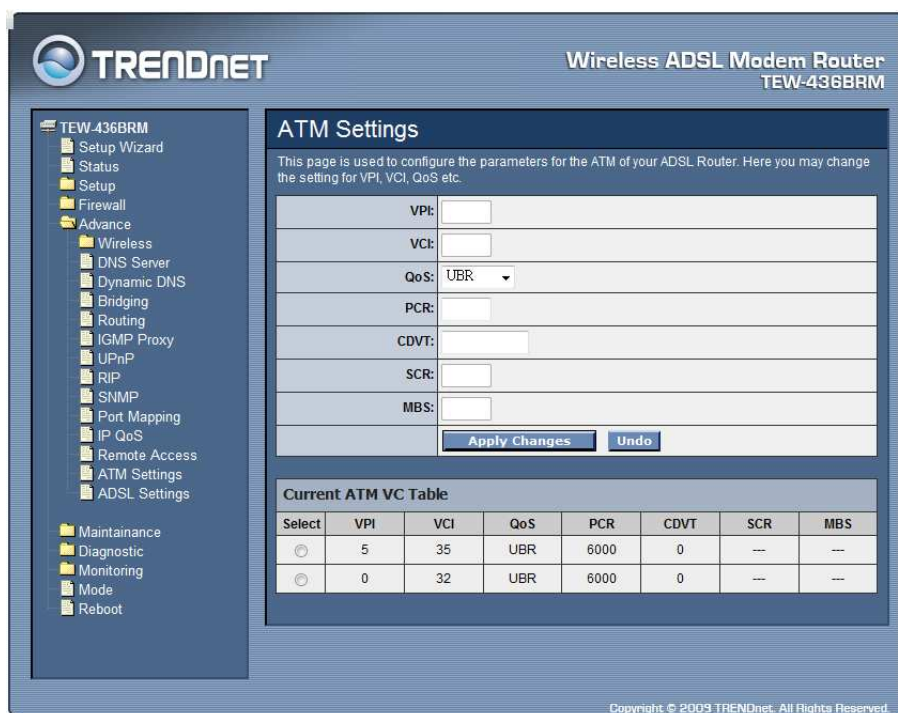
LAN: Checked the services on the LAN column to allows the services access from LAN side.

WAN: Checked the services on the WAN column to allows the services access from WAN side.

WAN Port: This field allows the user to specify the port of the corresponding service. Take the HTTP service for example; when it is changed to 8080, the HTTP server address for the WAN side is `http://dsl_addr:8080`, where the `dsl_addr` is the WAN side IP address of the WLAN ADSL Router.

ATM Settings

This page is used to configure the parameters for the ATM of your ADSL Router. Here you may change the setting for VPI, VCI, QoS etc.



VPI: Virtual Path Identifier. This is read-only field and is selected on the Select column in the Current ATM VC Table.

VCI: Virtual Channel Identifier. This is read-only field and is selected on the Select column in the Current ATM VC Table. The VCI, together with VPI, is used to identify the next destination of a cell as it passes through to the ATM switch.

QoS: Quality of Server, a characteristic of data transmission that measures how accurately and how quickly a message or data is transferred from a source host to a destination host over a network. The four QoS options are:

- **UBR (Unspecified Bit Rate):** When UBR is selected, the SCR and MBS fields are disabled.
- **CBR (Constant Bit Rate):** When CBR is selected, the SCR and MBS fields are disabled.
- **nrt-VBR (non-real-time Variable Bit Rate):** When nrt-VBR is selected, the SCR and MBS fields are enabled.

- **rt-VBR (real-time Variable Bit Rate):** When rt-VBR is selected, the SCR and MBS fields are enabled.

PCR: Peak Cell Rate, measured in cells/sec., is the cell rate which the source may never exceed.

CDVT: Cell Delay Variation Tolerance, is a QoS parameter in ATM network for managing traffic that is specified when a connection is set up. In CBR transmissions, CDVT determines the level of jitter that is tolerable for the data samples taken by the PCR.

SCR: Sustained Cell Rate, measured in cells/sec., is the average cell rate over the duration of the connection.

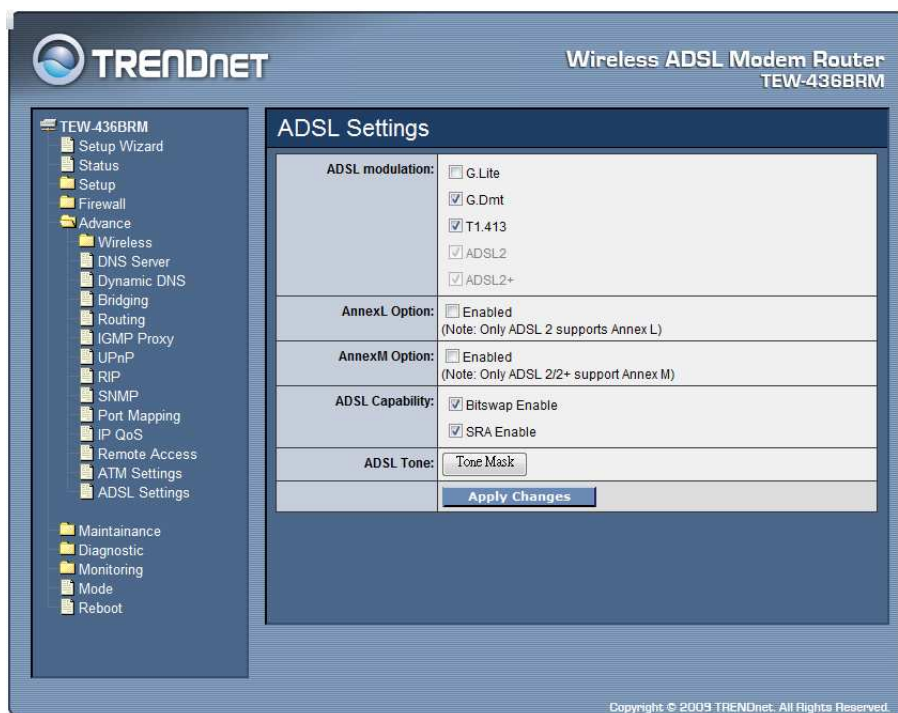
MBS: Maximum Burst Size, a traffic parameter that specifies the maximum number of cells that can be transmitted at the peak cell rate.

Apply Changes: Click to set new PVC QoS mode for the selected PVC. New parameters will take effect after save into flash memory and reboot the system.

Undo: Discard your settings.

ADSL Settings

The ADSL setting page allows you to select any combination of DSL training modes.



ADSL modulation: Choose preferred xDSL standard protocols, defined by ISP.

G.lite: G.992.2 Annex A

G.dmt: G.992.1 Annex A

T1.413: T1.413 issue #2

ADSL2: G.992.3 Annex A

ADSL2+: G.992.5 Annex A

AnnexL Option: Checked to Enable the ADSL2/ADSL2+ Annex L capability.

AnnexM Option: Checked to Enable the ADSL2/ADSL2+ Annex M capability.

ADSL Capability: Checked to enable the bitswap capability or SRA capability.

ADSL Tone: Click the “ADSL Tone” button to choose tones to be masked. Masked tones will not carry any data.

This page let user to mark the designate tones to be masked.

Tone Number	Select
0	<input type="checkbox"/>
1	<input type="checkbox"/>
2	<input type="checkbox"/>
3	<input type="checkbox"/>
4	<input type="checkbox"/>
5	<input type="checkbox"/>
6	<input type="checkbox"/>
7	<input type="checkbox"/>
8	<input type="checkbox"/>
9	<input type="checkbox"/>
10	<input type="checkbox"/>
11	<input type="checkbox"/>

:

500	<input type="checkbox"/>
507	<input type="checkbox"/>
508	<input type="checkbox"/>
509	<input type="checkbox"/>
510	<input type="checkbox"/>
511	<input type="checkbox"/>

..

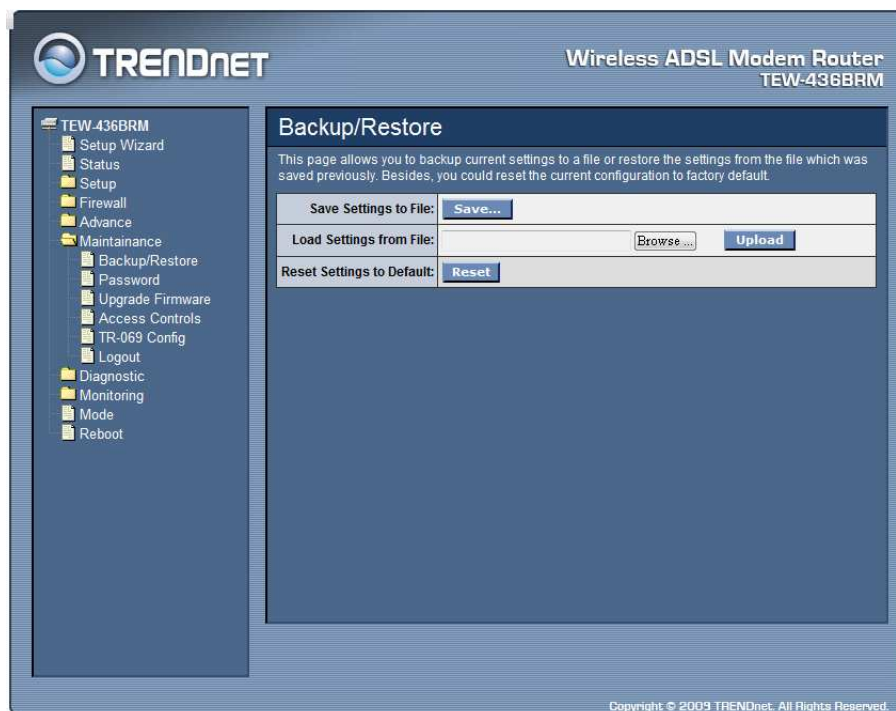
Apply Changes	Mask All	UnMask All	Close Page
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Apply Changes: Click to save the setting to the configuration and the modem will be retrained.

Maintainance

Backup/Restore

This page allows you to backup current settings to a file or restore the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.



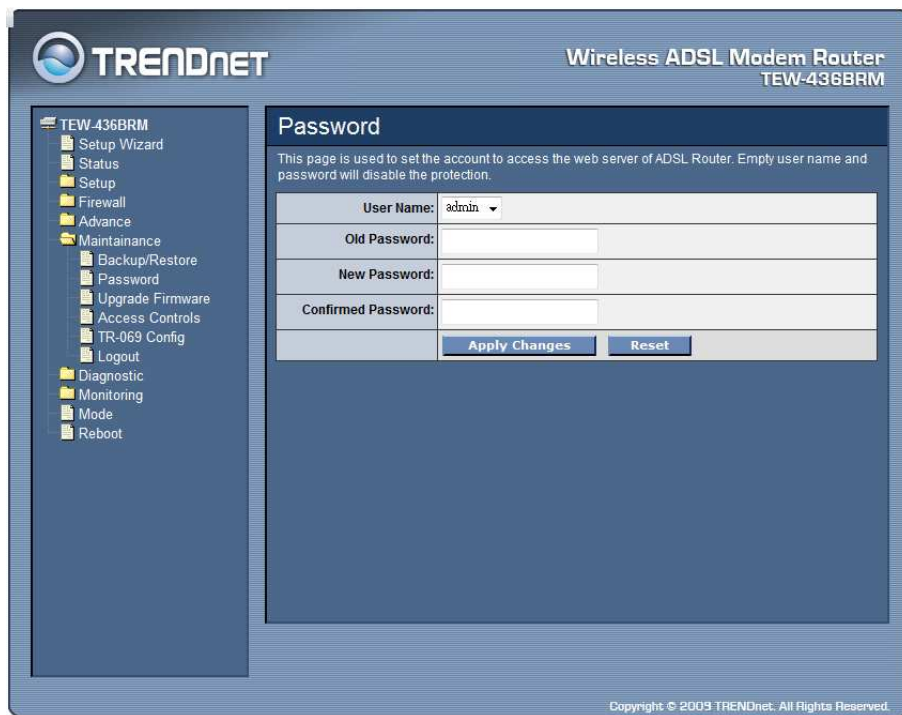
Save Setting to File: Click the “Save Setting to File” button to save current settings of the WLAN ADSL Router to local computer.

Load Setting from File: Click the “Browse” button and selected a saved setting file from file browse window then click “Upload” button to loading the saved setting to the WLAN ADSL Router.

Reset Settings to Default: Click the “Reset” button to reset the settings to factory default settings.

Password

The first time you log into the WLAN ADSL Router, you use the default password. There are two-level logins: *admin* and *user*. The admin and user password configuration allows you to change the password for administrator and user.



User Name: Selection of user levels are: admin and user.

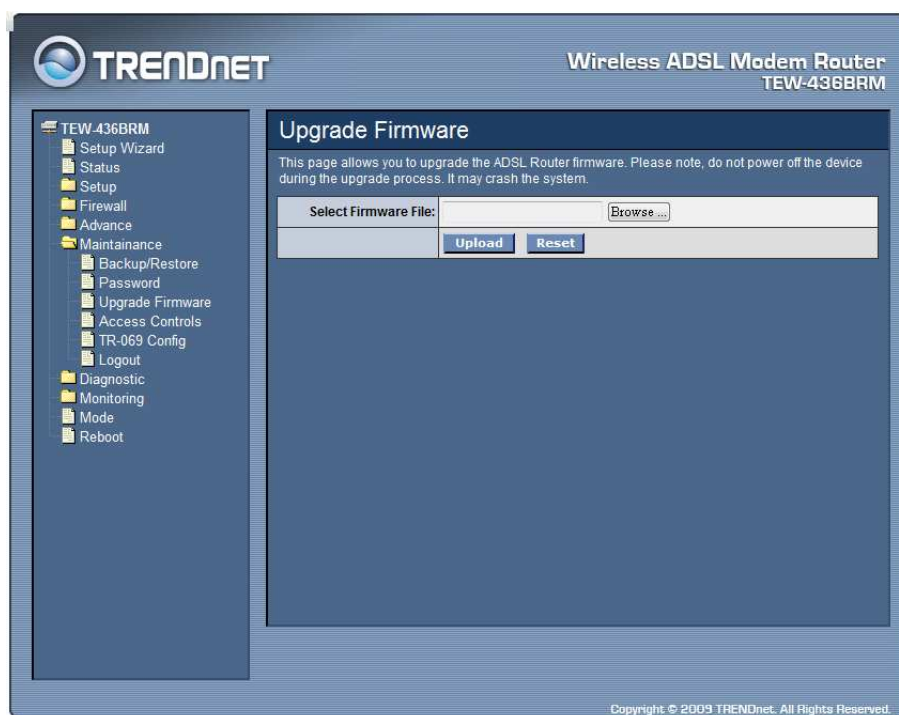
Old Password: Enter the old password for this selected login.

New Password: Enter the new password here.

Confirmed Password: Enter the new password here again to confirm.

Upgrade Firmware

This page allows you to upgrade the WLAN ADSL Router firmware. Please note, do not power off the device during the upgrade process. It may crash the system.



To upgrade the firmware for the DSL device:

- Click the Browse button to select the firmware file.
- Confirm your selection.
- Click the Upload button to start upgrading.

IMPORTANT! Do not turn off your DSL device or click the Reset button while this procedure is in progress.

Access Controls

The Access Control List (ACL) is a list of permissions attached to the WLAN ADSL Router. The list specifies who is allowed to access this device. If ACL is enabled, all hosts cannot access this device except for the hosts with IP address in the ACL table.

The screenshot shows the 'Access Controls' configuration page for a Trendnet Wireless ADSL Modem Router (TEW-436BRM). The page is titled 'Access Controls' and includes a brief description: 'This page is used to configure the IP Address for Access Control List. If ACL is enabled, just these IP address that in the ACL Table can access CPE. Here you can add/delete IP Address.'

The configuration options are as follows:

- ACL Capability:** Radio buttons for 'Disable' and 'Enable' (selected). An 'Apply Changes' button is below.
- Enable:** A checked checkbox.
- Interface:** A dropdown menu set to 'LAN'.
- IP Address:** A text input field.
- Subnet Mask:** A text input field.

Below these fields are 'Add' and 'Modify' buttons. At the bottom, there is an 'ACL Table' with the following structure:

Select	State	Interface	IP Address
--------	-------	-----------	------------

Buttons for 'Delete Selected' and 'Delete All' are located below the table. The footer of the page reads 'Copyright © 2009 TRENDnet. All Rights Reserved.'

ACL Capability: Enable or Disable the SNMP feature on the WLAN ADSL Router.

Enable: Checked to enable the selected route or route to be added.

Interface: Select the interface domain: LAN or WAN.

IP Address: Enter the IP address that allow access to this device.

Subnet Mask: Type the subnet mask in the text box.

Add: Click to add the ACL rule to the ACL table.

Modify: Click the “Modify” button to modify the selected rule form the ACL Table.

Delete Selected: Click the “Delete Selected” button to delete the selected rule from ACL Table.

Delete All: Click the “Delete All” button to delete the all of rule in the ACL Table.

TR-069 Config

TR-069 is a protocol for communication between a CPE and Auto-Configuration Server (ACS). The CPE TR-069 configuration should be well defined to be able to communicate with the remote ACS.

The screenshot shows the configuration interface for a TRENDnet Wireless ADSL Modem Router (TEW-436BRM). The main heading is 'TR-069 Config'. A note states: 'This page is used to configure the TR-069 CPE. Here you may change the setting for the ACS's parameters.' The 'TR069' section has radio buttons for 'Disabled' and 'Enabled', with 'Enabled' selected. The 'ACS' section includes: 'URL: http://', 'User Name: username', 'Password: password', and 'Periodic Inform Enable' with radio buttons for 'Disabled' and 'Enabled', where 'Enabled' is selected. The 'Periodic Inform Interval' is set to 350. The 'Connection Request' section includes: 'User Name:', 'Password:', 'Path: tr069', and 'Port: 7547'. At the bottom are 'Apply Changes' and 'Undo' buttons. The footer reads 'Copyright © 2009 TRENDnet. All Rights Reserved.'

TR069: Enable or Disable the TR-069 feature on the WLAN ADSL Router.

ACS

URL: Enter the ACS URL here.

User Name: The username the WLAN ADSL Router should use when connecting to the ACS.

Password: The password the WLAN ADSL Router should use when connecting to the ACS.

Periodic Inform Enable: When this field is enabled, the WLAN ADSL Router will send an Inform RPC to the ACS server at the system startup, and will continue to send it periodically at an interval defined in Periodic Inform Interval field; When this field is disabled, the WLAN ADSL Router will only send Inform RPC to the ACS server once at the system startup.

Periodic Inform Interval: Time interval in second to send Inform RPC.

Connection Request

User Name: The username the remote ACS should use when connecting to this device.

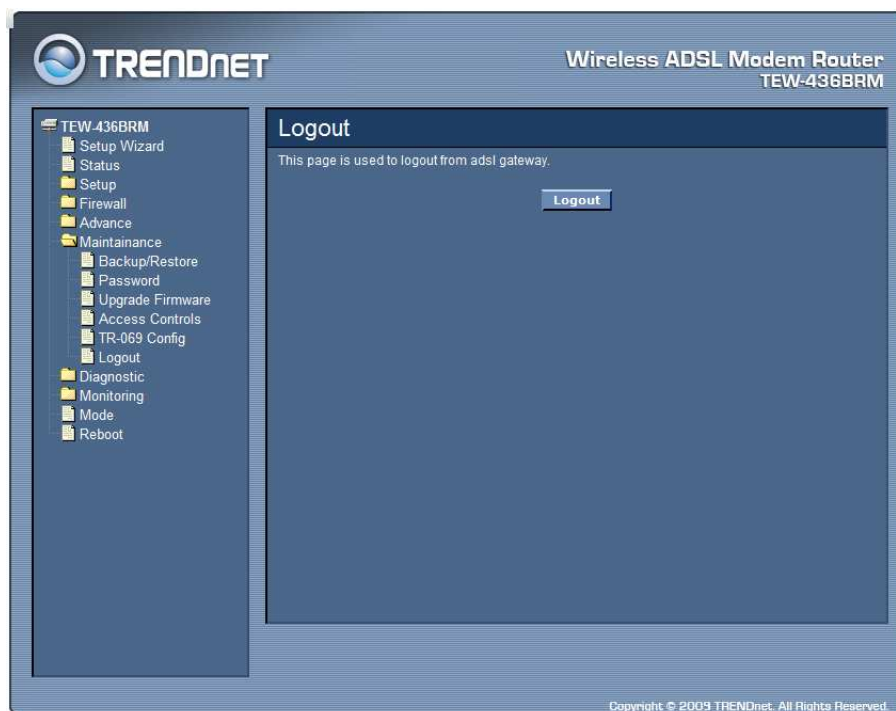
Password: The password the remote ACS should use when connecting to this device.

Path: The path of the device ConnectionRequestURL. The device ConnectionRequestURL should be configured based on the Device_IP, Path and Port as follows: `http://Device_IP:Port/Path`.

Port: The port of the device ConnectionRequestURL.

Logout

This page is used to logout from ADSL gateway.

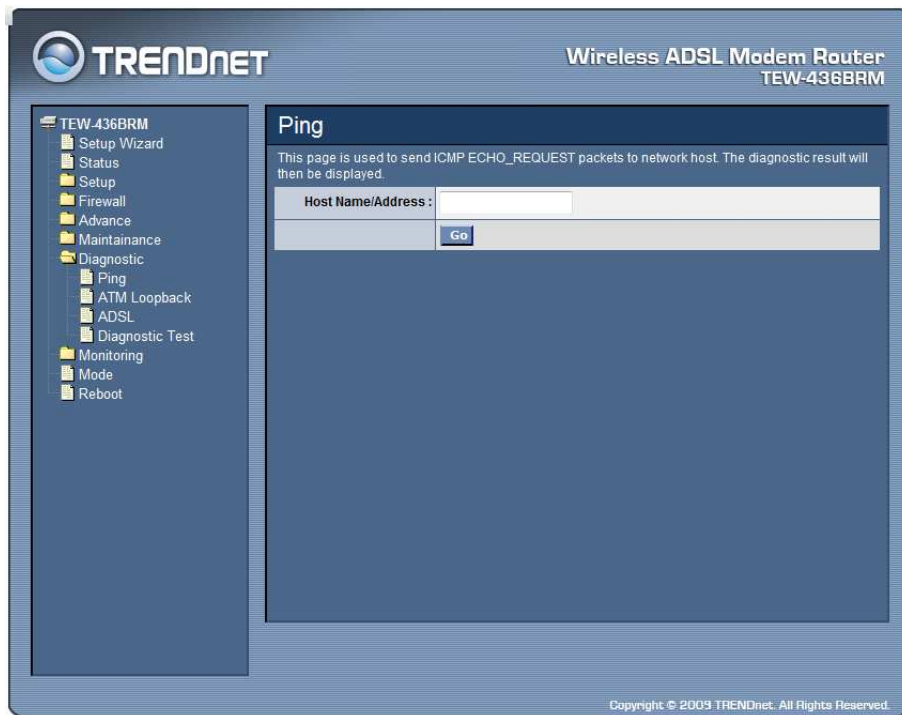


Click the “Logout” button to logout from the WLAN ADSL Router.

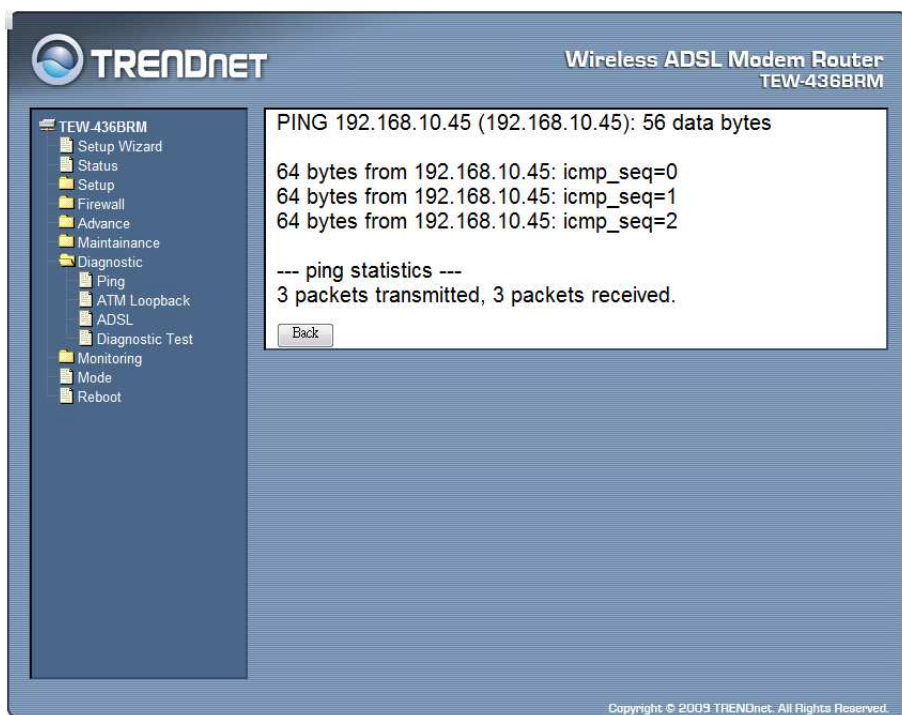
Diagnostic

Ping

Once you have your WLAN ADSL Router configured, it is a good idea to make sure you can ping the network. A ping command sends a message to the host you specify. If the host receives the message, it sends messages in reply. To use it, you must know the IP address of the host you are trying to communicate with and enter the IP address in the Host Address field. Click “Go” button to start the ping command, the ping result will then be shown in this page.



Go: Click “Go” button to start the ping command, the ping result will then be shown in this page.



ATM Loopback

In order to isolate the ATM interface problems, you can use ATM OAM loopback cells to verify connectivity between VP/VC endpoints, as well as segment endpoints within the VP/VC. ATM uses F4 and F5 cell flows as follows:

- **F4:** used in VPs.
- **F5:** used in VCs.

An ATM connection consists of a group of points. This OAM implementation provides management for the following points:

- **Connection endpoint:** the end of a VP/VC connection where the ATM cell are terminated.
- **Segment endpoint:** the end of a connection segment.

This page allows you to use ATM ping, which generates F5 segment and end-to-end loop-back cells to test the reach ability of a segment endpoint or a connection endpoint.

The screenshot shows the web interface of a Trendnet Wireless ADSL Modem Router (TEW-436BRM). The main content area is titled "ATM Loopback" and contains the following information:

Connectivity verification is supported by the use of the OAM loopback capability for both VP and VC connections. This page is used to perform the VCC loopback function to check the connectivity of the VCC.

Select PVC:	<input checked="" type="radio"/> 5/35 <input type="radio"/> 0/32
Flow Type:	<input checked="" type="radio"/> F5 Segment <input type="radio"/> F5 End-to-End
Loopback Location ID:	FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
<input type="button" value="Go !"/>	

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Select PVC: Select the PVC channel you want to do the loop-back diagnostic.

Flow Type: The ATM OAM flow type. The selection can be F5 Segment or F5 End-to-End.

Loopback Location ID: The loop-back location ID field of the loop-back cell. The default value is all 1s (ones) to indicate the endpoint of the segment or connection.

ADSL

This page shows the ADSL diagnostic result. Click “Start” button to start the ADSL diagnostic.

TRENDNET Wireless ADSL Modem Router
TEW-436BRM

TEW-436BRM

- Setup Wizard
- Status
- Setup
- Firewall
- Advance
- Maintenance
- Diagnostic
 - Ping
 - ATM Loopback
 - ADSL
 - Diagnostic Test
- Monitoring
- Mode
- Reboot

ADSL

Adsl Tone Diagnostics. Only ADSL2/2+ support this function.

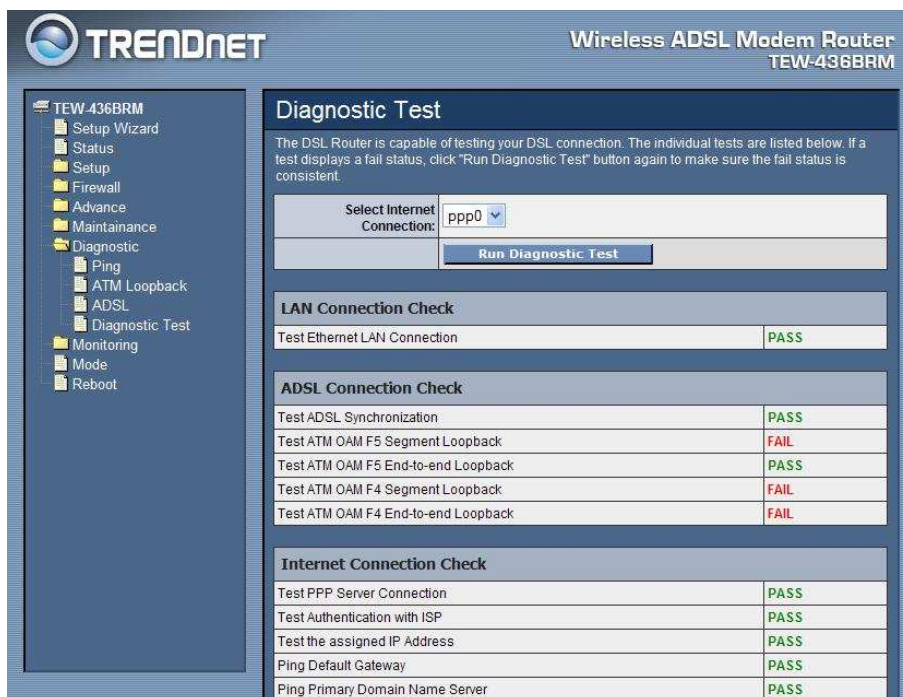
	Downstream	Upstream
Hlin Scale	4052	0
Loop Attenuation(dB)	0.0	0.0
Signal Attenuation(dB)	0.0	0.0
SNR Margin(dB)	0.0	0.0
Attainable Rate(Kbps)	0	0
Output Power(dBm)	0.0	0.0

Tone Number	H.Real	H.Image	SNR	QLN	Hlog
0	0.000	0.000	-32.0	-23.0	-96.3
1	0.000	0.000	-32.0	-23.0	-96.3
2	0.000	0.000	-32.0	-23.0	-96.3
3	0.000	0.000	-32.0	-23.0	-96.3
4	0.000	0.000	-32.0	-23.0	-96.3
5	0.000	0.000	-32.0	-23.0	-96.3
6	0.000	0.000	-32.0	-23.0	-96.3
7	0.000	0.000	-32.0	-23.0	-96.3

:

Diagnostic Test

The Diagnostic Test page shows the test results for the connectivity of the physical layer and protocol layer for both LAN and WAN sides.



The screenshot displays the 'Diagnostic Test' page for a TrendNet Wireless ADSL Modem Router (TEW-436BRM). The page is divided into three main sections: LAN Connection Check, ADSL Connection Check, and Internet Connection Check. The ADSL section shows several tests that have failed, including ATM OAM F5 and F4 segment loopbacks.

LAN Connection Check	
Test Ethernet LAN Connection	PASS

ADSL Connection Check	
Test ADSL Synchronization	PASS
Test ATM OAM F5 Segment Loopback	FAIL
Test ATM OAM F5 End-to-end Loopback	PASS
Test ATM OAM F4 Segment Loopback	FAIL
Test ATM OAM F4 End-to-end Loopback	FAIL

Internet Connection Check	
Test PPP Server Connection	PASS
Test Authentication with ISP	PASS
Test the assigned IP Address	PASS
Ping Default Gateway	PASS
Ping Primary Domain Name Server	PASS

Select Internet Connection: The available WAN side interfaces are listed. You have to select one for the WAN side diagnostic.

Run Diagnostic Test: Click the “Run Diagnostic Test” button to start the diagnostic test.

Monitoring

DHCP Clients

This table shows the assigned IP address, MAC address and time expired for each DHCP leased client.

The screenshot shows the TrendNet web interface for a Wireless ADSL Modem Router (TEW-436BRM). The left sidebar contains a navigation menu with options like Setup Wizard, Status, Firewall, and Monitoring. The main content area is titled "DHCP Client" and includes a table of leased clients. Below the table are "Refresh" and "Close" buttons. The footer contains the copyright notice: "Copyright © 2009 TRENDnet. All Rights Reserved."

IP Address	MAC Address	Time Expired(s)
192.168.10.2	00:12:f0:67:b2:cf	62726

Routing Table

This table shows a list of destination routes commonly accessed by your network.

The screenshot shows the TrendNet web interface for a Wireless ADSL Modem Router (TEW-436BRM). The left sidebar contains a navigation menu with options like Setup Wizard, Status, Firewall, and Monitoring. The main content area is titled "Routing Table" and includes a table of destination routes. Below the table are "Refresh" and "Close" buttons. The footer contains the copyright notice: "Copyright © 2009 TRENDnet. All Rights Reserved."

Destination	Subnet Mask	NextHop	Metric	Interface
127.0.0.0	255.255.255.0	*	0	lo
192.168.10.0	255.255.255.0	*	0	br0

ARP Table

This table shows a list of learned MAC addresses.

The screenshot shows the web interface of a TRENDnet Wireless ADSL Modem Router (TEW-436BRM). The left sidebar contains a navigation menu with options like Setup Wizard, Status, Setup, Firewall, Advance, Maintenance, Diagnostic, Monitoring, DHCP Clients, Routing Table, ARP Table, Bridge FDB Table, Interface Statistics, ADSL Statistics, Mode, and Reboot. The main content area is titled "ARP Table" and includes a sub-header "This table shows a list of learned MAC addresses." Below this is a table with two columns: "IP Address" and "MAC Address". One entry is visible: IP Address 192.168.10.45 and MAC Address 00:13:A9:F2:8F:7A. A "Refresh" button is located below the table. The footer of the interface reads "Copyright © 2009 TRENDnet. All Rights Reserved."

IP Address	MAC Address
192.168.10.45	00:13:A9:F2:8F:7A

Bridge FDB Table

This table shows a list of learned MAC addresses for this bridge.

The screenshot shows the web interface of a TRENDnet Wireless ADSL Modem Router (TEW-436BRM) displaying the "Bridge FDB Table". The left sidebar is identical to the previous screenshot. The main content area is titled "Bridge FDB Table" and includes a sub-header "This table shows a list of learned MAC addresses for this bridge." Below this is a table with four columns: "Port No", "MAC Address", "Is Local?", and "Ageing Timer". Two entries are visible: Port No 1 with MAC Address 00-13-a9-f2-8f-7a (Is Local? no, Ageing Timer 0.00) and Port No 1 with MAC Address 00-18-e7-5c-3c-4a (Is Local? yes, Ageing Timer --). "Refresh" and "Close" buttons are located below the table. The footer of the interface reads "Copyright © 2009 TRENDnet. All Rights Reserved."

Port No	MAC Address	Is Local?	Ageing Timer
1	00-13-a9-f2-8f-7a	no	0.00
1	00-18-e7-5c-3c-4a	yes	--

Interface Statistics

This page shows the packet statistics for transmission and reception regarding to network interface.

TRENDNET Wireless ADSL Modem Router
TEW-436BRM

TEW-436BRM

- Setup Wizard
- Status
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- Monitoring
 - DHCP Clients
 - Routing Table
 - ARP Table
 - Bridge FDB Table
 - Interface Statistics
 - ADSL Statistics
- Mode
- Reboot

Interface Statistics

This page shows the packet statistics for transmission and reception regarding to network interface.

Interface	Rx pkt	Rx err	Rx drop	Tx pkt	Tx err	Tx drop
eth0	4853	0	0	4651	0	1
wlan0	6300524	0	0	3311	0	0
5_35	0	0	0	0	0	0
0_32	0	0	0	0	0	0

[Refresh](#)

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ADSL Statistics

This page shows the packet statistics for transmission and reception regarding to the ADSL.

TRENDNET Wireless ADSL Modem Router
TEW-436BRM

TEW-436BRM

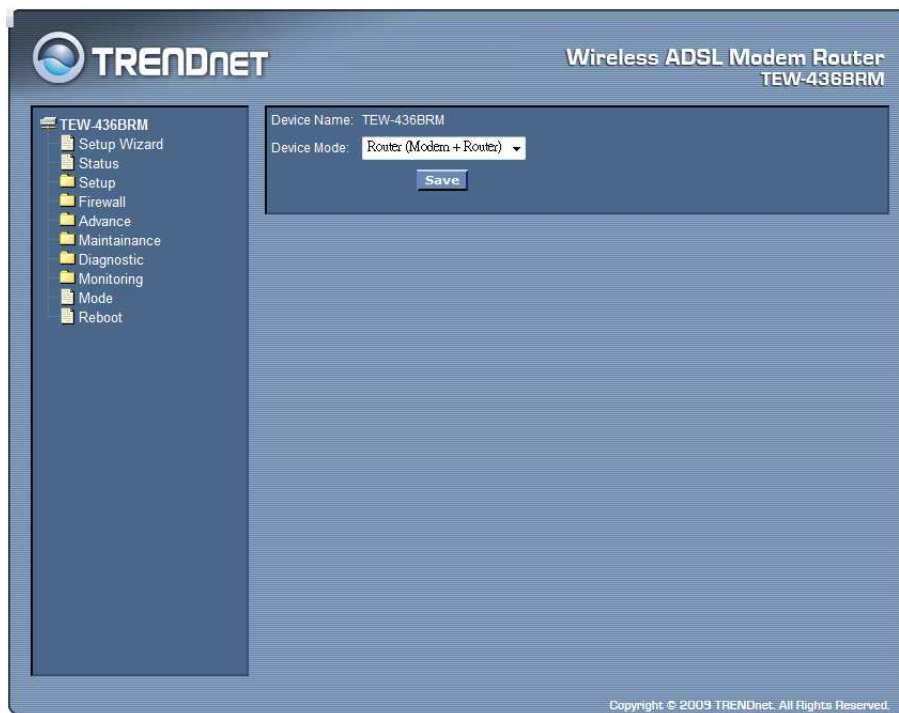
- Setup Wizard
- Status
- Setup
- Firewall
- Advance
- Maintenance
- Diagnostic
- Monitoring
 - DHCP Clients
 - Routing Table
 - ARP Table
 - Bridge FDB Table
 - Interface Statistics
 - ADSL Statistics
- Mode
- Reboot

ADSL Statistics

Mode	G.dmt	
Latency	Interleave	
Trellis Coding	Enable	
Status	SHOWTIME.	
Power Level	L0	
	Downstream	Upstream
SNR Margin (dB)	13.9	19.0
Attenuation (dB)	28.5	18.0
Output Power (dBm)	19.5	12.5
Attainable Rate (Kbps)	9564	1092
Rate (Kbps)	7680	640
K (number of bytes in DMT frame)	241	21
R (number of check bytes in RS code word)	14	16
S (RS code word size in DMT frame)	1.00	8.00
D (interleaver depth)	32	4
Delay (msec)	8.00	8.00
FEC	0	0
CRC	0	0
Total ES	0	0
Total SES	0	0
Total UAS	0	0

Mode

This page explains configuration and operation when in "Router" or "Modem" mode.

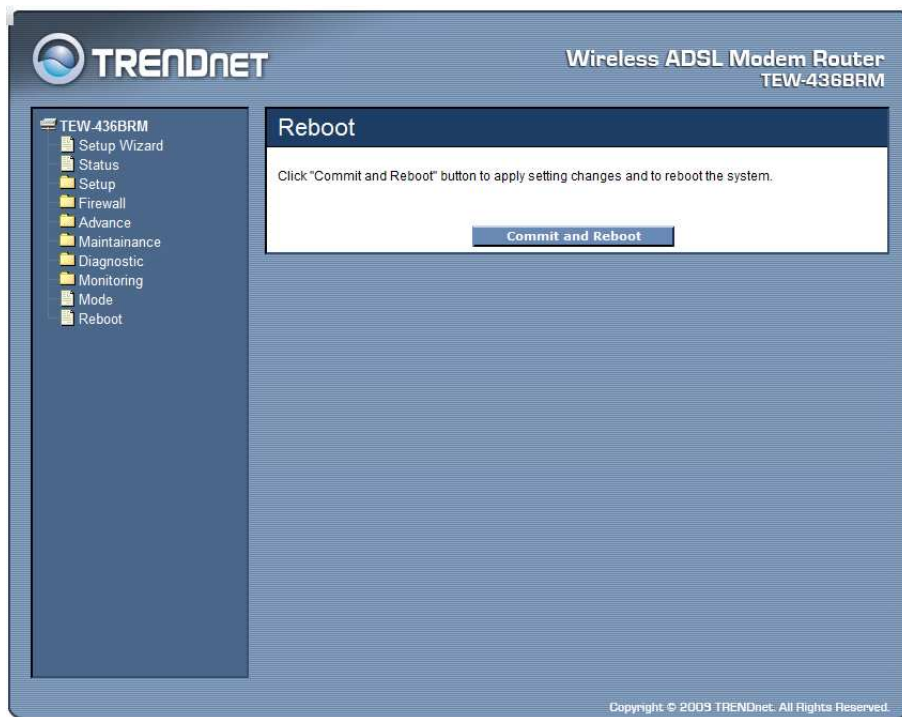


Device Mode: There are two modes available on the Mode screen.

- **Router:** Both the ADSL Modem and the Router features are operational. In this mode, this device can provide shared Internet Access to all your LAN users. Also, by default, it acts a DHCP Server, providing an IP address and related information to all Wireless and LAN users.
- **Modem:** Only the ADSL Modem component is operational. All Router features are disabled. This device is "transparent" - it does not perform any operations or make any changes to the network traffic passing through it. You need to have a DHCP Server on your LAN to provide IP addresses to the Wireless clients using this Access Point.

Reboot

Click "Commit and Reboot" button to apply setting changes and to reboot the WLAN ADSL Router.



TECHNICAL SPECIFICATIONS

General	
Standards	Compliant with ADSL standards: ANSI T1.413 Issue2, G.992.1 (G.dmt, Annex A), G.992.2 (G.lite) Compliant with ADSL2 standard: G.992.3 (G.dmt.bis) Compliant with ADSL2+ standard: G.992.5 Annex A IEEE 802.11b & 802.11g Wireless LAN IEEE 802.3u 10/100Base TX Fast Ethernet
Protocol	WLAN: CSMA/CA ATM & PPP: VC and LLC Multiplexing, Bridged/Routed Ethernet over ATM (RFC1483/2684), OAM F4/F5 loop-back, PPP over ATM (RFC2364), PPP over Ethernet (RFC2516), ATM TrafficShaping QoS(UBR, CBR, rt-VBR, nrt-VBR) LAN/WAN Network: TCP/IP, NAT, HTTP, DHCP Server/Relay/Client, DDNS, DNS Proxy
Radio Technology	DSSS/OFDM
Data Transfer Rate	802.11g mode: up to 54Mbps (auto sense) 802.11b mode: up to 11Mbps (auto sense) Ethernet: 10Mbps (half duplex), 20Mbps (full-duplex) Fast Ethernet: 100Mbps (half duplex), 200Mbps (full- duplex)
Receiver Sensitivity	802.11g: -65dBm typical @ 54Mbps 802.11b: -80dBm typical @ 11Mbps
TX Power (Average power)	802.11g: 14dBm typical (+1/ -2dBm) 802.11b: 14.5dBm typical (+1/ -2dBm)
Network Cables	10BASE-T: 2-pair UTP Cat. 3,4,5 (100 m), EIA/TIA- 568 100-ohm STP (100 m) 100BASE-TX: 2-pair UTP Cat. 5 (100 m), EIA/TIA-568 100-ohm STP (100 m)
Frequency Range	2412 ~ 2484 MHz ISM band
Modulation Schemes	DBPSK/DQPSK/CCK/OFDM
Security	64/128-bits WEP Encryption; WPA, WPA-PSK, WPA2, WPA2-PSK, WPS
Management	Web based Configuration, Command Line Interface (CLI) via Telnet, TR-069 Remote Management, SNMP Support
Channels	1~11 Channels (FCC) 1~13 Channels (ETSI)
Number of Ports	LAN: 4 x 10/100Mbps Auto-MDIX Fast Ethernet port WAN: 1 x RJ11Port

Physical and Environmental

DC inputs	12VDC 1A
Power Consumption	6.5watts (max)
Temperature	Operating: 0°C ~ 40° C, Storage: -10° ~ 70° C
Humidity	Operating: 10% ~ 90%, Storage: 5% ~ 90%
Dimensions	180 x 122 x 30mm
EMI:	FCC part 15, FCC part 68, CE