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INTRODUCTION

The High Power 150Mbps Wireless N USB Adapter (model TEW-646UBH) connects a laptop or desktop computer to a high speed wireless n network.

An adjustable external antenna and a 200% increase** in power output maximizes wireless throughput and coverage.

Setup is a breeze with one-touch Wi-Fi Protected Setup (WPS) technology. Advanced wireless encryption protects your valuable data. Wi-Fi Multimedia (WMM) Quality of Service prioritizes important video, audio and gaming traffic. Stream video, download files, play games, and talk online with this high power adapter.

Package Contents

This section provides unpacking and setup information for the Micro Wireless N USB Adapter.

Unpacking

The box should contain the following items:

- TEW-646UBH Micro Wireless N USB Adapter
- CD-ROM (Utility & User's Guide)
- Multi-Language Quick Installation Guide

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

System Requirements

Before installation, check the following:

- Make sure your computer is running at least a 300MHz or above processor with 256MB RAM or above
- Make sure the USB ports are is USB 2.0 port
- The operating system on your computer must be the following: XP (Service Pack 2), Windows Vista, Windows 7
- 802.11n or 802.11b/g access point or router.
- Make sure the environment has minimal interference and obstructions.

WIRELESS PERFORMANCE CONSIDERATIONS

There are a number of factors that can impact the range of wireless devices.

- 1. Adjust your wireless devices so that the signal is traveling in a straight path, rather than at an angle. The more material the signal has to pass through the more signal you will lose.
- 2. Keep the number of obstructions to a minimum. Each obstruction can reduce the range of a wireless device. Position the wireless devices in a manner that will minimize the amount of obstructions between them.
- 3. Building materials can have a large impact on your wireless signal. In an indoor environment, try to position the wireless devices so that the signal passes through less dense material such as dry wall. Dense materials like metal, solid wood, glass or even furniture may block or degrade the signal.
- 4. Antenna orientation can also have a large impact on your wireless signal. Use the wireless adapter's site survey tool to determine the best antenna orientation for your wireless devices.
- 5. Interference from devices that produce RF (radio frequency) noise can also impact your signal. Position your wireless devices away from anything that generates RF noise, such as microwaves, radios and baby monitors.
- 6. Any device operating on the 2.4GHz frequency will cause interference. Devices such as 2.4GHz cordless phones or other wireless remotes operating on the 2.4GHz frequency can potentially drop the wireless signal. Although the phone may not be in use, the base can still transmit wireless signal. Move the phone's base station as far away as possible from your wireless devices.

If you are still experiencing low or no signal consider repositioning the wireless devices or installing additional access points. The use of higher gain antennas may also provide the necessary coverage depending on the environment.

SOFTWARE INSTALLATION

This section describes how to install the driver and utility for the High Power 150Mbps Wireless N USB Adapter.

1) Insert the Utility and Driver CD-ROM into your computer's CD-ROM drive and then click **Install Utility**.



2) Follow the InstallShield Wizard Instructions



3) Click Finish to restart the computer.



4) After the computer is rebooted, plug the High Power 150Mbps Wireless N USB Adapter into an available USB slot on your computer.

WIRELESS UTILITY

The user can configure the wireless settings using the Wireless Adapter Configuration Utility. Double-click the utility icon that appears in the taskbar.



Mode

The Micro Wireless N USB Adapter has 2 operating modes Station and Access Point.

<u>Station</u>

This mode is the default mode for the wireless adapter. When this mode is selected the wireless adapter functions as a wireless client.

Access Point

Select this mode when to have the wireless adapter function as a wireless access point. This feature is similar to "tethering" and will allow you to share an Internet connection to other wireless clients. Please note that to share internet connection the computer with the Micro Wireless N USB Adapter must have a valid Internet connection using a wired connection.

Refresh

Click this option to refresh the utility for any changes.

About

This screen displays information about the Micro Wireless N USB Adapter, such as the Driver and Utility version. When a new version of the utility becomes available for upgrade, users will be able to identify by version numbers.



STATION MODE

This mode is the default mode for the wireless adapter. When this mode is selected the wireless adapter functions as a wireless client.

General

This is the default screen after launching the Utility program.



Status: Shows if the associated status of the wireless adapter

SSID: Shows the current SSID, which must be the same as your wireless access point or router in order to establish the connection correctly.

Speed: Shows the current connection speed.

Type: Shows the connection type of Infrastructure of Ad-Hoc.

Encryption: Shows the current encryption mode used.

SSID: Shows the SSID the adapter is associated with.

Signal Strength: Shows the wireless signal strength of the connection between the adapter with the Access Point.

pink Quality: Shows the wireless link quality between the adapter and access point.

MAC Address: Shows the MAC address information of the adapter

IP Address: Shows the IP address the adapter obtained from the access point.

Subnet Mask: Shows the subnet mask the adapter obtained

Gateway: Shows the gateway information obtained be the adapter.

Profile

This screen is where you set the basic wireless settings of the wireless adapter.

🕙 High Power 150Mbps Wireless N USB Adapter Utility							
Refresh(R) Mode(M) About(A)							
B- WyComputer	General F	Profile	Available N	letwork	Status	Statistics	Wi-Fi Protect Setup
TRENDnet Higl	Available	e Profi	le(s)				
	Profile	Name		SSID			Add
	C TRE	NDne	t	TREN	Dnet		
							Remove
							Edit
							Duplicate
							Dapacete
							Set Default
	-					•	
<							
Show Tray Icon			[Disa	ble Ada	pter	Close
Show Tray Icon Radio Off				Disa	ble Ada	pter	Close

Profile Name: You can modify the Profile Name to anything you would like, for example Home, Office, Play Room and etc.

SSID: Service Set Identifier, which is a unique name shared among all wireless clients in a wireless network. The SSID must match the wireless access point or router's SSID that you are connecting to.

Add: Adds a profile. The user can enter the necessary information required for accessing the particular Access Point or Wireless Router.

Remove: Deletes the selected profile

Edit: Edit an exist profile. The screen will back to profile. Edit the SSID and select the Wireless Mode, Authentication and Encryption then click *Apply* to save the profile. When the Profile name was changed, a new profile will be added in the list.

Duplicate: Duplicate the settings of the selected profile.

Set Default: Selected a profile from list then click the *Connect* to connecting to the wireless network with the profile setting.

Adding Profile – The user can create and manage the created profiles for home, work or public areas. By double-clicking on Add user can adjust to the specific setting such as SSID, channel, and encryption as saved by that particular profile.

Wireless Network Properties:					
This is a computer-to-computer(ad hoc) network; wireless access points are not used.					
Profile Name:					
Network Name(SSID):					
Channel: 1 (2412MHz) -					
Wireless network security					
This network requires a key for the following:					
Network Authentication: Open System 🔻					
Data encryption: Disabled					
ASCII PASSPHRASE					
Key index (advanced): 1					
Confirm network key:					
OK Cancel					

Ad-Hoc: Check this option to establish a point-to-point wireless communication directly with other wireless client devices.

Profile Name: User can create a profile name to distinguish each wireless networks created.

SSID: Enter the SSID or wireless network name of the access point.

Wireless Network Security

Authentication: The following options are available: Open System, Shared Key, WPA-PSK, WPA2-PSK, WPA EAP-TLS, WPA2 EPA-TLS. Select Open System, Shared Key for WEP data encryption feature.

Open or Shared Key

Open System and **Shared Key** require the user to set a WEP key to exchange data with other wireless clients that have the same WEP key. WEP is considered basic level of wireless encryption, if you would like higher security connection, WPA2 encryption is recommended.

- Default Key: select one of the 4 keys to use.
- Network Key: choose the encryption way, either in HEX or ASCII formats, and enter the password in the blank space.
- Key Length: select 64 or 128 bits as the length of the keys Key Format: HEX or ASCII

Key Length	Hex	ASCII
Туре	characters 0-9, A-F, a-f	alphanumeric format
64-bit	10 characters	5 characters
128-bit	26 characters	13 characters

WPA-PSK / WPA2-PSK

If using the **WPA-PSK/WPA2-PSK** authentication method, please select the *Encryption* type for TKIP or AES then enter the Passphrase key. The minimum length is 8 characters.

WPA EAP-TLS

If using the **WPA/WPA2 EAP-TLS** authentication method, please select the *Encryption* type for TKIP or AES then select the *WPA/WPA2 Certificate* from drop down list.

Available Network

This screen allows the user to scan for available wireless network. It also allows the user to establish wireless communications with an target device.

	General Profile Available		Refresh(R) Mode(M) About(A)						
TRENDnet Higl		Network S	Statu	s Statistics	Wi-Fi Protect Setup				
	Available Network(s)								
	SSID	Chann	nel	Encryption	Network Authentication	Signal 📤			
	I [™] GBP		1	None	Unknown	100%			
	1 ⁹⁹ Pam		1	TKIP/AES	WPA Pre-Shared Key/	26%			
	RMALAB (PR)		1	AES	WPA2 Pre-Shared Key	60%			
	sonnyW150NR		1	AES	WPA2 Pre-Shared Key	92%			
	TrendnetSky2		2	TKIP/AES	WPA Pre-Shared Key	70%			
	I ⁿ trendnetrma		3	WEP	Unknown	62% _≡			
	I ⁽¹⁾ TRENDNETWH2-N		4	AES	WPA Pre-Shared Key	56%			
	I" TRENDNETWH1-N		5	AES	WPA Pre-Shared Key	46%			
	TrendnetSky2		5	TKIP	WPA Pre-Shared Key	46%			
	🔹 🖍 Jumpstart-P1-b38		6	None	Unknown	42%			
	🖍 TRENDnet		6	None	Unknown	44%			
	INCOMPACT IN TREND Net 657		6	None	Unknown	100%			
	I ⁽¹⁾ TRENDnet_632BRP		6	TKIP	WPA Pre-Shared Key	100%			
	🖍 trendnetsky		6	WEP	Unknown	60%			
	I ⁽¹⁾ TRENDNETRMA-N		7	AES	WPA2 Pre-Shared Key	100%			
	🖍 🖍 trendnetwhg		7	WEP	Unknown	42%			
	🖍 TrendnetskyN		9	AES	WPA2 Pre-Shared Key	44%			
	TrendnetskyN		9	AES	WPA2 Pre-Shared Key	100% 👻			
	•		_			+			
	Refr	esh			Add to Profile				
	Note Double click on ite	m to join/o	crea	ite profile.					
Show Tray Icon Radio Off	J	Disable	e A	dapter		Close			

Select any one of the wireless networks by **double-clicking** on it or select the SSID then click the "Add to Profile" button.

Click the "Refresh" button to scan for available networks.

Status

The status tab shows user the current status of the wireless adapter.



Statistics

The statistics tab shows the current packet statistics of the wireless adapter.

eral Profile Available Network Status Statis	tics Wi-Fi Protect Setup	
Counter Name	Value	
The OK	value	
Tx Error	0	
RX OK	0	
Rx Packet Count	0	
Rx Retry	0	
Rx ICV Error	0	
Reset		
- NGSC	•	
Disable Adapter		
IE	eral Profile Available Network Status Statis	eral Profile Available Network Status Status Wi-Fi Protect Setup

Wi-Fi Protected Setup (WPS)

Wi-Fi Protected Setup (WPS) is designed to ease the task of setting up and configuring security on a wireless network. There are two methods used in the WPS as below instruction.

Push Button Config (PBC)

There are 2 ways on how to initialize WPS Push Button Config (PBC), follow the steps below :

Wireless utility:

- -Open the utility and select "Wi-Fi Protected Setup" tab.
- -Click on "Push Button Config (PBC) button

Wi-Fi Protected Setup - PBC method					
Wi-Fi Protected Setup - PBC method					
If there is more than one AP on the PBC mode, there will be [Session Overlap].Please use PIN method or wait for a while and use PBC method again.					
Status : Initial WPS					
Complete :					
Push Button Config (PBC) Cancel					

-Log into your wireless access point's user interface and start the access point's WPS push button configuration. Please refer to the wireless access point's manual on how to initialize WPS Push Button Config.

Note: Most wireless access points have a physical WPS button. Pressing the button will initialize WPS Push Button Config.

Physical button:

-Press the WPS button on the wireless adapter for 3 seconds and let go.

-Log into your wireless access point's user interface and start the access point's WPS push button configuration. Please refer to the wireless access point's manual on how to initialize WPS Push Button Config.

The LED will begin to blink during authentication. Once the connection has been successfully establish the LED will remain solid.

Note: Most wireless access points have a physical WPS button. Pressing the button will initialize WPS Push Button Config.

PIN Code

For PIN Code configuration the user is required to log into the wireless access point's user interface and follow the steps below. Please refer to the wireless access point's manual on how to initialize WPS Push Button Config.

-Open the wireless utility and select "Wi-Fi Protected Setup" tab.

-Click on "Pin Input Config (PIN)" button. You will be prompted to select your wireless access point's SSID. Click yes if you are aware of the access point's SSID.

W	/i-Fi Protected Setup - Select	AP	x
	WPS AP Name	WPS AP MAC	<u>^</u>
	WPS7746f1dc56	00:C0:02:FF:DC:56	
	TRENDNETRMA-N	00:14:D1:C3:BD:DD	
	TRENDnet658	00:E0:4C:81:86:82	
	TrendnetskyN	00:14:D1:CB:7F:60	Ξ
	CAMTEST	00:14:D1:62:0D:1D	
	651GREEN	00:14:D1:E9:5B:A5	
	GBP	00:14:D1:66:FC:E4	
	651nonGREEN	00:14:D1:6C:ED:38	
	RMALAB (PR)	00:14:D1:CB:67:B8	
	TRENDnet_632BRP	00:14:D1:67:83:96	-
	•	Þ	
	Re	efresh	
	Select	Cancel	

-Log into the wireless access point's user interface and input the PIN Code information provided on the wireless utility

Din Input Config (DIN)	
After pushing the DIN button Place onter the DIN code into your AD	
arei pushing the PIN button.Please enter the PIN code into your AP.	
DIN C - J	
PIN Code : 2/433/00	
Pin Input Config (PIN)	

-Initialize the wireless access point's WPS PIN configuration.

ACCESS POINT MODE

Select this mode when to have the wireless adapter function as a wireless access point. This feature is similar to "tethering" and will allow you to share an Internet connection to other wireless clients. Please note that to share internet connection the computer with the Micro Wireless N USB Adapter must have a valid Internet connection using a wired connection.

General

This section allows user to configure the access point settings.

😔 High Power 150Mbps Wireless N USB Adapter Utility				
Refresh(R) Mode(M) A	bout(A)			
B. 🚽 MyComputer	General Advanced Statistics ICS			
	SSID: acerpm7_AP			
	BSSID: 00:E0:4C:71:00:26			
	Association Table			
	AID MAC Address Life Time			
	Config			
		· · · · ·		
<				
Show Tray Icon	Disable Adapter	Close		
Radio Off				

SSID: Shows the SSID if the wireless adapter's network.

BSSID: Shows the MAC information of the wireless adapter.

Association Table: Shows all wireless clients connected to your adapter's wireless network. which must be the same as your wireless access point or router in order to establish the connection correctly.

Config: Click this button to configure the access point settings.

Vireless Network Properties:					
This is a computer-to-computer(ad hoc) network; wireless access points are not used.					
Profile Name:	Access Point Mode				
Network Name(SSID):	acerpm7_AP				
Channel:	1 (2412MHz) 🔻				
-Wireless network secu	rity				
This network requires	a key for the following:				
Netwo	ork Authentication: Open System				
Den System					
Data encryption: Disabled					
Key index (advanced): 1					
Confirm network key:					
ОК	Cancel				

Network Name (SSID): Enter the SSID or wireless network name of the access point Channel: Set the channel that you want the access point to operate on.

BSSID: Shows the MAC information of the wireless adapter.

Wireless Network Security

Authentication: The following options are available: Open System, Shared Key, WPA-PSK, WPA2-PSK, WPA EAP-TLS, WPA2 EPA-TLS . Select Open System, Shared Key for WEP data encryption feature.

Open or Shared Key

Open System and **Shared Key** require the user to set a WEP key to exchange data with other wireless clients that have the same WEP key. WEP is considered basic level of wireless encryption, if you would like higher security connection, WPA2 encryption is recommended.

- Default Key: select one of the 4 keys to use.
- Network Key: choose the encryption way, either in HEX or ASCII formats, and enter the password in the blank space.
- Key Length: select 64 or 128 bits as the length of the keys Key Format: HEX or ASCII

Key Length	Hex	ASCII
Туре	characters 0-9, A-F, a-f	alphanumeric format
64-bit	10 characters	5 characters
128-bit	26 characters	13 characters

WPA-PSK / WPA2-PSK

If using the **WPA-PSK/WPA2-PSK** authentication method, please select the *Encryption* type for TKIP or AES then enter the Passphrase key. The minimum length is 8 characters.

WPA EAP-TLS

If using the **WPA/WPA2 EAP-TLS** authentication method, please select the *Encryption* type for TKIP or AES then select the *WPA/WPA2 Certificate* from drop down list.

Advance

This section allows user to configure access point mode's advance settings.

		
😔 High Power 150Mbps W	Vireless N USB Adapter Utility	
Refresh(R) Mode(M) A	bout(A)	
B- WyComputer	General Advanced Statistics ICS	
	General	
	Beacon Interval	
	100	
	DTIM Period:	
	3	
	Preamble Mode	
	Long 👻	
	Set Defaults Appl	
4 III >		
Show Tray Icon Radio Off	Disable Adapter	Close

Statistics

The statistics tab shows the current packet statistics of the wireless adapter.

😔 High Power 150Mbps W	ireless N USB Adapter Utility		- • ×
Refresh(R) Mode(M) A	bout(A)		
	General Advanced Statistics ICS		
	Counter Name	Value	
	Tx OK	880	
	Tx Error	0	
	Rx OK	0	
	RX Packet Count	0	
	Rx ICV Error	0	
<	Reset		
Show Tray Icon Radio Off	📄 Disable Adapter		Close

ICS

The section shows user the status of the computer's network adapters.

😔 High Power 150Mbps W	ireless N USB Adapter Utility	
Refresh(R) Mode(M) A	bout(A)	
	General Advanced Statistics ICS Setting Internet Connection Sharing (ICS)	
	Connitame Device Name Connitame Device Name Vieles Network Co Intel(R) WFI Link 5100 AGN Local Area Connection Broadcom NetXtreme Gipabit Ethernet G 3G Connection Standard Modem Public Network	,
Show Tray Icon Radio Off	Disable Adapter	Close

MAC OS X SOFTWARE INSTALLATION

This section describes how to install the driver and utility for the High Power 150Mbps Wireless N USB Adapter with MAC OS X operating system

- 1) Insert the Utility and Driver CD-ROM into your computer's CD-ROM.
- 2) Browse the TEW-646UBH CD-ROM and go to MAC OS X folder
- 3) Select the correct Mac OS X version drivers to install and click "Installer.mpkg"



4) Click on "Continue" to continue with the installtion



5) When prompted for license agreement, click "Agree" to continue



6) If prompted, select the destination volume to install the utility and click "Continue".

	Select a Destination
Introduction Read Me License Select Destination Installation Type Install Linstrum	Select a destination volume to install the Realtek 11n Wireless USB Adapter Driver software. Macintosh HD 55.6GB (395MB Free) 1.9GB (1.7GB Free) Installing this software requires 620KB of space. You have chosen to install this software on the volume "Macintosh HD."
2	Go Back Continu

7) Click "Install" or "Upgrade to continue.

	Easy Install on "Macintosh HD"
Introduction Read Me License Select Destination	Click Upgrade to perform a basic installation of this software package on the volume "Macintosh HD."
O Installation Type Install	ata ana ana ana ana ana ana ana ana ana
5	
Verman	Go Back Upgrade

8) Input your password then click "OK" password.

	Authenticate
Installer n	equires that you type your password.
Name:	Mac User
Password:	
▶ Details	
(?)	(Cancel) OK

9) Click "Continue Installation"



10) When installation is complete click on "Restart"

000	😺 Install Realtek 11n Wireless USB Adapter Driver
 Introduction Read Me License Select Desi Installation Install Finish Up 	tination n Type Click Restart to finish installing the software.
L	Go Back Restart

11) Once restart is completed insert the TEW-646UBH on your Mac. The wireless utility will automatically appear. IF the utility does not appear you will find the utility icon in the Dock menu. Click on the icong to start the TEW-646UBH configuration.



MAC OS X UTILITY

This section describes how to install the driver and utility for the High Power 150Mbps Wireless N USB Adapter with MAC OS X operating system

Link Status

Link Status Pro	files Available Network Advanced Set	ting Information
MAC Address :	00e04c710026	
SSID :	TRENDnet	
BSSID :	00032f393710	
Security :	None	
Connection :	Connected	
Network Type :	Infrastructure	
Channel :	6	
Link Speed(Mbps):	TX 24 RX 24	
HT Info:	N/A	
Signal Strength:	***************	99%
		turn Radio OFF

MAC Address: Shows the MAC address of the wireless USB adapter **SSID/BSSID:** Shows the SSID that USB wireless adapter is connected to **Security:** Shows the type of security used

Connection: Shows the connection status of the wireless USB adapter Network Type: Shows the type of network the wireless USB adapter is set on Channel: Shows the current channel being used on the connection Link Speed: Shows the current linking speed both transmission and receive HT Info: Shows the HT information including bandwidth 20 or 40MHz, GI (Grand Interval) short of long, MCS index when connected in 802.11n mode Signal Strength: Shows the current wireless signal strength

Profiles



Add: Select this option to add a new profile, user can enter the necessary information required for access the access point or wireless router

Edit: View and edit the selected profile

Remove: Select this option to delete the selected profile

Duplicate: Select this option to copy the selected profile

Apply: Click this option to apply/activate the selected profile

Available Network

This tab allows users to scan for available wireless networks .

Associated	SSID	Channel	Network Typ	pe Encryption	BSSID
	2WIRE646	2	Infrastructur	e WEP	001ec73da721
	TrendnetSky2	2	Infrastructur	e WPA-PSK AES /	0014d1c06419
	RMALAB (PR)	4	Infrastructur	e WPA2-PSK AES	0014d1cb67b8
	TRENDnet	6	Infrastructur	e NO_ENCRYPTIC	N 00032f393710
	trendnetsky	6	Infrastructur	e WEP	00c002e7d0f0

Refresh: Click this option to refresh the available network list

Connect: Click this option to establish connection to a select available network.

Add to Profile: Select an available network and click this option to save the network as a profile.

Advance Setting

Link Status Prof	files Available Network	k Advanced Setting	Information
	80	02.11b Preamble Mode:	Auto
		QOS Mode:	Enable
		PSP Xlink Mode:	Disable
Fragment Threshold	2432		
RTS Threshold	: 2346	Refresh	
15 I. I. I. I. I		Apply	Set Default

802.11b preamble mode: To set the preamble mode

QOS Mode: This option allows users to enable or disable QoS feature

PSP Xlink Mode: This option allows users to enable or disable PSP mode

Fragment Threshold: This option allows users to set the fragment threshold of the wireless adapter:

RTS Threshold: This option allows users to set the RTS threshold of the wireless adapter:

About

This tab shows the wireless adapter's utility information



SPECIFICATIONS

Hardware	
Interface	USB 2.0
Standards	IEEE 802.11b, IEEE 802.11g, based on IEEE 802.11n draft 2.0 technology
LED Indicator	Power, Link
WPS Button	Enables WPS connection
Power Consumption	2.5 W
Antenna Connector	SMA
Supported OS	Windows: 7 (32/64-bit), Vista (32/64-bit), XP(32/64-bit)
	Mac: OS 10.4-10.6
Dimensions (LxWxH)	60 x 16 x 8 mm (2.3 x 0.6 x 0.3 in.)
Weight	5.7 g (0.2 oz)
Temperature	Operating: 0° ~ 55° C (32° ~ 131° F); Storage: -20° ~ 70° C (-4 ~ 158° F)
Humidity	Max. 90% (non-condensing)
Certifications	CE, FCC
Wireless	
Wireless Modulation	OFDM, DSSS
Wireless Modulation Antenna	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA)
Wireless Modulation Antenna Frequency	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA) 2.4 ~ 2.497 GHz
Wireless Modulation Antenna Frequency Quality of Service	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA) 2.4 ~ 2.497 GHz 802.11e, WMM
Wireless Modulation Antenna Frequency Quality of Service Date Rate (auto	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA) 2.4 ~ 2.497 GHz 802.11e, WMM 802.11b: 11Mbps
Wireless Modulation Antenna Frequency Quality of Service Date Rate (auto fallback)	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA) 2.4 ~ 2.497 GHz 802.11e, WMM 802.11b: 11Mbps 802.11g: 54Mbps
Wireless Modulation Antenna Frequency Quality of Service Date Rate (auto fallback)	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA) 2.4 ~ 2.497 GHz 802.11e, WMM 802.11b: 11Mbps 802.11g: 54Mbps 802.11n: 150Mbps
Wireless Modulation Antenna Frequency Quality of Service Date Rate (auto fallback) Output Power	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA) 2.4 ~ 2.497 GHz 802.11e, WMM 802.11b: 11Mbps 802.11g: 54Mbps 802.11g: 54Mbps 802.11h: 150Mbps
Wireless Modulation Antenna Frequency Quality of Service Date Rate (auto fallback) Output Power	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA) 2.4 ~ 2.497 GHz 802.11e, WMM 802.11b: 11Mbps 802.11g: 54Mbps 802.11n: 150Mbps 802.11b: 15dBm 802.11g: 14dBm
Wireless Modulation Antenna Frequency Quality of Service Date Rate (auto fallback) Output Power	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA) 2.4 ~ 2.497 GHz 802.11e, WMM 802.11b: 11Mbps 802.11g: 54Mbps 802.11g: 54Mbps 802.11h: 150Mbps 802.11b: 15dBm 802.11g: 14dBm 802.11g: 14dBm
Wireless Modulation Antenna Frequency Quality of Service Date Rate (auto fallback) Output Power Receiving Sensitivity	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA) 2.4 ~ 2.497 GHz 802.11e, WMM 802.11b: 11Mbps 802.11g: 54Mbps 802.11g: 54Mbps 802.11h: 150Mbps 802.11b: 15dBm 802.11g: 14dBm 802.11g: 14dBm 802.11h: 12dBm
Wireless Modulation Antenna Frequency Quality of Service Date Rate (auto fallback) Output Power Receiving Sensitivity	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA) 2.4 ~ 2.497 GHz 802.11e, WMM 802.11b: 11Mbps 802.11g: 54Mbps 802.11g: 54Mbps 802.11b: 150Bm 802.11b: 15dBm 802.11g: 14dBm 802.11g: 14dBm 802.11b: -78dBm at 11mpbs 802.11g: -65dBm at 54Mbps
Wireless Modulation Antenna Frequency Quality of Service Date Rate (auto fallback) Output Power Receiving Sensitivity	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA) 2.4 ~ 2.497 GHz 802.11e, WMM 802.11e, WMM 802.11b: 11Mbps 802.11g: 54Mbps 802.11g: 54Mbps 802.11h: 150Mbps 802.11b: 15dBm 802.11g: 14dBm 802.11g: 14dBm 802.11h: -78dBm at 11mpbs 802.11g: -65dBm at 54Mbps 802.11n: -93dBm at 150Mbps
Wireless Modulation Antenna Frequency Quality of Service Date Rate (auto fallback) Output Power Receiving Sensitivity Encryption	OFDM, DSSS 1 x 2dBi omni-directional detachable antenna (Reverse SMA) 2.4 ~ 2.497 GHz 802.11e, WMM 802.11e, WMM 802.11b: 11Mbps 802.11g: 54Mbps 802.11g: 54Mbps 802.11b: 15dBm 802.11b: 15dBm 802.11g: 14dBm 802.11g: 14dBm 802.11g: 65dBm at 11mpbs 802.11g: -65dBm at 54Mbps 802.11g: -93dBm at 150Mbps 64/128-bit WEP, WPA/WPA2-RADIUS, WPA /WPA2-PSK

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