AW-NB101 IEEE 802.11b/g/n Combo slim module

User's Manual

I. Introduction

i. Overview

Azurewave AW-NB101 combo wireless slim module is a highly integrated wireless local area network (WLAN) solution to let users enjoy the digital content through the latest wireless technology without using extra cables and cords. It provides easy-to-use, high performance, cost effective and low power solution. Moreover, AW-NB101 enables compatible high-speed wireless connectivity within home, business and public access wireless networks.

Compliant with the IEEE 802.11b/g/n standard, AW-NB101 uses Direct Sequence Spread Spectrum (DSSS), Orthogonal Frequency Division Multiplexing (OFDM), BPSK, QPSK, CCK and QAM baseband modulation technologies. When you are using AW-NB101, a high level of integration and full implementation of the power management functions specified in the IEEE 802.11 standard can minimize system power requirements.

The AW-NB101 802.11b/g/n Wireless Combo Slim Module provides up to 128-bit level of WEP security to your wireless data transfers. It is able to run in the operating systems of Windows XP/Vista in either Infrastructure mode or Ad-Hoc mode. Comparing to previous wireless technology, AW-NB101 got great improvements on speed and range. The wireless range increased up to two times wider and coverage area reduced the situation of dead spots. "Multiple In, Multiple Out" (MIMO) technology uses signal reflections to increase the range and maintain wireless connections up to five times farther; therefore, with MIMO, AW-NB101 is able to double the data rate up to 300Mbps.

ii. Features

- slim module
- Compliant with IEEE802.11 b/g/n standard
- 2 Antenna to support 1(Transmit) × 1 (Receive) technology and Bluetooth
- Antenna WLAN RX diversity
- High speed wireless connection up to 150 Mbps
- Low power consumption and high performance
- Enhanced wireless security
- Fully qualified Bluetooth 4.0 and BT 3.0HS
- Enhanced Data Rate(EDR) compliant for both 2Mbps and 3Mbps supported
- Fully speed operation with Piconet and Scatternet support

iii. Product Review

When the USB wireless module is transmitting data through connection, LED indicator will blink.

1. Connection Mode

◎Infrastructure Mode

Infrastructure mode needs an access point to establish the network, which can provide wireless accesses within valid range for users to communicate with others or transmit data with a wired network. There are several benefits of Infrastructure networking:

 $\sqrt{\text{Roaming: a wireless LAN enabled computer can physically move from the operating range of one access point to the other without losing connection. There is a quick association made between new access point and wireless device as the computer traverses from the coverage of one access point to another.$

 $\sqrt{\text{Range Extension: each wireless LAN enabled computer within the range of access point can communicate with other wireless LAN enabled computers within the effective range from the access point.$

 $\sqrt{\text{Wired to wireless LAN connection: the access point will establish a bridge between wireless LAN and other wired counterparts.}$



Infrastructure Mode

◎Ad-hoc Mode

The difference between Ad-hoc mode and Infrastructure mode is that Ad-hoc mode does not need the access point or router. When you use this mode, your computer will act as a server within the valid range and connect directly to others in the same LAN workgroup.



Ad-hoc Mode

It is recommended to choose this mode when there is no access point showed on your wireless network.

II. Installation

i. System Requirements

Before you install AW-NB101, please make sure your system meets the following requirements.

*Desktop or Laptop with USB 1.1/2.0 port
*Minimum of 64MB system memory
*Operating system: XP/Vista/Windows 7
*An optical drive/CD-ROM for utilities and driver installation

ii. Hardware Installation

- 1. Find an available USB 1.1/2.0 port on your desktop or laptop.
- 2. Plug AW-NB101 Wireless PCI-E Module into USB port of desktop or laptop.

iii. Operation Range

The operating range of AW-NB101 varies from the working environment. However, this device made improvement on speed and range, which also reduced dead spots in coverage area. AW-NB101 is two times wider than previous wireless products.

By default, this USB wireless adapter will automatically adjust the data rate. The transmission speed may vary according to the environment. The closer the wireless stations are the better the signal and transmission speed they will receive.

iv. Setup: Windows XP OS

If your computer is running a Windows operating system, it will automatically detect the AW-NB101 after the system boots up and displays a "Found New Hardware Wizard" window. Please click [Cancel] and proceed with the following steps.

Found New Hardware Wizard			
	Welcome to the Found New Hardware Wizard		
	Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). <u>Read our privacy policy</u>		
	Can Windows connect to Windows Update to search for software?		
	○ Yes, this time only		
	Yes, now and every time I connect a device		
	⊙ No, not this time		
	Click Next to continue.		
	< <u>B</u> ack <u>N</u> ext > Cancel		

1. Find out the Driver, and launch the Setup Wizard



2. Please wait few seconds for wizard to prepare installation

Azurewave Wireless LAN -	InstallShield Wizard	
Preparing Setup Please wait while the InstallSh	ield Wizard prepares the setup.	
	Azurewave Wireless LAN Setup is preparing the InstallShield Wizard, which will guide you through the rest of the setup process. Please wait.	
InstallShield	Cano	;el

3. Please select click [Install] to proceed

Azurewave Wireless LAN - Ins	stallShield Wizard	×
Ready to Install the Program The wizard is ready to begin insta	Illation.	
	Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exi wizard.	t the
InstallShield	< Back Install Canc	el

4. The Wizard is running installation



5. Please wait few seconds for Wizard to setup



6. When it is completed, please click [Finish]

Azurewave Wireless LAN - Ins	tallShield Wizard
	InstallShield Wizard Complete
	The InstallShield Wizard has successfully installed Azurewave Wireless LAN. Click Finish to exit the wizard.
InstallShield	< <u>B</u> ack Finish Cancel

9. When the process is finished, the system will show a message of "Found New Hardware"



v. Setup: Windows Vista OS

Please follow the steps to complete installation.

1. Launch the setup driver

17

AND					
vorite Links	setup.dll	5/18/2006 12:21 AM	Application Extens	365 KB	
Pictures	data1	7/10/2007 5:14 PM	Cabinet File	1,059 KB	
Music	data1.hdr	7/10/2007 5:14 PM	Cabinet File	31,009 KB	
Recently Changed Recently Changed	ISSetup.dll layout.bin	7/10/2007 5:14 PM 7/10/2007 5:14 PM	Application Extens BIN File	540 KB	
Public	setup	5/25/2006 1:10 AM 7/9/2007 5:28 PM	Application Configuration Sett	445 KB 1 KB	
	setup.inx	7/10/2007 5:14 PM 5/17/2006 3:44 AM	ISN File	254 KB 52 KB	
Folders					

2. When you see the permission dialogue box, please click [Continue]

User Account Co	ontrol 💽
If you started	this program, continue. Setup.exe Macrovision Corporation
🕑 Details	Continue Cancel
User Account (Control helps stop unauthorized changes to your computer.

3. Now the Wizard is preparing installation

Azurewave Wireless LAN - InstallShi	ield Wizard	
Preparing Setup Please wait while the InstallShield \	Wizard prepares the setup.	
	Azurewave Wireless LAN Setup is preparing the InstallShield Wizard, which will guide you through the rest of the setup process. Please wait.	
InstallShield		Cancel

4. Please click [Install] to proceed

Azurewave Wireless LAN - InstallShi	eld Wizard	×
Ready to Install the Program The wizard is ready to begin installa	ation.	
	Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to ex wizard.	it the
InstallShield	< <u>B</u> ack [Install] Cano	el

5. The system is process installation

Azurewave Wireless LAN - Instal	IShield Wizard	X
Setup Status		
	The InstallShield Wizard is installing Azurewave Wireless LAN	
InstallShield	Canc	

8. When the setup is completed, please click [Finish]

Azurewave Wireless LAN - InstallShi	eld Wizard
	InstallShield Wizard Complete
	The InstallShield Wizard has successfully installed Azurewave Wireless LAN. Click Finish to exit the wizard.
Install Shield	< Back Finish Cancel

III. Network Connection

i. For Windows XP OS

Please see the following steps to setup network connection for Windows XP.

1. Find the network icon on the desktop shortcut and right-click on it. Choose "View Available Wireless networks"



2. You will see several options, please select one and click [Connect]



3. Please wait for few seconds to let system connecting to selected wireless network

Wireless Network Connection	3
Please wait while Windows connects to the 'AzureWave' network.	
Detecting network type	
Cancel	

4. You may need to type the network key when it is required

Wireless Network Conne	ction	\mathbf{X}	
The network 'AzureWave' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders from connecting to this network.			
Type the key, and then dick Connect.			
Network key:	••••		
Confirm network key:	••••		
	Connect Cancel		

5. Now the selected wireless network is connected

^{((†1)} Wireless Network Connect	on 6			
Network Tasks	Choose a wireless network			
💋 Refresh network list	Click an item in the list below to connect to a wireless network in range or to get more information.			
Set up a wireless network for a home or small office	((o)) AzureWave		Connected 👷	
	Security-ena	bled wireless network		
Related Tasks	((@)) SWRDG			
Learn about wireless	B Security-ena	bled wireless network	•888	
networking	((@)) IAPO-G54			
preferred networks	Security-ena	bled wireless network	•0000	
Settings	((@)) default		-0	
Sound	Unsecured wire	ess network	0000	
			Connect	

6. You can check the connection status by clicking [Status] in the pop-up dialogue



7. Here is the wireless network connection status

(1) Wireless Network Connection 6 Status		
General Support		
Connection		
Status:	Acquiring network address	
Network:	AzureWave	
Duration:	00:01:54	
Speed:	54.0 Mbps	
Signal Strength:	1000	
Activity	Sent — Sectived	
Packets:	9 0	
Properties	Disable View Wireless Networks	
	Close	

ii. For Windows Vista OS

Following are the instructions to setup wireless connection for Windows Vista.

1. Right-click on the network icon located on desktop shortcut. When you see the dialogue, please click [Connect to a network]



2. Choose wireless network within your range and click [Connect]

🕞 👰 Con	nect to a network		
Select	a network to co	nnect to	
Sł	now All	•	4 9
2	SWRDG	Security-enabled network	î lle.
	bu	Unsecured network	l Ute.
2	IAPO-G54	Security-enabled network	lite.
<u>Set up a</u> Open N	connection or netwo etwork and Sharing C	ork Center	
			Connect Cancel

* If selected network is not secure, please choose [Connect anyway]

3. You may need to wait for few seconds when Windows connects to wireless network

Connect to a network	
Connecting to AzureWave	
in the second se	
	Cancel

4. Now the selected wireless network is connected



5. If you want to see the connection status, please right-click on the network you choose and select

[Status]

							- • • ×
00	Setwork	and Internet 🕨 Ne	twork Connection	ons 🕨	• 4	Search	ק
🌗 Orga	nize 👻 📲 Views	; 🔹 💇 Connect	To 🔀 Disable	e this network device	📑 Diagnose t	his connection	1 » 🕐
Name	Status	Device Name	Connectivity	Network Category	Owner	Туре	Phone # or Host Addre
LAN or H	ligh-Speed Interne Wireless Network	t (1) Connection					^
	AzureWave	Disable Connect / Disc	onnect				
		Status					
		Diagnose	63				
		Bridge Connec	tions				
		Create Shortcu	t				
		Delete					
		Rename					
	Ļ	Properties					

6. This is the information of network status

aff] Wireless Network Connection 2 Status
General
Connection
IPv4 Connectivity: Internet
IPv6 Connectivity: Limited
Media State: Enabled
SSID: AzureWave
Duration: 00:03:42
Speed: 48.0 Mbps
Signal Quality:
Details Wireless Properties
Activity
Sent — 💐 — Received
Bytes: 60,071 2,286,765
Properties Disable Diagnose
Close

IV. Setup for Ad-hoc Mode

i. For Windows XP OS

If you want to choose Ad-hoc mode, please right-click network icon on desktop shortcut and choose "Open Network Connections", or go to [Control Panel] and double-click "Network Connection" icon.



When you see the "Network Connections" screen, please follow the steps below to setup Ad-hoc mode.

1. Double-click "Wireless Network USB Adapter" icon to enter its properties



2. Click "General" tab and double-click the "Internet Protocol (TCP/IP)" item

🕂 Wireless Network Connection 6 Properties 👘 😰 🔀
General Wireless Networks Advanced
Connect using:
B02.11n USB Wireless LAN Card Configure
This connection uses the following items:
File and Printer Sharing for Microsoft Networks
Os Packet Scheduler
Instal Uninstal Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
 Show icon in notification area when connected Notify me when this connection has limited or no connectivity
OK Cancel

3. Choose "Use the following IP address:" and type the IP address; then click [OK]

Internet Protocol (TCP/IP) Prope	rties 🛛 🛛 🔀			
General				
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.				
 Obtain an IP address automatical 	y			
Use the following IP address: —				
IP address:	192.168.0.10			
Subnet mask:	255 . 255 . 255 . 0			
Default gateway:				
Obtain DNS server address autom	atically			
 Use the following DNS server add 	resses:			
Preferred DNS server:				
Alternate DNS server:				
Advanced				
	OK Cancel			

*Note: the IP address of the other wireless card should be set with the same subnet mask

4. Right-click the "Wireless Network Connection" icon and choose "properties"



5. Select "Wireless Network" tab and choose [Add]

🕹 Wireless Network Connection 6 Properties 👘 🕐 🔀
General Wireless Networks Advanced
Use Windows to configure my wireless network settings
Available networks:
To connect to, disconnect from, or find out more information about wireless networks in range, click the button below.
View Wireless Networks
Preferred networks: Automatically connect to available networks in the order listed below: Move up Move down
Add Remove Properties
Learn about <u>setting up wireless network</u> Advanced
OK Cancel

6. Type "Network name (SSID)" and choose "Data encryption" if you want to protect the network security

Wireless network properties	? 🛛					
Association Authentication Conr	ection					
Network name (SSID): test						
Wireless network key	Wireless network key					
This network requires a key for t	he following:					
Network Authentication:	Open 💌					
Data encryption:	Disabled 💌					
Network key:						
Confirm network key:						
Key index (advanced):						
The key is provided for me automatically						
This is a computer-to-computer (ad hoc) network; wireless access points are not used						
OK Cancel						

7. When you see the dialogue showing your network is unsecured, please click [Continue Anyway]

8. Now your network is in Ad-hoc mode

🕂 Wireless Network Connection 6 Properties 👘 🕐 🔀				
General Wireless Networks Advanced				
Use Windows to configure my wireless network settings				
Available networks: To connect to, disconnect from, or find out more information about wireless networks in range click the batton below				
View Wireless Networks				
Preferred networks: Automatically connect to available networks in the order listed below: Move up Move down				
Add Remove Properties				
Learn about setting up wireless network Advanced				
OK Cancel				

ii. For Windows Vista OS

Please follow the steps to setup Ad-hoc mode for Windows Vista.

1. Right-click the Network neighbor to choose "properties," or you can right-click network icon on desktop shortcut and choose "Network and Sharing Center"





2. When you see the "Network and Sharing Center" windows, please select "Manage network connection" bar

~~~~			
Vetwork and Inter	rnet  Metwork and Sharing Center	er 👻 😽 Search	٩
<b>Tasks</b> View computers and devices	Network and Sharing Ce	enter	•
Connect to a network Manage wireless networks Set up a connection or network <u>Manage network connections</u>	TEST-PC (This computer)	AzureWave	View full map = Internet
Diagnose and repair	💐 AzureWave (Public netwo	ork)	Customize
	Access	Local and Internet	
	Connection	無線網路連線 (AzureWave)	View status 😑
		all Signal strength: Excellent	Disconnect
	Sharing and Discovery		
	Network discovery	• On	$\odot$
	File sharing	o On	$\odot$
	Public folder sharing	⊖ Off	$\odot$
	Printer sharing	<ul> <li>Off (no printers installed)</li> </ul>	$\odot$
See also	Password protected sharing	• On	$\odot$
Internet Options	Media sharing	© Off	$\odot$
Windows Firewall	Show me all the files and folde	rs I am sharing	Ŧ

3. Right-click the connected network icon and choose "Properties"

○○ -	Network and Inter	net 🕨 Network Connectio	ns 🕨	✓ 4 5	Search		Q
🄄 Organize 👻	📲 Views 👻 🎦	Connect To 🛛 🔀 Disable	this network device	📑 Diagnose thi	s connection	»	0
Name Sta	tus Device N	Name Connectivity	Network Category	Owner	Туре	Phone # or Host A	ddre
LAN or High-Spe	ed Internet (1)						^
無線網距 AzureW Atheros	各連線 ave AR5008 Wireless Ne	Disable Connect / Disconner Status Diagnose Bridge Connections Create Shortcut Delete Rename Properties	ect				

4. When you see the warning message, please click [Continue]



5. Choose "Networking" tab and double-click the "Internet Protocol Version 4 (TCP/IPv4)" item

Connect using:		
2 802.11n USB V	Vireless LAN Card	
		Configure
This connection uses	the following items:	1
Client for Mic	rosoft Networks	
🗹 🚚 Wreless Inte	mediate Driver	
QoS Packet	Scheduler	
File and Print	er Sharing for Microsoft	Networks
🗹 🔺 Internet Prote	ocol Version 6 (TCP/IP)	v6)
🗹 🔺 Internet Prote	ocol Version 4 (TCP/IP)	v4)
M - Link-Layer Te	opology Discovery Map	per I/O Driver
🗹 🔺 Link-Layer Te	opology Discovery Res	ponder
Install	Uninstall	Properties
Description		
Description Transmission Contr	al Protocol/Internet Pro	tocol. The default
Description Transmission Contri wide area network	ol Protocol/Internet Pro protocol that provides o	tocol. The default communication

6. Choose "Use the following IP address:" and type the IP address; then click [OK]

Internet Protocol Version 4 (TCP/IPv4	I) Properties				
General					
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.					
Obtain an IP address automatically					
Use the following IP address:					
IP address:	192.168.0.10				
Subnet mask:	255.255.255.0				
Default gateway:					
Obtain DNS server address auto	omatically				
Ouse the following DNS server ad	dresses:				
Preferred DNS server:					
Alternate DNS server:					
	Advanced				
	OK Cancel				

*Note: the IP address of the other wireless card should be set with the same subnet mask

## 7. Choose "Manage wireless networks" bar



#### 8. Select [Add]



#### 9. Choose "Create ad-hoc network"

🌀 🎿 Man	ually connect to a wireless network	- • <b>×</b>
How d	o you want to add a network?	
*	Add a network that is in range of this computer This shows you a list of networks that are currently available and lets you connect to one. Once you connect, a profile for the network is saved on your computer.	
2	Manually create a network profile This creates a new network profile or locates an existing network and saves a profile for the network on your computer. You need to know the network name (SSID) and security key (if applicable).	
4	Create an ad hoc network This creates a temporary network for sharing files or an Internet connection	
		Cancel

#### 10. Please click [Next]



11. Enter "Network name" and if you want to protect the network security, please choose in "security type"; then click [Next]

G 🔐 Manually connect to a w	vireless network	
Give your network a r	name and choose security o	options
Network name:	test	
Security type:	No authentication (Open)	Help me choose
Security key/Passphrase:		Display characters
☑ Save this network		
		Next Cancel

12. Now your network is in Ad-hoc mode

Manually connect to a wireless network	
The test network is ready to use This network will appear in the list of wireless networks and will stay active until everyone disconnects from it. Give the network name and security key (if any) to people you want to connect to this network.	
Wireless network name: test	
Network security key: unsecured	
To share files, open <u>Network and Sharing Centes</u> in Control Panel and turn on file sharing.	
	Close

#### Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for

compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

#### This device is intended only for OEM integrators under the following conditions:

- 1) The antenna must be installed such that 20 cm is maintained between the antenna and users, and
- 2) The transmitter module may not be co-located with any other transmitter or antenna.

As long as 2 conditions above are met, further <u>transmitter</u> test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed

**IMPORTANT NOTE:** In the event that these conditions <u>can not be met</u> (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID <u>can not</u> be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

#### **End Product Labeling**

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains FCC ID: TLZ-NB101". The grantee's FCC ID can be used only when all FCC compliance requirements are met.

#### Manual Information To the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

For Taiwan 警語:

經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻 率、加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立即停用,並改善至無干擾時方得繼續使用。前項合法通信,指依電信法規定作業之無線 電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之 干擾。

Note: 1. 本模組於取得認證後將依規定於模組本體標示審驗合格標籤 2. 系統廠商應於平台上標示「本產品內含射頻模組: CCXXXXYYyyyZzW」字樣

# **Japanese Notice**

本装置は、第二種情報装置(住宅地域またはその隣接した地域において使用される べき情報装置)で住宅地域での電波障害防止を目的とした情報処理装置等電波障害 自主規制協議会(VCCI)基準に適合しております。 しかし、本装置をラジオ、テレビジョン受信機に、近接してご使用になると、受信 障害の原因となることがあります。本書の説明にしたがって正しい取り扱いをして ください。

#### **Industry Canada statement:**

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

#### **Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

#### Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

This device is intended only for OEM integrators under the following conditions: (For module device use)

The antenna must be installed such that 20 cm is maintained between the antenna and users, and
 The transmitter module may not be co-located with any other transmitter or antenna.

As long as 2 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

# Cet appareil est conçu uniquement pour les intégrateurs OEM dans les conditions suivantes: (Pour utilisation de dispositif module)

1) L'antenne doit être installée de telle sorte qu'une distance de 20 cm est respectée entre l'antenne et les utilisateurs, et

2) Le module émetteur peut ne pas être coïmplanté avec un autre émetteur ou antenne.

Tant que les 2 conditions ci-dessus sont remplies, des essais supplémentaires sur l'émetteur ne seront pas nécessaires. Toutefois, l'intégrateur OEM est toujours responsable des essais sur son produit final pour toutes exigences de conformité supplémentaires requis pour ce module installé.

#### **IMPORTANT NOTE:**

In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the Canada authorization is no longer considered valid and the IC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate Canada authorization.

#### NOTE IMPORTANTE:

Dans le cas où ces conditions ne peuvent être satisfaites (par exemple pour certaines configurations d'ordinateur portable ou de certaines co-localisation avec un autre émetteur), l'autorisation du Canada n'est plus considéré comme valide et l'ID IC ne peut pas être utilisé sur le produit final. Dans ces circonstances, l'intégrateur OEM sera chargé de réévaluer le produit final (y compris l'émetteur) et l'obtention d'une autorisation distincte au Canada.

#### Manual Information To the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

#### Manuel d'information à l'utilisateur final

L'intégrateur OEM doit être conscient de ne pas fournir des informations à l'utilisateur final quant à la façon d'installer ou de supprimer ce module RF dans le manuel de l'utilisateur du produit final qui intègre ce module.

Le manuel de l'utilisateur final doit inclure toutes les informations réglementaires requises et avertissements comme indiqué dans ce manuel.