# 802.11abg Wireless SDIO Card

**User Manual** 

### **Federal Communication Commission Interference Statement**

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 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.

The equipment complies with FCC RF radiation exposure limits set forth for

an uncontrolled environment, under 47 CFR 2.1093 paragraph (d)(2).

The 802.11abg Wireless SDIO Card has been tested to the FCC exposure requirements (Specific Absorption Rate).

#### IC SAR warning:

This device complies with the requirements of Health Canada Safety Code 6 for Canada. Testing was performed on laptop computers with antennas at 5mm spacing. The maximum SAR value is: 0.476 W/kg.

The device must not be collocated with any other antennas or transmitters.

# **Table of Contents**

Package Contents & System Requirements1
Features1
SD WLAN Module Wireless Networks 1
SD WLAN Card Network Scenarios1
Installing the Driver
Accessing WLAN Utility7
Configuring WLAN Utility7
Wireless tab7
Network Adapters tab8
IP Address tab8
Removing the Driver

## **PACKAGE CONTENTS & SYSTEM REQUIREMENTS**

- 1. Manual (In CD-ROM )
- 2. Drivers and configuration utilities on CD-ROM
- 3. Quick Install Guide
- 4. Product Device

If you miss any of these items please contact your agent.

## **FEATURES**

The 802.11abg Wireless SDIO Card is a wireless network card that complies with the IEEE 802.11abg standard on wireless LANs (Revision B).

- SDIO Card size as 40 (L) x 24 (W) x 2.1 (H) mm
- SDIO Interface
- Supports the IEEE802.11a/b/g wireless
- High radio performance
- ➢ Low power consumption
- Data rates of 6-54Mbps for 802.11a and 1-54Mbps for 802.11g
- Embedded 40MHz reference clock supported
- Sleep clock using 32 KHz clock
- ▶ Ready OS support as WinCE 5.0 and 6.0, Linux 2.6.9

# **SD WLAN MODULE WIRELESS NETWORKS**

### **SD WLAN Card Network Scenarios**

The 802.11abg Wireless SDIO Card enables you to:

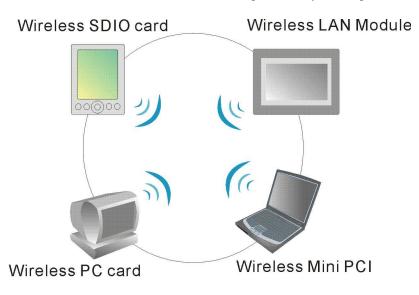
- Connect your computer to a Peer-to-Peer workgroup of wireless computing devices
- Connect your computer to a Small Office/Home Office (SOHO) network that includes Wi-Fi access points
- Connect your computer to a Local Area Network (LAN) Infrastructure that includes the 802.11abg Wireless SDIO Card, or other IEEE 802.11b compliant LAN systems

Wireless stations can be equipped with the 802.11abg Wireless SDIO Card, but also with other WLAN PC Cards. Both of them share the same wireless functionality.

### Peer-to-Peer (Ad-hoc) Workgroup

The Peer-to-Peer workgroup configuration enables you to quickly set up a small wireless workgroup, where the workgroup participants can exchange files using features like "Files and Printer Sharing" as supported by Microsoft® Networking.

You can use this option to setup a temporary or Ad-hoc network in environments where no access points are available (for example in Small Office/Home Office "SOHO" environments). As long as the stations are within range of one another, this is the easiest and least expensive way to set up a wireless network.



### Home Networking

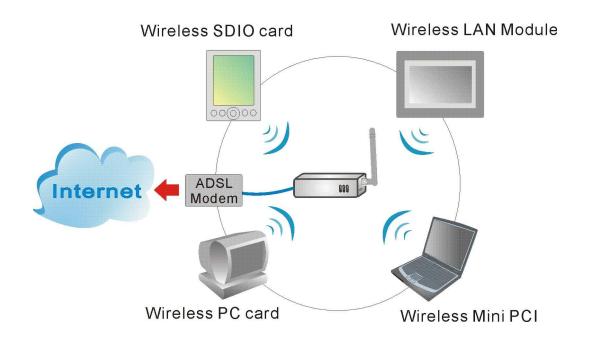
With 802.11 abg Wireless SDIO Card, wireless access to the Internet or other devices is at your fingertips. All you need to do is connect the 802.11 abg Wireless SDIO Card to an existing access point that may be connected to the external Cable or xDSL modems and you are ready to:

- Share files and printers, and
- Access the Internet

### Enterprise Networking

With the Wi-Fi certified access point in the corporate network system, you can connect to a corporate Local Area Network (LAN) infrastructure to access all network facilities in wireless. LAN Infrastructures may either be:

- Stand-alone wireless LANs
- Wireless network infrastructures connected to an existing Ethernet network



# **INSTALLING THE DRIVER**

# Installation of the 802.11abg wireless SDIO card driver to the PDA via using Microsoft ActiveSync®

1. Connect your PDA to your computer and make sure Microsoft ActiveSync® has established a connection between the two devices.



Note: Do not insert the 802.11abg Wireless SDIO Card into the card slot of your PDA until the Driver installation has been performed.

## Important Notice:

The SDIO drivers are based on following CPU type:

- Intel PXA270 for Windows Mobile® 5.0
- Marvell PXA310 for Windows Mobile® 6.0



Please go to **Start > Settings > System** tab > select **About** icon > **Version** tab to check the PDA CPU type.

If your PDA CPU is other type, please check with the agent of SDIO card. Due to different PDA CPU type might cause incompatible between the driver and SDIO card.

🏄 Set	tings	4	: 📢	11:33	ok
About					-
Security   OS 5.1.4 © 1996	Mobile® 5 Feature Pa 78 (Build 1 - 2006 Mici reserved.	ick 5706.3.5	5.2)		and
U.S. and	outer prog internation 'rocessor:	hal copyr	ight lav	vs,	
Expar	Memory: nsion slot:		MB		
Version	Device ID	Copyrig	ihts		
		Towns (			

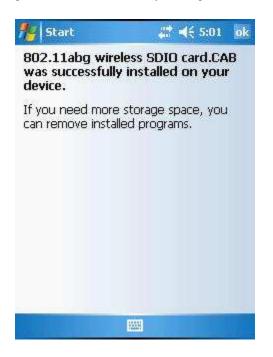
2. Insert the included CD-ROM to your PC. The Wireless LAN Utility screen will appear, select the Install Driver (WM 5.0 or 6.0) to start driver installation.



3. Click **"OK"** to complete the driver installation.

Application Downloading Complete	
Please check your mobile device screen to see if additional steps are necessary to complete this in OK	stallation.

4. After finished driver installing, the installed successfully message will show on the PDA screen.



Note: Do not insert the 802.11abg wireless SDIO card into the card slot of your PDA until the driver installation has been performed.

## **ACCESSING WLAN UTILITY**

**0**7

Go to **Start > Settings > Connections** tab > select the **Wi-Fi** icon to access the Windows CE built-in WLAN utility.



# **CONFIGURING WLAN UTILITY**

Select an available AP or router from the list and tap Connect to make a connection.

### Wireless tab

- Configure Wireless Networks Select an available network device from the list and tap Connect.
- Networks to access: Select the type of network access from the pull-down list.
  - All Available: Infrastructure or Ad-hoc mode, a group of wireless devices communicate with both access points and network adapters.
  - Only access points: Infrastructure mode, a group of wireless devices communicate directly with only access points.
  - **Only computer-to-computer**: Ad-hoc mode, a wireless device communicates directly with each other without using an access point.



### Network Adapters tab

### **Configure Network Adapters**

- My network card connects to: Tap Work or The Internet from the pull-down menu.
  - Work: Connects to the network in your office.
  - **The Internet**: Connects to your ISP at home.
- Tap an adapter to modify settings: Tap an adapter from the list to enter its configuration screen.
  Or select an adapter then tap Edit at the left-down

corner of the screen to enter its configuration settings page.

<b>Configure Network</b>	Adapters
- My network card conn	0.5000.2028502 Q
Work	
Tap an adapter to mo	dify settings:
NE2000 Compatible Socket 10-100 Driv Virtual Ethernet In Bluetooth PAN Driv	ver termediate Miniport
802.11abg wireles	
L2TP NDISWAN Mi	2012/02/2012
Remote-NDIS Host PPTP NDISWAN M	5845 - 501
AsyncMac NDISWA	NA 1975 NA 1978 NA 197
Vireless Network Ada	apters
Edit	

If 802.11abg wireless SDIO card is tapped, the following screen will appear for you to configure:

## **IP Address tab**

### • Use server-assigned IP address

Tap **Use server-assigned IP address** to obtain an IP address automatically. The wireless router will act as a DHCP server. An IP address will be assigned from the wireless router.

🏄 Settin	gis	8	-	4€ 5:07	ok
802.11abg	wireless	SDI	0 ca	rd	-
Use ser	ver-assig	ned 1	(P ac	ddress	
O Use spe	ecific IP a	addre	SS		
IP a	ddress: 🛐	92.1	68.5	0.136	
		- 1	2		
IP Address	Name Ser	vers			_
		a da un man Nacional Companie d			

### • Use specific IP address

- **IP address**: Enter the IP address (within the range of the wireless router's IP address, for instance, if the IP address of the router which you would like to connect is 192.168.1.254, you may enter the IP address from 192.168.1.1 to 192.168.1.253, such as 192.168.1.123)
- Subnet mask: The subnet mask, for example, 255.255.255.0, must be the same as that set on your Ethernet network.
- **Default gateway**: Enter the IP address of your network's gateway, such as 192.168.1.254. The gateway is the device that enables communication between your computers and the Internet. In most cases, your router acts as your gateway.

Me Settings	# <b>4</b> € 3:34 ok
Bluetooth PAN Dr	iver
O Use server-ass	igned IP address
OUse specific IF	<sup>,</sup> address
IP address:	192.168. 1 .123
Subnet mask:	255.255.255.0
Default gateway:	192.168, 1 .254
IP Address Name S	ervers

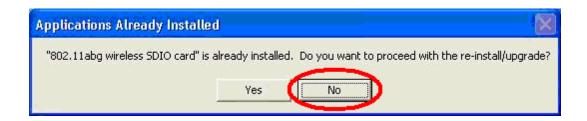
# **REMOVING THE DRIVER**

If you would like to remove the driver from your PDA, please make a connection between the PDA and your computer via Microsoft ActiveSync® and then insert the CD-ROM into your PC.

1. Select the Install Driver (WM 5.0 or 6.0) to start to REMOVE the driver.



2. If you would like to re-install or upgrade the driver, please click "Yes"; if not, please click "No" to process removal.



3. Select the **802.11abg wireless SDIO card** item, and then click **"Remove"** button to uninstall the program.

着 Add/Remove Programs	
Select a program's check box if you want to mobile device, or clear the check box if you program from your device.	
Note: If a program that you installed is not lis not designed to be used on your mobile devi	
🗷 🚱 802.11 abg wireless SDIO card	86.5 K
Program description Wireless SDIO card Driver	
Space required for selected programs:	0.0 K
Space available on device:	178,264.3 K
🔽 Install program into the default installati	on folder
Remove from both locations	
To remove the selected program from both your device and this computer, click Remo	
OK Cancel	

4. Click "OK" to confirm removing the application.



5. Click **"OK"** to complete the uninstallation.

Add/Remove Programs	
There are no device-compatible programs a	vailable.
Note: If a program that you installed is not li not designed to be used on your mobile dev	
Program description	
Space required for selected programs:	0.0 K
Space available on device:	178,389.8 K
🔽 Install program into the default installat	ion folder
1. Town hadden up an and the second	
Remove from both locations	
	Pennin I
Remove from both locations To remove the selected program from both	Pennin I