



UbiCell User Guide

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SAFETY CONCERNS

This document provides the information to prevent bodily injury and property damage. Please make a good use of our product with its description below.

Conventions

**WARNING**

Provides information or instructions that you should follow in order to avoid personal injury or fatality.

**CAUTION**

Provides information or instructions that you should follow in order to avoid service failure or product damage.

**NOTE**

Indicates additional information for reference.

Symbols

**Caution**

Indication of a general caution

**Restriction**

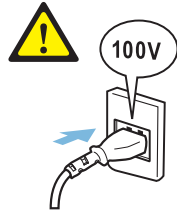
Indication for prohibiting an action for a product

**Instruction**

Indication for commanding a specifically required action

WARNING

Power



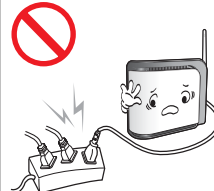
Insert power cord tightly and fully into the outlet.

Failure to do so may cause fire.



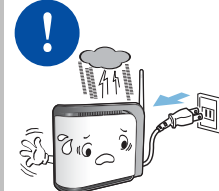
Do not touch the UbiCell or power plug with wet hands.

Failure to do so may cause electric shock.



Do not connect many devices to a single outlet.

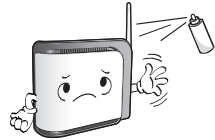
Failure to do so may cause electric shock.



Pull out the power plug when the UbiCell is not used for a long time or bad weather condition.

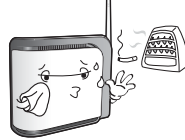
Failure to do so may cause fire or electric shock.

Installation/Maintenance



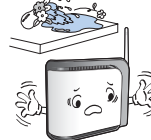
Do not use or keep flammable spray or materials near the UbiCell.

Failure to do so may cause fire or explosion.



Do not install in humid or dusty area and near a heating devices(heater or light for cigarette). Install in the place well ventilated.

Failure to do so may cause fire or electric shock.



Do not put instruments that contain water such as vases, cups, cosmetics, and medicines, or small metals near the UbiCell.

Moisture in the UbiCell can cause a fire and electric shocks.



Do not put heavy materials on the UbiCell.

Failure to do so may cause the damage to the parts of the UbiCell or fire.



Turn off the power switch and unplug the power cable, and then contact the service center if unusual sound, smell, or smoke comes out.

Failure to do so may cause fire or electric shock.



CAUTION

Installation/Maintenance



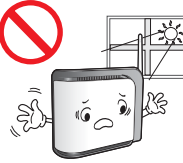
Accurately install and properly use the product according to the manual.

This is to prevent malfunctions and reductions in product lifetime.



Do not spray water directly or do not use chemical solvents such as wax, benzene, alcohol, thinner, mosquito spray, aerosol, lubricant, and detergent.

Failure to do so may cause the damage to the product.



Do not install the UbiCell on an unstable surface or near the direct rays of sunlight.

It may cause severe damage to the parts of the UbiCell, and your UbiCell may not work properly.



Do not separate, repair or remodel the UbiCell arbitrarily.

If a repair is needed, please contact where the UbiCell was purchased or call the Service Center.

Installation/Maintenance



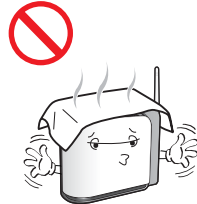
Do not place the product on unstable support.

This is to protect the product from falling.



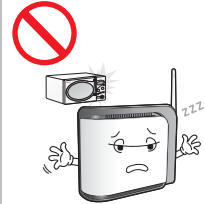
Don't give a shock to the UbiCell.

The UbiCell can be damaged.



Do not cover the UbiCell.

Doing so may cause product malfunction, resulting from the rise of inside temperature.



Don't install the UbiCell near the products which release electromagnetic waves such as microwaves, hair driers or vacuum cleaners.

If they are too close, GPS signal can not be normally received.

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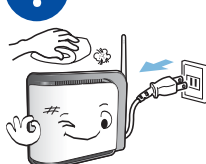
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Installation/Maintenance



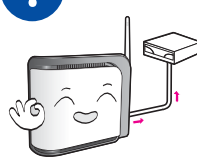
UbiCell always should be in an upright position.

Failure to do so may cause product malfunction, resulting from the rise of inside temperature.



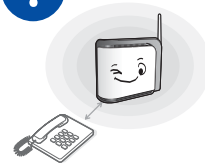
Clean the UbiCell with a soft and dry cloth when cleaning.

Failure to do so may cause the damage to the product.



Check the maximum length of the cable and install it near the router.

Failure to do so may cause malfunction of this product.



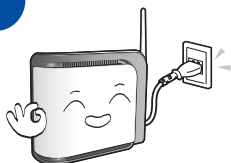
UbiCell must be placed more than 0.5 m apart from the other LAN devices.

RF signal interference may have a bad effect on the other LAN devices.

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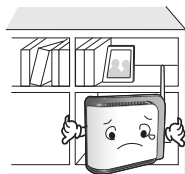
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Installation/Maintenance



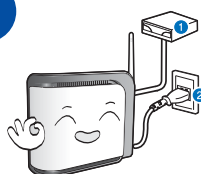
Please use a refined accessory and a charger provided or activated by Samsung Electronics.

The use of another accessory and a charger may cause the critical damage to the product.



Install the product in an area with good ventilation. Install the UbiCell at a distance of more than 30cm from the walls or other products.

Not doing so may cause product malfunction, resulting from the rise of inside temperature.



Ethernet cable connector (RJ-45) should be plugged before plugging a DC power cable.

Not doing so may cause product malfunction.

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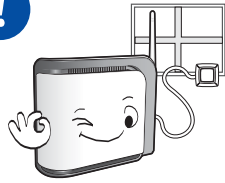
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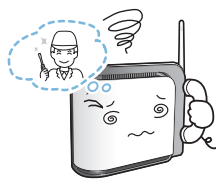
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Installation/Maintenance



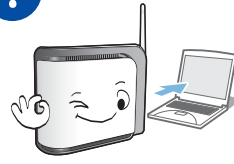
External GPS antenna always should be located indoors. If possible, install external GPS antenna around the window.

If not, GPS antenna can be damaged, or cannot normally receive GPS signal. ▼



If the UbiCell doesn't work for a long time, check the state of LED and call customer service.

This is to prevent malfunctions and reductions in product lifetime.



UbiCell should be registered first.

Your UbiCell will not be able to function if the instruction is violated.

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PREPARATION



Congratulations!

Your purchase of the Sprint Nextel Wireless UbiCell ensures that you and your family have reliable wireless telephone service while in your home or small business.

You only have to install the UbiCell in your home or small business, and resister.

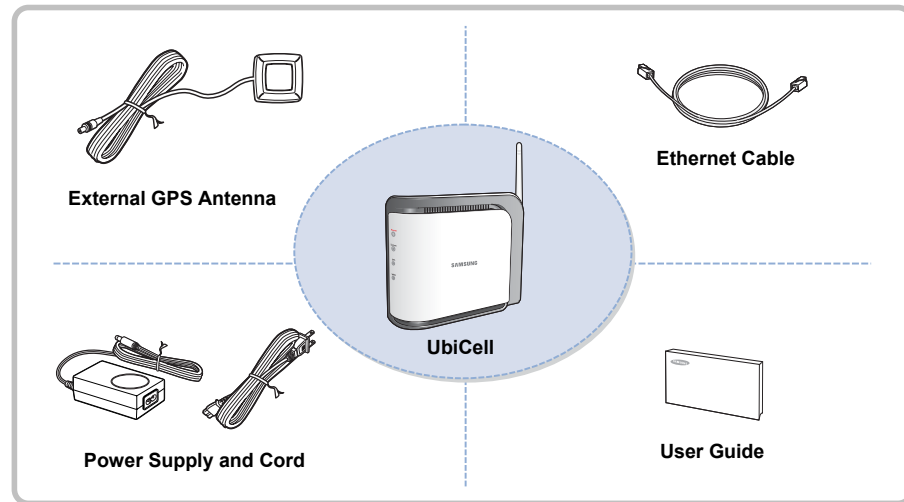
Sprint Nextel Wireless will be operated to make the UbiCell function normally through UbiCell Manager(UCM).

About This Guide

This user guide provides instructions for the use of UbiCell. Please take the time to study this guide to become familiar with the operation of your UbiCell and the benefits this new UbiCell can provide. Keep this guide handy. You may need to look up instructions for infrequently used features.

What's in the box

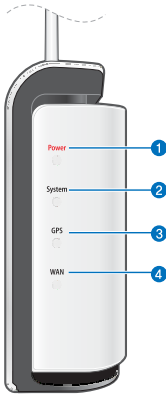
After purchasing this product, check if the items below are all included in the package. If any item is missing or damaged, contact your dealer.



Names and Functions of each part

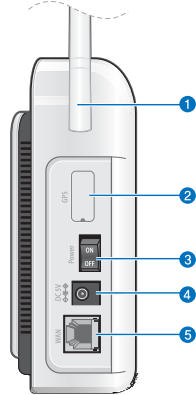
The UbiCell is very simple. On one end it has connectors for power and LAN.
A third connector, for an external GPS antenna, is not usually needed.
On the other end the UbiCell has four LED indicators to let you know its status.

LED



Name	Description
① Power	Power LED. When powering on UbiCell, it turns blue.
② System	When the UbiCell normally works, It turns blue. When the alarm occurs, it turns red.
③ GPS	When GPS signal is normally received, it turns blue.
④ WAN	When the Ethernet cable is normally connected, it turns blue.

Connector



Name	Description
① Antenna	Connects the antenna.
② GPS	Connects the external GPS antenna.
③ Power	Turn on/off the UbiCell using the power button.
④ DC5V	Connects the power cable.
⑤ WAN	Connects the Ethernet cable.

Registering your UbiCell

Before installing your UbiCell you need to register it with Sprint Nextel. You can do this on-line by going to **www.sprint.com/ubicell/register**, or you can do it by calling **1-800-UBICELL**.



Registering

Your UbiCell will not be able to function if the instruction is violated. Your UbiCell should be registered first.



INSTALLING YOUR UBICELL

If possible, place the UbiCell in a high location such as on top of a book shelf or tall cabinet. For best results place the UbiCell in a room with a window.

Make sure your DSL modem or cable modem and broadband router are on and working properly.

When you operate the UbiCell, you had better stay at a distance of more than 20cm from it.



Installation Environment

Refer to the 'Environment Standard' of 'ANNEX' for the conditions of the environment which make the UbiCell normally work.



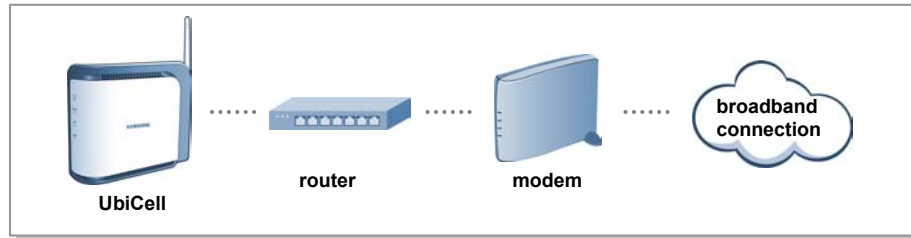
Installing your UbiCell

- 1) Your UbiCell always should be in an upright position.
- 2) Install the UbiCell at a distance of more than 30cm from the walls or other products.



Connecting an Ethernet Cable

Using the Ethernet cable provided, connect one end to the 'WAN' connector on the right-hand end of the UbiCell and connect the other end to an available port on your broadband router:



Ethernet Cable

- 1) Check the maximum length of the cable and install it near the router.
- 2) Ethernet cable connector(RJ-45) should be plugged before plugging a DC power cable.

Connecting the Power

Connect the power cable to the 'DC 5 V' connector on the right-hand end of the UbiCell and plug the transformer into an available wall outlet using the cord that comes with it.

Turn on the UbiCell by pressing the 'Power' switch just above the 'DC 5 V' connector.



Connecting the power

Please use a refined accessory and a charger provided or activated by Samsung Electronics.

Connecting an External GPS Antenna



NOTE

If the UbiCell is installed in places where GPS signals cannot be received, an external GPS antenna must be connected.



Plug the external GPS antenna cable into the GPS connector on the UbiCell. This connector is normally concealed behind a small rubber flap.

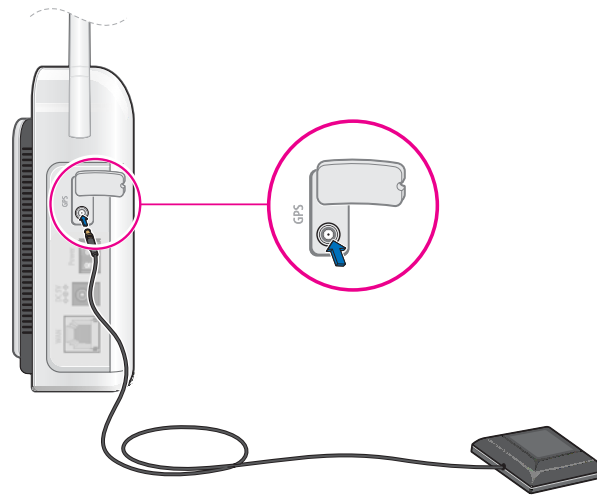
Connect this antenna as follows:

The antenna must be laid in a horizontal position, as close to a window as possible. Laying it on a windowsill is ideal. To be certain of keeping the antenna horizontal, you may wish to tape it down, but do not use duct tape. The window should not have metal blinds, nor metallic solar film.

Plug the antenna cable into the GPS connector on the UbiCell. This connector is normally concealed behind a small rubber flap:

**External GPS antenna**

External GPS antenna always should be located indoors.



The antenna cable is 10 meters (about 33 feet) long, providing plenty of flexibility in locating both it and the UbiCell.



Checking the LED

Connect the power cable to the 'DC 5 V' connector on the right-hand end of the UbiCell and plug the transformer into an available wall outlet using the cord that comes with it.



Turn on the UbiCell by pressing the 'Power' switch just above the 'DC 5 V' connector.

The 'Power' LED on the left-hand end of the UbiCell should lit up blue. Over the next few minutes the 'WAN LED, the 'GPS' LED, and the 'System' LED should all lit up blue. (If after 10 minutes any of the LEDs is not lit up, or is lit up red, see the 'Troubleshooting' instructions on the next page.)

That's all there is to it. You can now make and receive calls with your Sprint Nextel handset using the UbiCell.

TROUBLESHOOTING

In the unlikely event that you have problems, check the following.

The Power LED is not lit



Check that the power transformer is plugged into a wall outlet, and the cable from it is plugged securely into the UbiCell.

The GPS LED still does not light up blue 10 minutes after plugging-in the UbiCell



Try moving the UbiCell away from obstructions around or above it, and the closer to a window the better. If all else fails, connect an external GPS antenna.

The WAN LED lights up red.



The Ethernet cable is not connected correctly.

The System LED lights up red



The UbiCell was unable to register with the Sprint Nextel network. Contact Sprint Customer Service.

If the above suggestions did not correct the problem, or you encounter a problem that is not listed here, you can get additional assistance by calling customer service at 1-800-UBICELL, or going to www.sprint.com/ubicell/trouble.



Product Specifications

The specifications of the UbiCell are as follows.

Capacity

The capacity of UbiCell is described as follows:

Category	Specification
Maximum Number of Frequencies	1 FA
Sector	Omni
Maximum Number of Channels	4 CEs

Transmitter/Receiver Specification

The specification of the transmitter and receiver of UbiCell is described as follows.
The items that are not included in the following table should meet the IS-95A/B, IS-2000 standard.

Item		Specification
Transmission	Tx Frequency	1,930~1,990 MHz
	Channel Bandwidth	1.25 MHz
	Power	50 mW/carrier
	Modulation	QPSK
Reception	Rx Frequency	1,850~1,910 MHz
	Channel Bandwidth	1.25 MHz
	Sensitivity	-119 dBm





Unit Specification

The specification of UbiCell is described as follows:

Category	Specification
Size(H × W × D, mm)	144 × 175 × 54
Weight	About 400 g(About 710~720 g if an adapter and cables are included)

Environment Standard

The temperature, humidity, altitude, and vibration that is proper for operating UbiCell, and the noise and electromagnetic wave caused when UbiCell operates are described as follows

Category	Specification
Size(H × W × D, mm)	144 × 175 × 54
Weight	About 400 g(About 710~720 g if an adapter and cables are included)

Category	Range	Standard
Temperature a)	0~45°C	-
Humidity	0~90% RH	-
Altitude	-60 m(60 m below sea level)~1,800 m	-
Noise b)	Below 45.0 dBA from a distance of 1 m	ANSI-SI.3-1971
EMI/EMC c)	Satisfied	GR-1089-CORE Section 3

a) 'Temperature' includes the temperature scope that UbiCell properly operates.

b) 'Noise' is a criterion that is measured in the place of a distance of 1m from the UbiCell.

c) 'EMI/EMC' meets the test conditions of FCC, UL, and Telecordia, international organizations.

Power

The specification of UbiCell power is described as follows. UbiCell meets the power safety criterion defined in UL60950-1 and EN60950-1.

Category	Specification
Input Voltage	AC 120 V or AC 220 V
Voltage Variation Range (Tolerable error of commercial electric power source)	100~250 VAC





Radio Configuration

The Specification of UbiCell Radio Configuration Characteristics is described as follows.

Forward Channel	Reverse Channel
1	1
2	2
3	3
5	4

Service Option

The Specification of UbiCell Service Option is described as follows.

Category	Service Option
Voice	3, 32768
SMS	6, 14
Data	33
Test Call	2, 9

USA-Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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. If not installed and used in accordance with the instructions, it 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 tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

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

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Caution: Exposure to Radio Frequency Radiation.

To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons. This device must not be co-located or operating in conjunction with any other antenna or transmitter.



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