

## WiMAX Travel Router + Dock

MODEL NUMBER

PHS2000W

### PACKAGE INCLUDES

#### Travel Router

*Integrated WIMAX modem Inside*

#### Reception Enhancing Dock

*WIMAX antennas and Ethernet*

#### USB Wall Charger

*Converts AC power to DC over USB*

#### USB Cable

*Charges router from either  
Wall Charger or computer*

#### Quick Start Guide



all:connected  
**BUSINESS SERIES**

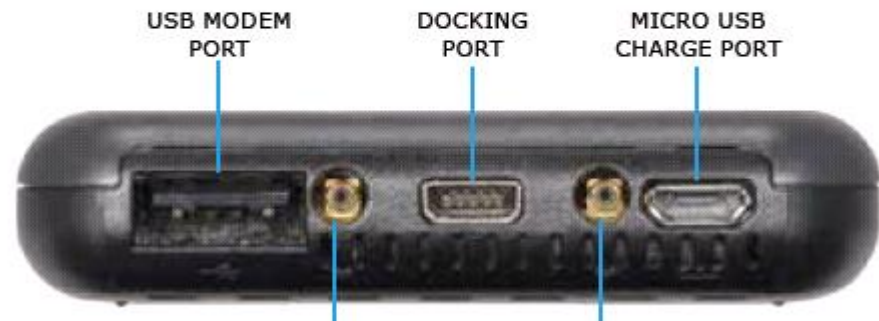


## PHS2000 Router

WiMAX Travel Router has simplified buttons and ports to keep your experience easy and reliable.

The router communicates essential information with its center LEDs. Also, quickly pressing the Power or Signal Strength buttons will display battery level or modem connection strength.

Outside of WiMAX markets, the router can connect to many 3G USB modems - just plug in the modem before powering on.



## PHS2000 Dock

WiMAX Travel Router Dock features two WiMAX antennas.

Raise the antennas to their upright position and enhance your connection to the WiMAX network by 5dB.

Connect computers or switches to the Ethernet port. Also configurable to use your Cable/DSL modem as primary internet connection.



## Optional Accessories

Visit [www.cradlepoint.com/phs2000w](http://www.cradlepoint.com/phs2000w) to purchase accessories.



### Travel Pouch

*Protect your handheld router by using our neoprene-padded travel pouch*



### Car Power Adapter

*5VDC 1A with USB Type A connector and micro USB cable. Style may vary.*



### Compact USB Charger

*with prongs that unfold up to 180 degrees vertically*

*5VDC 0.7A with USB Type A connector and micro USB cable*



### Additional Power Supply

*Get an additional standard wall power supply to take with you wherever you go.*

## Getting Started

### 1. Charge The Battery

#### Option #1: **Connect to Power Adapter**

Connect the USB cable to the adapter. Plug adapter into an outlet and connect to the PHS2000's micro USB Port.

#### Option #2: **Connect to Computer**

Plug the USB cable into an available USB Port on your computer and connect to the PHS2000's micro USB Port.

#### Option #3: **Dock the PHS2000**

Connect the power adapter and USB cable into the micro USB Port on the Dock. Ensure the dock power switch is on. Place the PHS2000 onto the docking port.

#### Option #4: **Connect to Car Adapter** (not included)

Plug the car adapter into an automobile 12V receptacle and connect to the PHS2000's micro USB Port.

Full Charge = 3 or more hours of use, may vary based on conditions

*NOTE: the battery is not removable. Do not attempt to remove or replace the battery.*

### 2. Power On / Off

**Turn On:** Press and Hold the Power Button for 1 Second

**Turn Off:** Press and Hold the Power Button for 5 Seconds

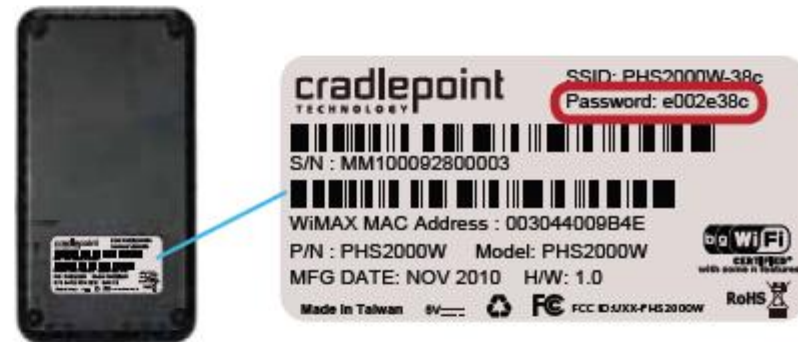
### 3. Connect Your Computer

**Ethernet:** Place the PHS2000 onto the dock connector. Connect an Ethernet cable from your computer to the Ethernet port on the dock.

**WiFi:** The PHS2000 has internal 802.11n WiFi antennas which provide up to 350 feet of range from the CradlePoint router to your connected computers or WiFi-enabled devices.

The default password is on the product sticker on the back of your router. (See Page 7)

*NOTE: If you are asked for an "8-digit PIN", click CONNECT USING A SECURITY KEY and enter your eight character default password found on the bottom of your router.*



### 4. Activate

In order to use the PHS2000, you will need to activate the router and subscribe to a data plan through your wireless service provider.

Open an internet browser. You should be presented with a welcome and setup page. Please establish a data account. You're now ready to connect to the internet.

Find your operating system and follow the connection steps.



#### MAC OS X

- 1) Open your wireless connection list by clicking the AIRPORT wireless icon on your menu bar

*You'll see a list of available wireless networks*

- 2) Click on the PHS2000W-xxx
- 3) Enter Default Password
- 4) Click CONNECT



#### WINDOWS 7

- 1) Click the NETWORK CONNECTION icon in the lower right hand corner taskbar.

*You'll see a list of available wireless networks*

- 2) Click PHS2000W-xxx
- 3) Enter Default Password
- 4) Click CONNECT

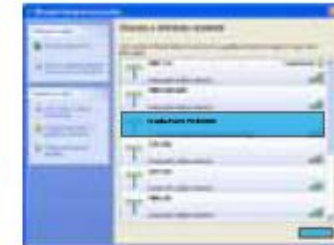


#### WINDOWS VISTA

- 1) Click START
- 2) Hover over CONNECT TO
- 3) Click WIRELESS NETWORK CONNECTION

*You'll see a list of available wireless networks*

- 4) Click PHS2000W-xxx
- 5) Enter Default Password
- 6) Click CONNECT



#### WINDOWS XP

- 1) Click START
- 2) Hover over CONNECT TO
- 3) Click WIRELESS NETWORK CONNECTION

*You'll see a list of available wireless networks*

- 4) Click PHS2000W-xxx
- 5) Enter Default Password
- 6) Click CONNECT

## First Time Setup Wizard

The First Time Setup Wizard will help you customize the name of your wireless network, change passwords to something you choose, and establish an optimal WiFi security mode.

The PHS2000 comes with a unique password creating built-in WiFi WPA2 Security which prevents unauthorized users from connecting to your WiFi network.

To access the administration pages, open a browser window and type “**cp**” or “**192.168.0.1**” in the address bar. Press enter/return.

When prompted for your password, type the eight character **DEFAULT PASSWORD** found on the back of the PHS2000 on the product label.

On first log-in, you will be automatically directed to the **FIRST TIME SETUP WIZARD**.

After first log-in, you will be directed to the **ROUTER CONSOLE**.

If you are currently using the PHS2000 WiFi network and you changed the wireless network name and/or security password, you will need to reconnect your devices to the network using your new settings.

*NOTE: If you are unable to connect, you may have mistyped your username/password. Please reboot the router in “Open Security Mode” (page 17) and re-establish your settings, or reset the device to factory settings (page 15).*



## First Time Setup Wizard, continued

### STEP 1/3 Setting Your Administrative Password and Time Zone

If you choose, you can change the router's **DEFAULT ADMINISTRATOR PASSWORD**. Then, select your **TIME ZONE**. Click **NEXT**.

### STEP 2/3 Configuring Your Wireless Network

CradlePoint recommends you customize your WiFi Network Name. Type in your personalized Network name here. You can also enable the Guest Network feature (see description on page 14).

Choose the **WIFI SECURITY LEVEL** that best fits your needs: **POOR** for **WEP**, **BETTER** for **WPA** or **WPA2** and **BEST** for **WPA2 Only**. ( Make sure your PC or other devices support the mode you choose ). Click **NEXT**.

Choose a personalized **WIRELESS SECURITY PASSWORD**. This password will be used to reconnect your devices to the router once the security settings have been saved. Click **NEXT**.

### STEP 3/3 Applying Your New Settings

Review the details and record your wireless network name, administrative and wireless WPA password. Click **APPLY** to save the settings and update them to your router.

## Using The Router With The Dock

The dock provides additional features to your PHS2000 integrated modem router.

Two antennas increase modem signal reception when in the up position ( + 5dB ).

Charge and use the PHS2000 router while docked.

Provide internet access to a non WiFi-enabled computer or other Ethernet-enabled equipment via the Ethernet port ( 10/100 mbps ).

Dock can provide internet from a connected PHS2000 router or a DSL/Cable modem via Ethernet. No USB 3G modems can be used.

The dock has a power LED which indicates if it is receiving power ( blue ).

Dock charging and Ethernet connectivity work only when connected to the provided wall power adapter, with the power switch on.

Dock antennas are always functional and work best when lifted up.

*NOTE: To use an internet connection from an Ethernet-based modem, connect an Ethernet cable from the DSL/Cable modem into the Ethernet port on the dock. You must change the port designation from LAN to WAN in the administration pages of the PHS2000.*



## Using With an External USB Modem

In addition to the integrated modem in the PHS2000, the router also supports many 3G USB modems. To use an external USB modem, turn off the router, insert the USB modem into the USB slot, and power on by holding the power button for 1 second. It will detect and use the external modem if it is supported. Visit [www.cradlepoint.com/phs2000w](http://www.cradlepoint.com/phs2000w) to view the supported modems list.

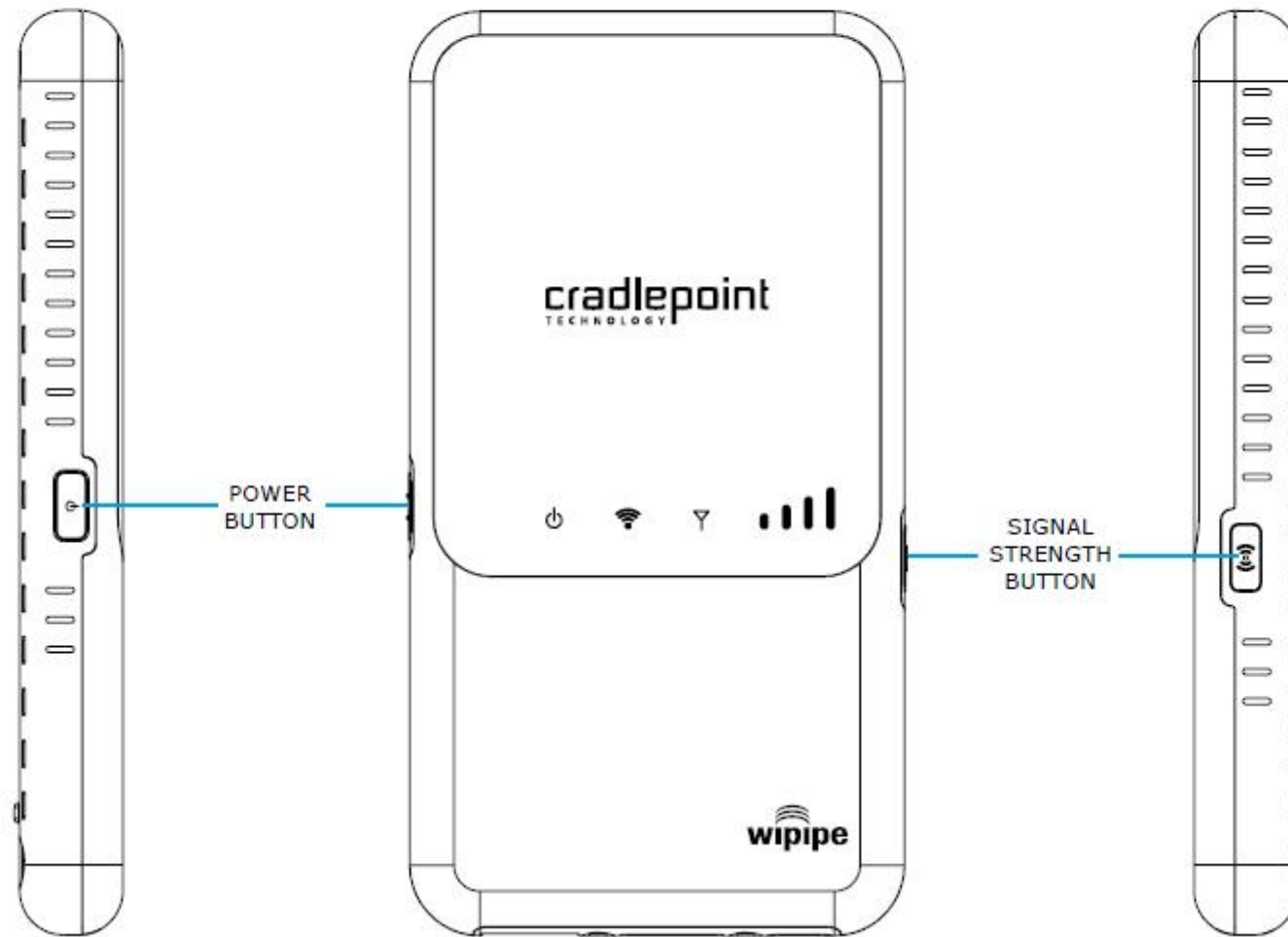
When you want return to the WiMAX integrated modem, power off the router, remove the connected USB modem, and turn the power back on.

### Updating Firmware

If you find your external USB 3G modem is not connecting properly, the most common solution is to update the router firmware. Connect your computer to the PHS2000 with its WiFi network connection or an Ethernet cable (from the dock). Open a browser window and type “**cp**” or “**192.168.0.1**” in the address bar. Press enter/return. When prompted, enter your administrator password.

Select **SYSTEM SETTINGS** on the top navigation bar, then **SYSTEM SOFTWARE** from the drop down menu. Find the Firmware Upgrade section. If a newer version of firmware is available, click **AUTOMATIC (INTERNET)**. Wait a few minutes while your firmware is downloaded and installed.

## LED Router Information



## POWER

*on:* solid green = adequate charge

*on:* blinking red = low battery

*charging:* amber = charging

*charging:* green = fully charged

*charging:* amber/green alternating = battery error

*standby:* blinking green: adequate charge

## WiFi STATUS LED

*on:* green = operating normally

## MODEM STATUS LED

*on:* solid green = connection active

*on:* blinking green = connecting

*on:* blinking amber = connection error

*off:* modem not connected

*standby:* red = modem error

## SIGNAL STRENGTH

Press the signal strength button on the right side of the router for one second and release.

Blue LEDs = *modem signal strength*  
four bars reflects full signal strength  
( a flashing bar indicates half )

## BATTERY LEVEL

Press the power button on the left side of the router for one second and release.

Green LEDs = *battery level*  
four bars reflects full battery  
( a flashing bar indicates half )

## Create WiFi Networks

Your router can create two WiFi networks: one private and one public.

Guests on the public network have full, secure access to the internet - but are restricted from accessing the administration pages or any connected devices on your private network.

Enable the Guest Network in Step 2 of the **FIRST TIME SETUP WIZARD**. It will appear as “**Guest**” in your available WiFi networks list.

Each network can have unique prioritization properties and security settings.

WiPipe™ technology inside your PHS2000 gives you granular Quality of Service settings, allowing you to prioritize the web traffic passing thru the router for Internet Telephony (VoIP), Media Streaming, and Web Browsing.

### [WiPipe Built-In Management Application](#)

DHCP Server Support up to 253 reservations, UPnP IGD 1.0 Compatible, NAT Support, Restricted NAT, IP Address Ranges, Port Ranges, and Schedule, Port forwarding - including a DMZ host, IPSec, PPT and PPPoE pass-through, VPN Pass through with multiple sessions, firewall support stateful packet inspection and up to 24 rule-based options, DNS relay, Static or Assigned DNS servers, pre-configured for OpenDNS services, Dynamic DNS, Content Filtering with OpenDNS, Variable Power WiFi Broadcast

## Additional Features

### HARDWARE RESET

When you press the recessed **RESET** button on the back of the PHS2000, the handheld router will perform a full restart. A full restart includes termination of all open connections and a reboot of the router, which will help recover your router from hangs, freezes or other malfunctions.

Pressing the Reset button on the back of the PHS2000 does **not** restore factory defaults.

### FACTORY RESET

In order to return the PHS2000 to its original factory state, press and hold both the **POWER** and **SIGNAL STRENGTH** buttons for 10 seconds while the PHS2000 is booting. Both the WiFi and Modem LEDs will blink amber twice when the factory reset is occurring.

Or login to the administration pages, select **SYSTEM SETTINGS**, then **SYSTEM CONTROL**, and press "**RESTORE TO FACTORY DEFAULTS**" button.

All settings will be reset to the original factory defaults, including the Network Name (SSID), and the Default Administration and Wireless Passwords.

## Additional Features

### SUSPEND MODE

The device will automatically go into suspend mode when there is no data activity for 10 minutes.

This setting can be changed within the administration pages. Log into the router, select **SYSTEM SETTINGS** on the top navigation bar, then **POWER MANAGEMENT** from the drop down menu. To turn the device on or off from the suspended mode is the same as if the device were off.

If the device is accidentally turned on in an area where it shouldn't be used, immediately press and hold the power button during boot to turn off before the device activates the radio transmitters.

### WiFi as WAN

Public WiFi networks aren't very secure, but are generally free. The PHS2000 can receive a WiFi signal and use it to create internet access, allowing you to securely connect up to 16 devices using the PHS2000's security features.

Enable this feature by logging in to your router (see login instructions on page 8) and selecting **INTERNET** on the top navigation bar and then **WiFi as WAN Settings** in the drop down menu. Click **ENABLE** and select the WiFi network you'd like to use as your Internet Connection.



## Additional Features

### **WIRED NETWORKS as DATA SOURCE**

When docked, the PHS2000 can use Ethernet WAN from a DSL or Cable Modem. You must change Ethernet port designation from LAN to WAN in the administration pages.

### **FAILOVER**

The PHS2000 also supports failover/failback to its cellular modem from a wired network outage. Configure the Ethernet port to WAN, enable Failover, and connect a Cable/DSL Modem.

### **TURN WIFI BROADCAST ON / OFF**

WiFi broadcast can be turned ON or OFF when docked. Configure this setting in the administration page under Network Settings / WiFi - Local Network Settings. If WiFi is off, WiFi LED will be off.

### **“OPEN SECURITY” MODE for WiFi**

The router comes with WPA2/AES WiFi security. The default password is printed on the product label found on the back of the router. If you cannot connect your device with WPA2/AES security, boot the router in “Open Security” mode by pressing the power button and then pressing and holding the signal strength button during boot up for 10 seconds.

## **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.

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.

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.

IEEE 802.11b or 802.11g operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

**IMPORTANT NOTE:**

**FCC Radiation Exposure Statement:**

The product comply with the US portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or reduce output power if it doesn't affect the transmission/receiving quality.

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

Due to the essential high output power natural of WiMAX device, use of this device with other transmitter at the same time may exceed the FCC RF exposure limit and such usage must be prohibited (unless such co-transmission has been approved by FCC in the future).

### Warranty Information

CradlePoint, Inc. warrants this product against defects in materials and workmanship to the original purchaser (or the first purchaser in the case of resale by an authorized distributor) for a period of one (1) year from the date of shipment.

This warranty is limited to a repair or replacement of the product, at CradlePoint's discretion. CradlePoint does not warrant that the operation of the device will meet your requirements or be error free. Within thirty (30) days of receipt should the product fail for any reason other than damage due to customer negligence, purchaser may return the product to the point of purchase for a full refund of the purchase price. If the purchaser wishes to upgrade or convert to another CradlePoint, Inc. product within the thirty (30) day period, purchaser may return the product and apply the full purchase price toward the purchase of another CradlePoint product. Any other return will be subject to CradlePoint, Inc.'s existing return policy.

### Limitations of Liability

THE REMEDIES PROVIDED HEREIN ARE YOUR SOLE AND EXCLUSIVE REMEDIES. IN NO EVENT SHALL CRADLEPOINT INC. BE LIABLE FOR ANY LOST PROFITS, DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY.

### Safety and Hazards

Due to the nature of wireless communications, data transmission and reception is not guaranteed and may be delayed, corrupted (i.e., contain errors), or lost. The device is not intended for and should not be used in any critical applications where failure to transmit or receive data properly could result in property damage, loss or personal injury of any kind (including death). CradlePoint expressly disclaims liability for damages of any kind resulting from: (a) delays, errors, or losses of any data transmitted or received using the device; or (b) any failure of the device to transmit or receive such data.

### Privacy

CradlePoint may collect general data pertaining to the use of CradlePoint products via the Internet including, by way of example, IP address, device ID, operating system, browser type and version number, etc. To review CradlePoint's privacy policy, please visit: <http://www.cradlepoint.com/privacy>.

## Register Your Product

Register your PHS2000 to receive 60 days of complementary Chat and Email Support.

If you'd like to have more support options, CradlePoint offers two premium paid services:

### **1) One Time Issue Support**

This service will open a support case and will resolve the specific problem you need to address. Service coverage only applies to the initial support case issue.

### **2) Extended Service and Support**

If you need more than One-Time Issue Support, or you need Firmware upgrades for 3G modem support, Extended Service and Support is the perfect option.

*You will receive:*

- one year of unlimited phone support
- one year of unlimited firmware downloads
- one year of router feature updates
- full chat, email, and knowledge base access

To register and purchase support visit [www.cradlepoint.com/portal](http://www.cradlepoint.com/portal) or call **+1 208.908.4348**