### IBR650 (Industrial Broadband Router)



cradleooint

# QUICK START GUIDE

## SETTING UP THE ROUTER

- **1**) Plug the power supply into an electrical outlet.
- **2)** Connect Modem (▲)Antennas
- 3) Connect the power supply to the IBR650.Ensure power is switched on. o = OFF | = ON



### for more information about your product, visit: **www.cradlepoint.com**

### PORTS & SWITCHES





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### FINDING YOUR PASSWORD

Your unique default password is shown on the product label on the bottom of your router. It is also the last eight characters of the MAC Address.

You will be asked for this password when you log into the administration pages. The default password provides security for your router out-of-the-box.

### SPECIAL FEATURES

### IPSec VPN End-Point Support

- **GRE Tunneling**
- Data Usage Management & Alerts
- **GPIO Interface**
- **GPS** (if supported by modem carrier)
- Failover / Failback
- IP Passthrough
- VLAN Support



find this label on the bottom of your router

# ACTIVATE YOUR MODEM

A wireless broadband data plan must be added to your IBR600. A new line of service can be added or a data plan can be transferred from an existing account. Wireless broadband data plans are made available from wireless carriers, such as Sprint and Verizon, and are required to allow your modem to connect and transfer data on their network. You will need the ESN number from your product label on your router to add or transfer a line of service. After adding a data plan to the modem, the modem may need to be activated. To activate the modem, login to the IBR650 administration pages (see below) and select Internet from the top navigation bar then Modem Settings from the drop-down menu, find and select the CradlePoint modem and click Update/Activate, in the popup click Activate.

To add a broadband data plan, or to check if your modem has a broadband data plan attached, contact the business you purchased the IBR650 from or your wireless service provider. For more information see www.cradlepoint.com/IBR650.

# USING THE FIRST TIME SETUP WIZARD

The First Time Setup Wizard will help you change passwords to something you choose, and establish a time zone.

- 1) Open a browser window and type "cp/" or "192.168.0.1" in the address bar. PRESS ENTER/RETURN.
- 2) When prompted for your password, type the **eight character Default Password** found on product label (the last eight characters of the MAC Address).
- 3) When you log-in for the first time, you will be automatically directed to the FIRST TIME SETUP WIZARD.

### IP PASSTHROUGH

To configure the IBR650 to run in IP Passthrough mode, please follow the steps below (after logging into router):

- 1) Select **INTERNET** in the top navigation menu.
- 2) Select CONNECTION MANAGER in the drop down menu.
- 3) Find the IP Passthrough section.

4) Select **ENABLED**, then click **APPLY**.

### FIRMWARE UPDATES

CradlePoint regularly makes new feature support and performance enhancements available for our products in a software package called "firmware". Updating firmware ensures your IBR650 is ready for today and tomorrow's technology.

#### To Update Your Firmware, Follow The Steps Below:

- 1) Connect your computer to the IBR650 via a Ethernet cable in the LAN Port.
- 2) Open a browser window and type "192.168.0.1" in the address bar. PRESS ENTER/RETURN.
- 3) Enter your password to login. Your unique password is the administrator password you set earlier or the default password found on the bottom label.
- 4) Select SYSTEM SETTINGS on the top navigation bar, then SYSTEM SOFTWARE in the drop down menu.
- 5) Find the **FIRMWARE UPGRADE** section. This will display the current firmware version that is installed and indicate if updated firmware is available.
- 6) Click AUTOMATIC (Internet) if new firmware is available. The router will download and install the firmware and automatically reboot itself. A status monitor will appear and indicate when this process is complete. This process may take several minutes depending on your internet connection speed.
- 7) If your router does not have an active internet connection (ie: modem not activated, no Ethernet WAN) you will need to download the latest firmware from www.cradlepoint.com/IBR650 to your desktop, then use the MANUAL FIRMWARE UPLOAD option.

This important Product Information and Safety Guide contains safety, handling, disposal, regulatory, trademark, copyright, and software licensing information. Read all safety information below and operating instructions before using the IBR650 3G device to avoid injury.

SAFETY AND HAZARDS Under no circumstances should the IBR650 3G device be used in any areas (a) where blasting is in progress. (b) where explosive atmospheres may be present, or (c) that are near (i) medical or life support equipment, or (ii) any equipment which may be susceptible to any form of radio interference. In such areas, the IBR650 3G device MUST BE POWERED OFF AT ALL TIMES (since the device otherwise could transmit signals that might interfere with such equipment). In addition, under no circumstances should the IBR650 3G device be used in any aircraft, regardless of whether the aircraft is on the ground or in flight. In any aircraft, the IBR650 3G device MUST BE POWERED OFF AT ALL TIMES (since the device otherwise could transmit signals that might interfere with various onboard systems on such aircraft). Furthermore, under no circumstances should the IBR650 3G device be used by the driver or operator of any vehicle. Such use of the device will detract from the driver's or operator's control of that vehicle. In some jurisdictions, use of the IBR650 3G device while driving or operating a vehicle constitutes a civil and/or criminal offense.

Due to the nature of wireless communications, transmission and reception of data by the IBR650 3G device can never be guaranteed. and it is possible that data communicated or transmitted wirelessly may be delayed, corrupted (i.e., contain errors), or totally lost. The IBR650 3G device is not intended for, and CradlePoint recommends the device not be used in any critical applications where failure to transmit or receive data could result in property damage or loss or personal injury of any kind (including death) to the user or to any other party. 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.

**Warning:** This product is only to be installed by gualified personnel!

To comply with FCC/IC regulations limiting both maximum RF output power and human exposure to RF radiation, the maximum antenna gain must not exceed 5 dBi in the Cellular band and 4 dBi in the PCS band.

ANTENNA CONSIDERATIONS Although the antenna model(s) used with these devices meet(s) the Industry Canada Radio Frequency requirements, it is possible that the future customers may swap them for different ones without network providers knowledge and approval. Such customers must be made aware of, and follow, the Radio Frequency requirements applied in thie Technical Approval:

- RSS-102 "Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)"
- RSS-129 "800 Mhz Dual-Mode CDMA Cellular Telephones"
- RSS-132e "Cellular Telephones Employing New Technologies Operating in the Bands 824-849 Mhz and 869-894 Mhz"
- BSS-133 r1 "2 GHz Personal Communications Services"

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

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

**OPEN SOURCE SOFTWARE** This product contains software distributed under one or more of the following open source licenses: GNU General Public License Version 2, NetBSD Foundation License, and PSF License Agreement for Python 3.1.1. For more information on this software, including licensing terms and your rights to access source code, contact CradlePoint at www.cradlepoint.com/opensource.

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.

#### **IMPORTANT NOTE**

FCC 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.

**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.

**LIMITATION OF CRADLEPOINT LIABILITY** The information contained in this Quick Start Guide is subject to change without notice and does not represent any commitment on the part of CradlePoint or its affiliates. CRADI EPOINT AND ITS AFFILIATES HEREBY SPECIFICALLY DISCLAIM LIABILITY FOR ANY AND ALL: (A) DIRECT, INDIRECT, SPECIAL, GENERAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES. INCLUDING WITHOUT LIMITATION FOR LOSS OF PROFITS OR REVENUE OR OF ANTICIPATED PROFITS OR REVENUE ARISING OUT OF THE USE OR INABILITY TO USE THE IBR650 3G DEVICE. EVEN IF CRADLEPOINT AND/OR ITS AFFILIATES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND EVEN IF SUCH DAMAGES ARE FORESEEABLE: OR (B) CLAIMS BY ANY THIRD. PARTY. Notwithstanding the foregoing, in no event shall the aggregate liability of CradlePoint and/or its affiliates arising under or in connection with the IBR650 3G device, regardless of the number of events, occurrences, or claims giving rise to liability, exceed the price paid by the original purchaser of the IBR650 3G device.

**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.

**OTHER BINDING DOCUMENTS; TRADEMARKS; COPYRIGHT** By activating or using your IBR650 3G device, you agree to be bound by CradlePoint's Terms of Use, User License and other Legal Policies, all as posted at www.cradlepoint.com/legal. Please read these documents carefully. CradlePoint, the CradlePoint logo, and IBR650 are trademarks of CradlePoint, Inc.

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Part Number: 170582-000