



# ***Digi Wi-Point 3G***

*Wireless Cellular Data Gateway*

## ***User's Guide***



## **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.

### **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.

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

Digi International, Inc. declares that Digi Wi-Point 3G (FCC ID:SUMMB8600D) is limited in CH1~CH11 for 2.4GHz by specified firmware controlled in U.S.A.



# Table of Contents

<b>1</b>	<b>ABOUT THIS GUIDE.....</b>	<b>4</b>
<b>1</b>	<b>INTRODUCTION.....</b>	<b>5</b>
<b>2</b>	<b>INSTALLING THE DIGI WI-POINT 3G.....</b>	<b>6</b>
2.1	VERIFY KIT CONTENTS.....	7
2.2	WRITE PRODUCT IDENTIFICATION .....	8
2.3	POWER UP THE DIGI WI-POINT 3G.....	8
2.4	LED INDICATORS .....	10
2.5	INITIALIZE THE DIGI WI-POINT 3G UNIT .....	11
<b>3</b>	<b>USER INTERFACE OVERVIEW .....</b>	<b>13</b>
3.1	MENU COMPONENTS .....	15
3.1.1	<i>Configuration.....</i>	<i>15</i>
3.1.2	<i>Management.....</i>	<i>27</i>
3.1.3	<i>Administration.....</i>	<i>29</i>
<b>4</b>	<b>TROUBLESHOOTING .....</b>	<b>33</b>
4.1	OVERVIEW .....	33
4.2	INTRODUCTION.....	33
4.3	RESET TO FACTORY DEFAULT PROCEDURE .....	33
4.4	FORCED RELOAD PROCEDURE.....	34
4.5	FREQUENTLY ASKED QUESTIONS.....	35
<b>5</b>	<b>DEFAULT DIGI WI-POINT 3G SETTINGS .....</b>	<b>39</b>



# 1 About This Guide

This section describes the objectives, audience and conventions of the Digi Wi-Point 3G User's Guide.

## Objectives

This document explains the steps for initial setup and basic configuration of the Digi Wi-Point 3G. This document also provides troubleshooting information and detailed specifications.

## Audience

This document is for the person installing and configuring the Digi Wi-Point 3G for the first time. The installer should be familiar with network structures, terms and concepts.

## Conventions

This document uses the following conventions to convey instructions and information:



Note

Means reader take note. Notes contain helpful suggestions or references to materials not contained in this manual.



Warning

**The warning symbol means danger.** You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.

## Obtaining Documentation

You can access the latest Digi International, Inc. documentation on the World Wide Web at the following URL: <http://www.digi.com/products/literature/>

## Special comment

This device is a general wireless router, and can act as a Wi-Fi router only after inserting a Wi-Fi pc card.



# 1 Introduction

The Digi Wi-Point 3G is the industry's first and the most integrated Wi-Fi and 3rd generation cellular (3G) solution for home, small office and home office. The products are simple to use and easily scalable. Digi Wi-Point 3G is a 3G router for consumer market, based on our MobileBridge™ platform technology.

The Digi Wi-Point 3G combines the best of Wi-Fi and 3G mobile communications technologies including CDMA 1x, EV-DO, EDGE, UMTS and supports EV-DO Release A and HSDPA.

The Digi Wi-Point 3G bridges wireless networks of 802.11b/g standards and wired networks, allowing them to communicate with each other. The Digi Wi-Point 3G allows authorized users to share the Internet access.

Use the instructions in this guide to help you connect, set up, and configure the Digi Wi-Point 3G.



## 2 Installing the Digi Wi-Point 3G

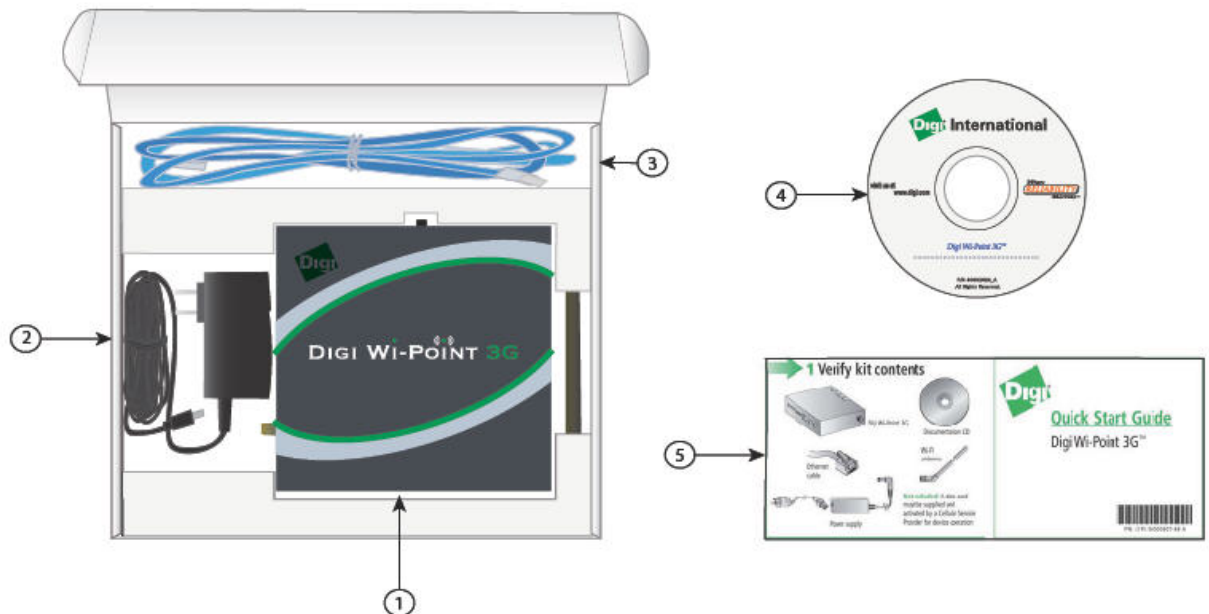
Installing the Digi Wi-Point 3G is easy. Follow the quick steps below to power up your wireless network:

1. Verify kit content
2. Write down product ID
3. Power up the Digi Wi-Point 3G
4. Verify that LED Indicators are on
5. Initialize the Digi Wi-Point 3G unit



## 2.1 Verify Kit Contents

Digi Wi-Point 3G kit includes the following components, similar to those depicted below:



1. Digi Wi-Point 3G router (Top View)
2. Power Adaptor
3. Ethernet cable
4. CD
5. Quick Start Guide



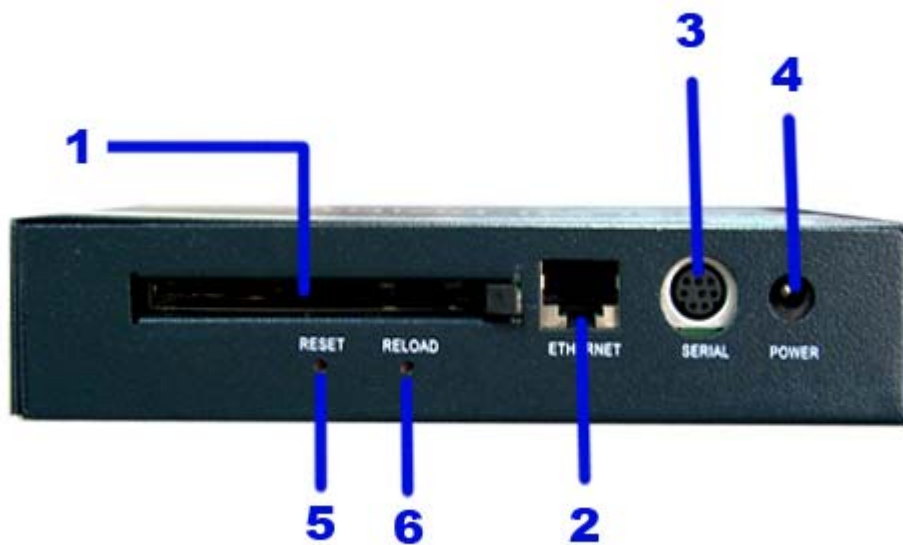
## 2.2 Write Product Identification

Before you proceed with your Digi Wi-Point 3G installation, please write down and keep the following Digi Wi-Point 3G information on the Digi Wi-Point 3G label:

- Serial Number
- MAC address

## 2.3 Power up the Digi Wi-Point 3G

Connect the Digi Wi-Point 3G power supply and press the power switch down.







1. PC Card Slot
2. Ethernet interface (RJ45)
3. Console Port (RS232)
4. Power jack
5. Reset Button
6. Reload Button

The Digi Wi-Point 3G power supply accepts any input AC voltage in the range of 100-240 VAC.



## 2.4 LED Indicators

Digi Wi-Point 3G has four two-color LEDs to indicate the working status. The following table shows the status when the Digi Wi-Point 3G is configured successfully and running properly.

**LED Indicator Color Index**

	<b>Ethernet</b>	<b>Cellular</b>	<b>Wi-Fi</b>	<b>Power</b>
Off	No cable	Card inserted;  No Internet connection	Disabled	Power off
Green	100Mbps mode	Card inserted;  Internet connection	Enabled	Power on and normal
Green Blink	100Mbps mode, and data transmission	Card inserted;  Internet connecting	Enabled and data transmission	N/A
Red	10Mbps mode	No card	N/A	N/A
Red Blink	10Mbps mode, and data transmission	Probing Card;	N/A	N/A
Amber	N/A	N/A	N/A	System boot and error
Amber Blink	N/A	N/A	Enabled and data transmission error	Upgrading firmware



## 2.5 Initialize the Digi Wi-Point 3G Unit

1. Connect Digi Wi-Point 3G to your computer using one of the two specified methods:

- I. Connect your computer to Digi Wi-Point 3G using the included Ethernet cable or a hub and your computer set to "Automatic IP" configuration.
- II. Alternatively, you can connect your computer to Digi Wi-Point 3G with wireless Ethernet.
  - a) Enable the Wi-Fi interface in your laptop or PC. Make sure it works.
  - b) Configure the Wireless Ethernet card to match the network name and encryption key of Wireless Ethernet card installed in the Digi Wi-Point 3G. The default network name is the SN of this device, and "Automatic IP" configuration is also needed.

2. Open your web browser to <http://192.168.1.1>. The Digi Wi-Point 3G login screen will appear. Enter the username/password (default is root/dbps), and click OK. The home web page should appear





## Wi-Point 3G Configuration and Management

[Home](#)  
[Quickly Setup](#)  
**Configuration**  
[Network](#)  
[Mobile](#)  
[Serial Ports](#)  
[System](#)  
[Remote Management](#)  
[Security](#)  
[GPS](#)  
[Time](#)  
**Management**  
[Connections](#)  
[Event Logging](#)  
**Administration**  
[Backup/Restore](#)  
[Update Firmware](#)  
[Factory Default Settings](#)  
[System Information](#)  
[AT Command](#)  
[PIN Utility](#)  
[Reboot](#)  
[Logout](#)

### Home

Getting Started

**Quickly Setup** Not sure what to do next? This Quickly Setup can help.

System Summary

Model:	Wi-Point 3G
Ethernet MAC Address:	00:0B:89:03:39:F2
WiFi MAC Address:	00:0B:89:03:39:F3
Ethernet and WiFi IP Address:	172.16.0.1
Mobile IP Address:	Not Connected
Description:	None
Contact:	None
Location:	None
SN:	MA175G100207

Copyright © 1996-2007 Digi International Inc. All rights reserved.  
[www.digi.com](http://www.digi.com)

If you want to do a quick installation, you can continue to read the content in this chapter.

3. Click Wizard on the home page and click Enter.
4. The default IP and Subnet Mask will appear. Change Card Status to Enable. (If you are using a GPRS/UMTS/EDGE network, you will need to input "CID", "APN"), then click Next.
6. Check the settings and click Submit, The Digi Wi-Point 3G will need to be rebooted for changes to take effect.



## 3 User Interface Overview

The Digi Wi-Point 3G embeds a web server for web-based management. This section will show you how to visit Digi Wi-Point 3G's web site.

1. Open your browser and enter the Digi Wi-Point 3G's IP address in the address field. (192.168.1.1.)
2. Press Enter. The Digi Wi-Point 3G login dialog box appears.



**Note:**

Default user name: root

Default password: dbps

3. After you input the right username and password, the home page of the Digi Wi-Point 3G web site will appear:



## Wi-Point 3G Configuration and Management

[Home](#)  
[Quickly Setup](#)  
**Configuration**  
[Network](#)  
[Mobile](#)  
[Serial Ports](#)  
[System](#)  
[Remote Management](#)  
[Security](#)  
[GPS](#)  
[Time](#)  
**Management**  
[Connections](#)  
[Event Logging](#)  
**Administration**  
[Backup/Restore](#)  
[Update Firmware](#)  
[Factory Default Settings](#)  
[System Information](#)  
[AT Command](#)  
[PIN Utility](#)  
[Reboot](#)  
[Logout](#)

Home

Getting Started

Quickly Setup Not sure what to do next? This Quickly Setup can help.

System Summary

Model:	Wi-Point 3G
Ethernet MAC Address:	00:0B:89:03:39:F2
WiFi MAC Address:	00:0B:89:03:39:F3
Ethernet and WiFi IP Address:	172.16.0.1
Mobile IP Address:	Not Connected
Description:	None
Contact:	None
Location:	None
SN:	MA17SG100207

Copyright © 1996-2007 Digi International Inc. All rights reserved.  
[www.digi.com](http://www.digi.com)

There are three main categories on Digi Wi-Point 3G's web site:

- Configuration
- Management
- Administration

The following sections will explain each of them in detail.



## 3.1 Menu Components

### 3.1.1 Configuration

This section will explain in detail the components under the Configuration section of the home page.

#### 3.1.1.1 Network

This is where you configure the network settings for the Digi Wi-Point 3G including IP address, LAN settings, Wi-Fi security, DHCP Server settings, Network Services, Dynamic DNS update and VPN.

##### Ethernet and Wi-Fi IP Settings

- **IP Address:** The IP Address of the Ethernet & WLAN. The default IP address is 192.161.1.1.
- **Subnet Mask:** The subnet mask of the Ethernet & WLAN. The default subnet mask is 255.255.255.0.

Once you have configured these parameters, click Apply.

##### Wi-Fi LAN Settings

- **Network name (SSID):** The name used to identify the particular network to which a user wants to attach. The SSID must be identical for all the access points in the wireless network.
- **Enable Broadcast SSID:** When wireless clients survey the local area for wireless networks, they will detect the SSID broadcast by the Router. To broadcast Digi Wi-Point 3G's SSID, keep the default setting checked. If you do not want to broadcast Digi Wi-Point 3G's SSID, leave box unchecked.



- **Wireless Channel:** Select the appropriate channel from the list provided to correspond with your network settings. All client devices in your wireless network must be broadcast on the same channel in order to function correctly.
- **Network Mode:** From this drop-down menu, you can select the wireless standards running on your network. If you have both Wireless-g and Wireless-b devices in your network, you can keep the default setting as Mixed. (See XXX for more information on this setting.)
- **Enable stations isolation:** If you don't want different client stations connected to the device to communicate with each other, Enable this option.

**Max associations:** The max client station number allowed to be connected to the Digi Wi-Point 3G. Once you have configured these parameters, click Apply.

**Wi-Fi Security Settings:** This configuration page is used to set wireless Ethernet security parameters. The Digi Wi-Point 3G supports two different types of security settings for your wireless Ethernet network: Wi-Fi Protected Access (WPA) Pre-Shared Key (PSK) and Wire Equivalence Protection (WEP).

#### **Network Authentication**

- **WPA Pre-Shared Key** - There are two encryption options for WPA Pre-Shared Key, TKIP and AES. TKIP stands for Temporal Key Integrity Protocol. TKIP utilizes a stronger encryption method and incorporates Message Integrity Code (MIC) to provide protection against hackers. AES stands for Advanced Encryption System, which utilizes a symmetric 128-bit block data encryption. To use WPA Pre-Shared Key, enter a password in the PSK (Only for WPA-PSK) field between 8 and 63 characters in length.
- **Shared:** Select from the dropdown menu of **Network Authentication**, which will enable the WEP sections.





**WEP:** There are two levels of WEP encryption security, 64-bit and 128-bit. The bigger encryption bit number, the more secure your wireless network. However, the transmission speed is sacrificed for the higher bit level's WEP security.

**Transmit Key:** Select WEP key (1-4) to decide which key will be used during the data transmission.

Enter the WEP Key into the appropriate Key field. All access points in your wireless network must use the same WEP key to utilize WEP encryption.

You can also configure the Digi Wi-Point 3G security modes to be compatible for other station security settings. Such as:

**Mode 1:** no security, no authentication

- **Network Authentication:** OPEN
- **Data Encryption:** Disabled

**Mode 2:** enable security, no authentication

- **Network Authentication:** OPEN
- **Data Encryption:** WEP

**Mode 3:** no security, enable authentication

- **Network Authentication:** Shared
- **Data Encryption:** Disabled

**WPA-PSK:**

A Network SSID is required before a password can be entered for WPA-PSK authentication.



**Note:** Enter the Network name (SSID) on the Wi-Fi LAN Settings tab.



**Access Control Mode:** Allowing or denying some special stations connection in the Wi-Fi network is also an option to guarantee the security of the wireless network. The following components can be configured to set the station connection control and assure wireless network security. The Digi Wi-Point 3G supports 3 types of access control modes:

- **Disabled:** Indicates no access control function, allow all of the stations connect to the Digi Wi-Point 3G.
- **Allow:** Indicates only allow the stations which have the MAC addresses listed in the table to access the Digi Wi-Point 3G.
- **Deny:** Indicate only deny the stations which have the MAC addresses listed in the table to access the Digi Wi-Point 3G.

**Access Control List:** The MAC addresses of stations which have been allowed or denied to connect to the Digi Wi-Point 3G are saved in this list box.

There are 2 methods to input the MAC address: one is to select the station item in the Station Connected list, then click Add; the other is to input the station MAC address through MAC address edit box on the page (below the ACL), the input MAC address format must be XX:XX:XX:XX:XX:XX.

**Stations connected:** In order to add the ACL conveniently, the MAC addresses of stations which have been already connected to the Digi Wi-Point 3G appear in this domain. Click Refresh, this list will be updated. Once you have configured these parameters, click Apply.



#### WiFi MAC Access Control List

Access control mode: ☒ Disabled ☐ Allow ☐ Deny

- Disabled: Disable wireless Access control.
- Allow: Only allow stations within the ACL.
- Deny: Only deny stations within the ACL

Access control list:

Stations connected	Actions	Access control list
00:C0:02:A4:DE:D1	Add>>	00:C0:02:A4:DE:D1
Refresh		Remove
		<input type="text"/> New
		e.g. 12:23:45:78:9a:bc

Apply

### DHCP Configuration

This setting is used to configure the Digi Wi-Point 3G's Dynamic Host Configuration Protocol (DHCP) server function. The Digi Wi-Point 3G can be used as a DHCP server for the internal Ethernet network. The DHCP server automatically assigns an IP address to each computer in the Ethernet network. If you choose to enable the Digi Wi-Point 3G's DHCP server option, you must configure all of PCs in the Ethernet network to connect to this DHCP server (Digi Wi-Point 3G), and make sure there is no other DHCP server on your network.

DHCP is enabled by factory default. If there is already a DHCP server in the Ethernet network or a DHCP server is not necessary for the Ethernet network, the Enable DHCP Server on LAN Interface can be un-checked. (Other DHCP features will be disabled).

- **Range:** Enter the values for start IP address and end IP address. The default start IP address is 192.161.1.1 and the default end IP address is 192.168.1.131.



- **Lease Duration:** The amount of time in second a network user will be allowed to connect to Digi Wi-Point 3G with their current dynamic IP address got from the DHCP server. When the time is up, the user will be automatically assigned a new dynamic IP address. The default lease duration is one day.



**Note:**

When the DHCP server's IP address range is set, it must be assured that there is no other device in the network to use the IP address located in this address range, such as printer server, file server, etc. Otherwise there is a risk for address conflict.

**Static Lease Reservations:**

You can specify the static IP address for the known DHCP clients. The router will assign the IP address you configured on the list to these clients.

1. Click Add to add a new entry for the static IP assignment.

**Network Configuration**

- ▶ Ethernet and WiFi IP Settings
- ▶ WiFi LAN Settings
- ▶ WiFi Security Settings
- ▼ **DHCP Server Settings**

**Note:** For the DHCP server to operate, the ConnectPort X8 must be configured to use a static IP address. (See the [IP Settings](#) page in the Network Configuration area.) Please review additional notes below.

☒ Enable Dynamic Host Configuration Protocol (DHCP) Server

\* IP Addresses:  to

Lease Duration:  days  hrs  mins

**Static Lease Reservations \*\***

Enable	IP Address	MAC Address
No reservations currently configured		
<input checked="" type="checkbox"/>	<input type="text" value="0.0.0.0"/>	<input type="text" value="00:00:00:00:00:00"/>

AddRemove All

For DHCP server status and lease management, use the [DHCP Server Management](#) page in the Network Services Management area.

\* The IP address pool must specify addresses that are in the subnetwork of the ConnectPort X8. The DHCP server will not operate if this configuration does not meet this requirement.

\*\* A reservation IP address must not be the same as the IP address of the DHCP server itself. It must be a valid IP address in the subnetwork of the DHCP server. The DHCP server will ignore a reservation that does not meet these requirements.

Apply

In order to avoid conflicting IP addresses, you should NOT assign Static IP addresses within the DHCP Pool.

2. Click Remove to delete an existing entry.



3. Save the configuration and reboot for changes to take effect.

#### **DNS:**

The Digi Wi-Point 3G supports dynamic DNS (DDNS). The default status for DDNS is disabled. The Digi Wi-Point 3G only supports DNS provided by [www.dyndns.org](http://www.dyndns.org). To use this feature, you should obtain your own domain name from the provider. Every time the Wi-Fi's IP changes, the router will register the new public IP address obtained from the PPP negotiation to the provider.

#### **VPN**

Virtual Private Networks (VPNs) are used to securely connect two private networks so that devices may connect from one network to the other network using secure channels. VPN uses IP Security (IPSec) technology to protect the transferring of data over the Internet Protocol (IP).

The Digi device is responsible for handling the routing between networks. Devices within the private network served by the Digi device can connect directly to devices on the other private network to which the VPN tunnel is established to. The VPN tunnels are configured using various security settings and methods to ensure the networks are secured.

### **Advanced Network Settings**

The Advanced Network Settings are used to fine tune the network connection and network interfaces. The default settings will typically work in most situations

- **Host name:** The Host name to be placed in the DHCP Option 12 field. This is an optional setting which is only used when DHCP is enabled.

#### **3.1.1.2 Mobile**

This is where you configure Service Settings, PPP and Mobile Connection Settings, including SureLink™ settings.

**SureLink™:** Provides an "always-on" mobile network connection to ensure rapid on-demand communication. The configuration settings allow you to customize how SureLink detects when a connection has been lost, in order to re-establish the link.



### 3.1.1.3 Serial Ports

This is where you configure the serial ports for the device. This feature has limited functionality in this device and is used mostly for console management.

- **Serial Baud Rate:** When you need a backup link (for example, the v.90 modem) for Digi Wi-Point 3G, you might need to configure the serial speed for the modem. There are 6 options for the serial speed (bps): 115200, 57600, 38400, 19200, 9600, and 4800. You may need to reference to the user guide of the modem to configure the right speed.

### 3.1.1.4 System

This is where you configure the Device Identity, SNMP and Log settings.

**System Configuration**

- ▶ Device Identity Settings
- ▶ Simple Network Management Protocol (SNMP) Settings
- ▼ Log Settings
  - ☐ **Show log entries in reverse order (newest entries on top)**  
Number of log entries to show:  ( 5-50 )
  - ☐ **Enable syslog'ing to remote syslog server**  
Remote syslog server:   
IP address of remote syslog server

Apply

**Note:** Syslog sends UDP datagrams to port 514 on the specified remote syslog server. Be sure to set syslogd on the remote server to accept syslog messages from MobileBridge.

**Device Identity Settings:**

**Simple Network Management Protocol (SNMP) Settings**



- **Enable SNMP:** This allows the administrator to manage the Digi Wi-Point 3G through the SNMP protocol. In order to do so, you must specify the Public community name and Private community name, which enables the SNMP Manager to access the Digi Wi-Point 3G. The Digi Wi-Point 3G supports SNMP traps. To enable this function, you must specify the IP address of Trap destination and Trap interval, which indicates the frequency that the device sends trap information.

**Log Settings:** You can configure the Log method here. The Digi Wi-Point 3G can display the Syslog entries in the Web GUI; it can also send the Syslog entries to a remote syslog server. To send the Syslog to the syslog server, you need to check the *"Enable syslogging to remote syslog server"* checkbox and assign the IP address of remote syslog server in the bottom box.

### 3.1.1.5 Remote Management

This is where you configure the device for Web UI or Client-Initiated remote management

- **Web GUI Management Connection**
- **Client-Initiated Management Connection**

### 3.1.1.6 Security

This is where you configure security settings for the Digi Wi-Point 3G including username, password Anti-Attack and filter settings.

- **Username:** Username for the Digi Wi-Point 3G's web administration. The default username is: root.
- **Password:** Password for the Digi Wi-Point 3G's web administration. The default password is: dbps.

**MAC Filter Settings** (See configuration settings for the Access Control List in section 3.1.1.1)



**IP Forwarding:** This feature allows you to forward incoming traffic on certain ports in order to access services behind the NAT. This feature can let you setup a web server, mail server, etc. that can be accessed from the Internet.

The IP Forwarding table in the Digi Wi-Point 3G consists of many port forwarding items.

- **Enable Checkbox:** You can enable or disable an IP forwarding item by checking or unchecking this checkbox.
- **Apply:** Click Apply to validate the change immediately. No reboot is needed here.
- **Add:** Click Add. An IP forwarding item will appear in the list above.





Each item consists of the following parameters:

- **Protocol:** This parameter indicates which protocol will implement this port forwarding rule. Possible protocols are: TCP, UDP, TCP/UDP.
- **External Port:** This parameter indicates the port for public access.
- **Forward to Internal IP Address:** This parameter indicates the IP address of the internal host which wants to provide service for the outside.
- **Forward to Internal Port:** This parameter indicates the port of internal service.

**DMZ:** When DMZ is enabled, you should assign a client's IP address to the Digi Wi-Point 3G. Then, the Digi Wi-Point 3G will forwards the all incoming traffic from WI-FI to this client host. It will be useful when you would access a client host of Ethernet from Internet.

- **LAN Host:** Client's IP address.

**Anti-Attack:** Anti-Attack function can block an attack via the Stateful Packet Inspect (SPI).

The Digi Wi-Point 3G can block the following attacks:

Denial of Service (DoS): Ping of Death, Land, Smurf, SYN Flood, Fraggle and IP Spoofing.

- **Enable Anti-Attack:** Check this checkbox to enable the Anti-Attack function. Select the attack you want to block after you enabled the Anti-Attack function.
- **Content Filter:** Content Filter is an advanced security feature designed to filter the HTTP sessions according to the contents.

Content Filter includes URL filter list and WEB features restriction. The default configuration of content filter is off. You can enable it by checking Apply filter and Restrict Web Features on: LAN, then click Apply.

- **Enable Allowed/Forbidden Domains:** Indicates whether or not the URL Filter is enabled.
- **Disable All web traffic except Allowed Domains:** Indicates URL Filter mode. URL Filter has two modes: Allow means to permit traffic to the specified domains



only; Forbidden means to prohibit traffic to the non-trusted sites only. Checking the box means the Content Filter is enabled.

## **Restrict WEB Features**

### **3.1.1.7 GPS**

This is where you configure the GPS settings for the device

### **3.1.1.8 Time**

This is where you set the time zone for the device and enable daylight savings time settings.

- **NTP Server:** You can enable Automatically synchronize with Internet time server by checking the box. The default value of the NTP server's IP address is 207.46.130.100. This value is configurable.
- **Time zone:** Current country time zone. Check Enable Daylight Saving Time if it is DST (Daylight Savings Time) in your country.



## 3.1.2 Management

### 3.1.2.1 Connections

Connections Management					
Virtual Private Network (VPN) Connections					
Action	Description	Remote Address	Status		
No reservations currently configured					
<div>Connect</div> <div>Disconnect</div>					
Mobile Connection					
Action	Description	Local Address	Mask	Gateway	Status
<input checked="" type="radio"/>	PCMCIA	10.1.186.206	255.255.255.255	10.64.64.64	up
<input type="radio"/>	Serial Port	0.0.0.0	0.0.0.0	0.0.0.0	uninitd
<div>Connect</div> <div>Disconnect</div>					

This section of the UI contains information about VPN and Mobile Connections as seen above.



### 3.1.2.2 Event Logging

**Event Logging**

```
1 0 day 00:00:14 (none) local2.info modem[26]: Modem(/dev/tts/2) command
"AT$QCMIPNAI?",return "$QCMIPNAI: Unset^MOK^M"
1 0 day 00:00:14 (none) local2.info modem[26]: Modem(/dev/tts/2) command
"AT$QCMIPMASS?",return "$QCMIPMASS: Unset^MOK^M"
1 0 day 00:00:15 (none) local2.info modem[26]: Modem(/dev/tts/2) command
"AT$QCMIPMHSS?",return "$QCMIPMHSS: Unset^MOK^M"
1 0 day 00:00:15 (none) local2.info modem[26]: Modem(/dev/tts/2) command
"AT$QCMIPRT?",return "$QCMIPRT: 0,1^MOK^M"
1 0 day 00:00:15 (none) local2.info modem[26]: Modem(/dev/tts/2) command
"AT$QCMIPMASPI?",return "$QCMIPMASPI: 2,1^MOK^M"
1 0 day 00:00:15 (none) local2.info modem[26]: Modem(/dev/tts/2) command
"AT$QCMIPMHSP?",return "$QCMIPMHSP: 3,1^MOK^M"
1 0 day 00:00:15 (none) local2.info modem[26]: Modem(/dev/tts/2) command
"AT$QCMIPPHA?",return "0.0.0.0,1^MOK^M"
1 0 day 00:00:15 (none) local2.info modem[26]: Modem(/dev/tts/2) command
"AT$QCMIPSHA?",return "255.255.255.255,1^MOK^M"
1 0 day 00:00:15 (none) local2.info modem[26]: Modem(/dev/tts/2) command
"AT$QCMIPHA?",return "0.0.0.0,1^MOK^M"
1 0 day 00:00:17 (none) daemon.info dnsmasq[40]: started, version 1.10
cachesize 150
0 0 day 00:00:17 (none) daemon.warn dnsmasq[40]: failed to drop root privs
```

Refresh

The Event Logging display shows a list of the most recent activities that have taken place on the Digi Wi-Point 3G. To change the settings of the Event Logging display: under Configuration, click System>Log Settings. (See below)

**System Configuration**

▶ Device Identity Settings

▶ Simple Network Management Protocol (SNMP) Settings

▼ Log Settings

☐ **Show log entries in reverse order (newest entries on top)**  
Number of log entries to show:  ( 5-50 )

☐ **Enable syslog'ing to remote syslog server**  
Remote syslog server:   
IP address of remote syslog server

Apply

**Note:** Syslog sends UDP datagrams to port 514 on the specified remote syslog server. Be sure to set syslogd on the remote server to accept syslog messages from MobileBridge.



You can configure the Log method here. The Digi Wi-Point 3G can display the syslog entries in the Web UI and can send the Syslog entries to a remote syslog server. To send the syslog to the syslog server, you need to check the Enable syslogging to remote syslog server checkbox and assign the IP address of remote syslog server in the bottom box.

### 3.1.3 Administration

#### 3.1.3.1 Backup/Restore

**Download Configurations:** User can save current device configurations to a PC for later use.

**Upload Configurations:** User can upload saved device configurations to restore the device to its previous configuration status.



**Note:** After uploading the configuration file, the device must be rebooted to enable changes.

#### 3.1.3.2 Update Firmware

The Digi Wi-Point 3G's firmware is upgraded through this tab. Follow these instructions:

1. Download the firmware from Digi's website <http://www.digi.com/support/> to your host PC.
2. Browse to the firmware image. Click Upload firmware. A pop-up window comparing the current version of firmware and the new version of the firmware to be upgraded will appear. Click OK to confirm the upgrade.



**Note:** During the upgrade process, the Power LED will blink an amber color. The device will reboot after the firmware upgrade is complete.

### 3.1.3.3 Factory Default Settings

**Factory Default Settings**

**Caution:** Restoring the factory default settings will clear **all** current settings and automatically reboot the Digi Wi-Point 3G

Restore

Click Restore to reset all configurations to their factory default values.

### 3.1.3.4 System Information

**Signal strength:** Indicate current Wi-Fi signal strength. Signal strength ranges from 0-31 with 0 being the lowest signal strength and 31 being the highest signal strength. If this value is 0, you do not have a signal, please check the Wi-Fi card carefully to make sure it is inserted correctly. You may need to call your mobile operator to make sure your area is covered within their network;

### 3.1.3.5 AT Command

**AT Command**

Port:

Command:

Output:

Execute

**AT Command:** This function is provided to the advanced users to diagnostic the Wi-Fi card or the V.90 modem connected by the serial cable. Select a target device from the drop-down menu in the Port field. Input the AT commands in the Command field. Click Execute to send the AT commands to the target and then the result will be seen in the Output filed.



**Note:** The AT commands CANNOT be sent to the target device before you

disconnect the device from the Internet.

### 3.1.3.6 PIN Utility

This configuration page is set to Enable/Disable the function of PIN protection. The PIN Code can prevent the unauthorized user from connecting to the internet.

There are three main tabs in this setting:

- Enable/Disable
- Change PIN
- Renew PIN



**Note:**

Before you setup PIN, please make sure the Wi-Fi is disabled, or you may cause input errors. Be aware that every time you change the configuration of PIN, you must reboot the devices to make it become effective.

- **Enable PIN:** Put the PIN Code in and click Enable to complete this function. The PIN Code must be at least 4 characters long.
- **Change PIN:** Put in the former PIN Code and new one twice, then click the Change button. Putting in the wrong PIN Code three times (consecutively) will lock the SIM.
- **Renew PIN:** Enter Personal Unblocking Key (PUK) code and your new PIN. Click Renew to enable.



**Note:**

Only after you pass the PIN authentication can you login the Internet access page or the PIN management pages.



### **3.1.3.7 Reboot**

After you have configured your device, save and reboot the Digi Wi-Point 3G. The new configurations will then take effect. During the reboot process, the power LED will blink an amber color.





## 4 Troubleshooting

### 4.1 Overview

- Introduction
- Reset to Factory Default procedure
- Force Reload Procedure
- Frequently Asked Questions
- LED Indication status

### 4.2 Introduction

This section helps you to locate problems related to the Digi Wi-Point 3G's setup. The most common installation problems are related to the IP address. For example, without the TFTP server IP address, you will not be able to download firmware to the Digi Wi-Point 3G.

IP address management is critical and we suggest you to create a chart to document and validate the IP addresses of your system.

If the password is lost or forgotten, you will need to reset the Digi Wi-Point 3G to default values. The Reset to Factory Default procedure resets the Digi Wi-Point 3G configuration settings, but does not change the current firmware. The Forced Reload procedure will erase the current firmware and configurations, please use it with caution when you need to download new software.

### 4.3 Reset to Factory Default Procedure

Use this procedure to reset the network configuration values, including the Digi Wi-Point 3G IP Address, Subnet Mask, and so on. The current Digi Wi-Point 3G



Software will not be erased. This procedure may be required if the password or the configurations are forgotten.

When the Digi Wi-Point 3G is working in normal status, press and hold the RELOAD button until all the indicator lights change to amber. Release RELOAD button, and press RESET button to reboot the Digi Wi-Point 3G. This will restore factory default network values.



**Warning:**

If you press and hold the RELOAD button for more than 10 seconds immediately after the Digi Wi-Point 3G is powered on or reset, the Digi Wi-Point 3G will enter Force Reload Procedure. This will erase the firmware image. You must have a TFTP server to upload a new firmware binary.

## 4.4 Forced Reload Procedure

Use this procedure to force the Digi Wi-Point 3G back to default network configuration values and download new Digi Wi-Point 3G software. This procedure may be required when the current Digi Wi-Point 3G software is missing, corrupted or needs to be upgraded. A TFTP server is needed to complete this action.

### Download procedure

1. A free TFTP server can be downloaded from [www.solarwinds.net](http://www.solarwinds.net).
2. To upload a firmware image, the Digi Wi-Point 3G must be on the same network as your TFTP server. This can be any server on the network or via an Ethernet-crossover cable.

The force reload will resent the Digi Wi-Point 3G's IP to 192.161.1.1. The Digi Wi-Point 3G will need a TFTP server with IP address "192.161.1.2" in order to download the file `firmware.bin`. Change the IP address of TFTP server to



192.161.1.2, and make sure the firmware image named `firmware.bin` is accessible in the root directory of your TFTP server. Power on the Digi Wi-Point 3G.

3. Press the RESET button.
4. Press and hold the RELOAD button for about 10 seconds immediately after you press and release the RESET button until the Power LED turns amber and the WI-FI LED turns off. The Digi Wi-Point 3G will delete the current firmware and configuration files. Then the Digi Wi-Point 3G will download the firmware from step 2.
5. After finishing this procedure, the Digi Wi-Point 3G will reboot automatically and the POWER LEDs will blink amber.

After completion the Digi Wi-Point 3G will have factory default configuration. Please refer to chapter 5 for the factory default values.

## 4.5 Frequently Asked Questions

**What is the maximum number of IP addresses that the Digi Wi-Point 3G will support?**

The Digi Wi-Point 3G will support up to 253 IP addresses.

**Is IPSec Pass-Through mode supported by Digi Wi-Point 3G?**

Yes, it is a built-in feature that the Digi Wi-Point 3G automatically enables.

**Does Digi Wi-Point 3G support IPX or AppleTalk?**

No. TCP/IP is the only protocol supported.

**What is Network Address Translation and what is it used for?**



Network Address Translation (NAT) translates multiple IP addresses on the private network to one public Internet address. This adds a level of security since the address of a PC connected to the private network is never transmitted on the Internet

**Does the Digi Wi-Point 3G support any operating system other than Windows 98, Windows Millennium, Windows 2000, or Windows XP?**

The Digi Wi-Point 3G supports any 802.11 b/g client.

**Which browsers does the Digi Wi-Point 3G support?**

The Digi Wi-Point 3G supports Internet Explorer, Netscape, Mozilla and Safari.

**I am not able to get the web configuration screen for the Digi Wi-Point 3G. What can I do?**

You may have to remove the proxy settings on your Internet browser, or remove the dial-up settings on your browser. Check with your browser documentation, and make sure that your browser is set to connect directly and that any dial-up is disabled.

**Does the Digi Wi-Point 3G pass PPTP packets or actively route PPTP sessions?**

The Digi Wi-Point 3G allows PPTP packets to pass through.

**Is the Digi Wi-Point 3G cross-platform compatible?**

Any platform that supports Ethernet and TCP/IP is compatible with the Digi Wi-Point 3G.

**Can the Digi Wi-Point 3G act as my DHCP server?**

Yes. The Digi Wi-Point 3G has a DHCP server built-in.



### **Can my personal information be intercepted during transmission through the air?**

Wi-Fi features two-fold protection in security. The Digi Wi-Point 3G deploys Direct Sequence Spread Spectrum technology utilizing the inherent security feature of scrambling. Additionally, the Wi-Fi feature offers encryption (WEP) and authentication (WPA Enterprise) to restrict access and enhance security.

### **What is WEP?**

WEP is Wired Equivalent Privacy, a data privacy mechanism based on a 64-bit or 128-bit shared-key algorithm, as described in the IEEE 802.11 standard.

### **What is WPA-PSK?**

WPA-PSK means Wi-Fi Protected Access - Pre-Shared Key. It is an enhanced wireless encryption standards defined by the Wi-Fi Alliance.

### **What is a MAC Address?**

The Media Access Control (MAC) address is a unique number assigned by the manufacturer to any Ethernet networking device that allows the network to identify it at the hardware level. For all practical purposes, this number is usually permanent. Unlike IP addresses, which can change every time a computer logs onto the network, the MAC address of a device stays the same, making it a valuable identifier for the network.



### **How do I resolve issues with signal loss?**

Connectivity can change depending on the environment the device is located in. Such materials as lead glass, metal, concrete floors, water and walls can inhibit the signal and reduce range. You may try using a channel with less traffic in order to eliminate interference.



## 5 Default Digi Wi-Point 3G Settings

The following table lists the settings defined at the factory for all Digi Wi-Point 3G units, and provides a place to enter the values for your system if you have changed them.

### ***Default Setting***

Item	Default Value	My System Value
Local IP Address	192.161.1.1	
Local IP Mask	255.255.255.0	
Network Name(SSID)	DIGIWIPOINT3G	
Frequency Channel	6	
DHCP Server Status	Enabled	
DHCP Lease Range	192.168.1.2-192.168.1.1 00	
TFTP Server IP Address	192.161.1.2	
TFTP File Name	firmware.bin	
Http Username	root	
Http Password	dbps	