



Quick Installation Guide

RANGER SERIES

300Mbps Wireless LAN Access Point with PoE

DG-WA3000NP



UP TO 300 Mbps

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Package Contents

The following items should be present in your package:

- DG-WA3000NP Wireless Access Point with PoE.
- 3dBi dipole antenna (2 Nos.)
- Switching Power Adapter (5V DC, 1A)
- Rubber feet (4 Nos.)
- Quick Installation Guide
- Installation Guide CD (includes User Manual & Utility)
- Patch cord (1 No.)

Make sure that the package contains above items. If any of the listed items is damaged or missing, please contact your retailer immediately.

Product Overview

Thank you for purchasing DG-WA3000NP wireless LAN Access Point with PoE! With this high cost-efficiency wireless Access Point, computers and wireless devices which are compatible with IEEE 802.11n can connect to existing wired Ethernet network, at the speed of up to 300Mbps. DG-WA3000NP also supports power over ethernet which helps in easy installation, by eliminating the need of a dedicated power source for the access point.

With Quick Setup installation procedure, any computer user can setup a wireless network environment in very short time - within minutes, even inexperienced users. Just follow the instructions given in this user manual, you can complete the setup procedure.

Product Features

- Complies with IEEE 802.11b/g/n wireless network standards - works with other 802.11b/g/n wireless devices.
- Complies with 802.3af PoE standard.
- High speed wireless network, six times faster than conventional 802.11g wireless network (up to 300Mbps).
- Allows wireless devices to connect to existing wired network and share network resources.
- Supports 64/128-bit WEP, WPA, and WPA2 wireless data encryption.
- Supports RADIUS server, only allows users listed in your authorization server to use wireless network.
- Supports MAC address filtering (Only allows specific wireless device of your choice to connect to this Access Point).
- Supports DHCP server function.
- Supports point-to-point and point-to-multi point bridge function.
- Supports WDS (Wireless Distributed System) repeater mode.
- Supports Universal Repeater mode.
- Supports AP Client mode.
- Supports four sets of ESSID to group the different wireless networks.
- Supports hidden SSID function.
- Supports WPS (Wi-Fi Protected Setup), simplifies wireless client setup procedures. Even inexperienced users can setup a wireless network without network technician's help!
- Easy to use web-based GUI (Graphical User Interface) for network configuration and management purposes.

System Requirements

The following system requirements are recommended

- Computer or network devices with wired or wireless network interface card.
- Web browser (Microsoft Internet Explorer 4.0 or above, Netscape Navigator 4.7 or above, Opera web browser, or Safari web browser).
- An available AC power socket (100 – 240 V, 50/60Hz)

Front View

Below shown is the product front view.



Users can verify Access Point status from the LED indicators on the front panel. Below given is the LED description.

LED Name	Light Status	LED Color	Description
PWR	On	Green	The Access Point is switched on and correctly powered.
	On		Wireless WPS mode is enabled.
WLAN	Off	Amber	Wireless network is switched off.
	Flashing		Wireless LAN activity (transferring or receiving data).
LAN	On	Green	LAN port is connected.
	Off		LAN port is not connected.
	Flashing		LAN activity (transferring or receiving data).

Rear View

Below shown is the product Rear View.



Below given is the Access Point interface description.

Interfaces	Description
Antennas	Two reverse SMA antenna connectors for screwing detachable antennas enclosed with the product.
Power	Power connector, connects to power adapter.
LAN	Local Area Network (LAN) port.
Reset / WPS	Reset the Access Point to factory default settings (clear all settings) or start WPS function. Press this button and hold for 10 seconds to restore all settings to factory defaults, and press this button for less than 5 seconds to start WPS function.

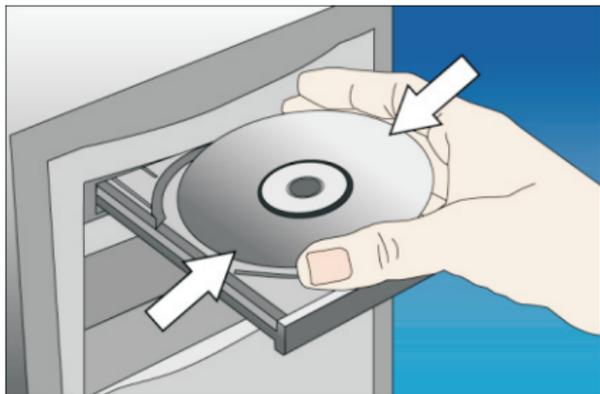
Hardware Installation

Please follow the below mentioned instructions to build the network connection between your new wireless PoE Access Point and your computers, network devices:

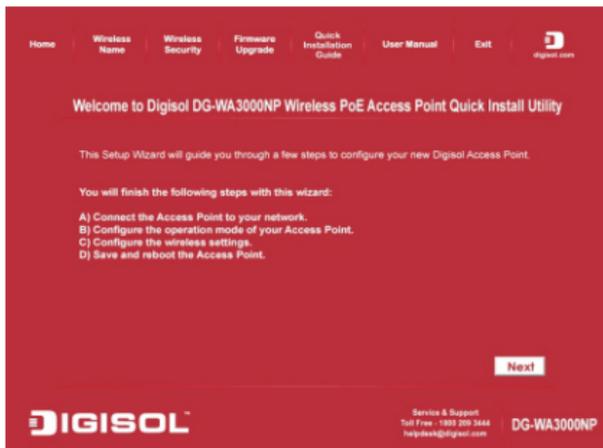
- 1** Fix two detachable dipole antennas to the antenna connectors of the Access Point.
- 2** Connect the Access Point to ADSL modem, router, or switch/hub in your network through the LAN port of the Access Point by using Ethernet cable.
- 3** Connect the power adapter (5V DC, 1A) to the wall socket, and then connect the other end of it to the 'Power' socket of the Access Point.
- 4** Please check all the LEDs on the front panel. 'PWR' LED should be steadily ON, 'LAN' LED should be ON if the Access Point is correctly connected to the ADSL modem, router or switch/hub.

Software Installation

- 1 Insert the Setup CD into your CD-ROM drive of notebook/desktop computer.



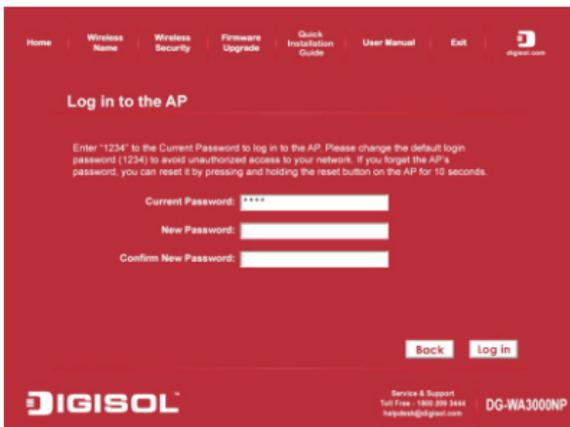
- 2 Explore the CD and execute the "APWizard.exe" file. Screen given below will be displayed. Click 'Next' to continue.



- 3 Connect one end of the network cable to the LAN port on the AP and the other end to one of the LAN ports on the router. Power ON the router and the AP. Ensure that all the LED's on the Access Point are ON. If not, try the above steps again else click 'Next' to continue.



- 4 Enter the AP's password to log in to the AP. The default password is "1234". It is recommended to change the AP's password to protect it from being accessed by other users. If you do not wish to change the current password, you can leave "New Password" and "Confirm New Password" fields blank. Click 'Log in' to continue.



- 5 Configure the IP Address of AP for future management. Click 'Next' to continue.

The screenshot shows a web browser interface with a dark red background. At the top, there is a navigation menu with links: Home, Wireless Name, Wireless Security, Firmware Upgrade, Quick Installation Guide, User Manual, and Exit. The Digisol logo is in the top right corner. The main heading is 'Configure the IP Address'. Below it, a paragraph explains that a valid IP address must be assigned to the AP. Three input fields are provided: IP Address (192 . 168 . 2 . 1), Subnet Mask (255 . 255 . 255 . 0), and Default Gateway (0 . 0 . 0 . 0). A note below the fields states that the IP address must match the network settings and provides an example. At the bottom, there are 'Back' and 'Next' buttons. The footer contains the Digisol logo, service and support contact information (Tel: Free - 1800 200 3444, helpdesk@digisol.com), and the model number DG-WA3000NP.

- 6 Select an operation mode for your Access Point and click 'Next'. The wizard will guide you to finish the following corresponding settings.

The screenshot shows a web browser interface with a dark red background. At the top, there is a navigation menu with links: Home, Wireless Name, Wireless Security, Firmware Upgrade, Quick Installation Guide, User Manual, and Exit. The Digisol logo is in the top right corner. The main heading is 'Select AP Modes'. Below it, a paragraph asks to select an operation mode for the AP. There are six radio button options, each with a description: Access Point (Add wireless capability to your current local area network), Universal Repeater (Extend the range of your current wireless network), AP Client (Connect your Ethernet-ready network device to your wireless network), Point to Point Bridge (Bridge 2 networks with wireless connection. For example: 2 buildings or houses), Point to Multi-Point Bridge (Bridge multiple networks with wireless connection. For example multiple buildings or houses), and WDS Bridge (Connect multiple Access Points wirelessly without wired backbone). At the bottom, there are 'Back' and 'Next' buttons. The footer contains the Digisol logo, service and support contact information (Tel: Free - 1800 200 3444, helpdesk@digisol.com), and the model number DG-WA3000NP.

7 Configure the settings for the operation mode you have selected.

Access Point

- Configure the SSID and Channel Number. Click 'Next' to continue.

The screenshot shows the 'Configure Wireless Settings' page. At the top, there is a navigation menu with links for Home, Wireless Name, Wireless Security, Firmware Upgrade, Quick Installation Guide, User Manual, and Exit. The main heading is 'Configure Wireless Settings'. Below this, a sub-heading reads: 'Configure the name (SSID) and channel for your wireless connection. The default SSID is "Digisol", the default wireless channel is 6.' There are two input fields: 'Wireless Name (SSID):' with the value 'Digisol' and a note '(Example: myHome_goh123.)', and 'Channel Number:' with a dropdown menu showing '6'. At the bottom right, there are 'Back' and 'Next' buttons. The footer contains the Digisol logo, 'Service & Support' information (Toll Free: 1-800-208-3444, www.digisol.com), and the model number 'DG-WA3000NP'.

Universal Repeater

- To configure Root AP's SSID Click on 'Site Survey', a "Wireless Site Survey" window will appear. Select the wireless router or AP you wish to repeat and click 'Connect'. Next, configure a network name and channel number in Main SSID and Channel Number for the repeater to be identified.

The screenshot shows the 'Site Survey' page. At the top, there is a navigation menu with links for Home, Wireless Name, Wireless Security, Firmware Upgrade, Quick Installation Guide, User Manual, and Exit. The main heading is 'Site Survey'. Below this, a sub-heading reads: 'Select the Wireless Router or AP you wish to connect or repeat by clicking on Site Survey. You can configure the Main SSID for your Repeater so you can recognize it. If you are not using the Repeater mode, you can leave it blank.' There are three input fields: 'Root AP's SSID' with a 'Site Survey' button next to it, 'Main SSID: Digisol' with a note '(For Repeater Mode Only)', and 'Channel Number:' with a dropdown menu showing '6'. At the bottom right, there are 'Back' and 'Next' buttons. The footer contains the Digisol logo, 'Service & Support' information (Toll Free: 1-800-208-3444, www.digisol.com), and the model number 'DG-WA3000NP'.

AP Client

- Click on 'Site Survey', "Wireless Site Survey" window will appear. Select the wireless router or AP you wish to connect and click 'Connect', or enter your wireless network's SSID manually. Click 'Next' to continue.

The screenshot shows a web interface with a dark blue header containing navigation links: Home, Wireless Name, Wireless Security, Firmware Upgrade, Quick Installation Guide, User Manual, and Exit. A logo for 'digisol.com' is in the top right. The main heading is 'Configure Wireless Settings'. Below it, a note says 'Configure the name (SSID) and channel for your wireless connection. The default SSID is "Digisol"'. There are two input fields: 'Wireless Name (SSID)' with the value 'digisol' and a 'Site Survey' button to its right; and 'Channel Number' with a dropdown menu showing '6'. Below these are 'Back' and 'Next' buttons. At the bottom, the DIGISOL logo is on the left, and 'Service & Support' with contact info and 'DG-WA3000NP' are on the right.

Point-to-Point / Point-to-MultiPoint / WDS Bridge

Note: Same setup procedure applies to Point-to-Point Bridge, Point-to-MultiPoint Bridge and WDS Bridge modes.

- For bridge mode, you need at least two Access Points. We will use Point-to-Point Bridge as an example. Select a channel number you wish to use and enter the MAC address of the other Access Point for the bridge. Click 'Next'.

The screenshot shows a web interface with a dark blue header containing navigation links: Home, Wireless Name, Wireless Security, Firmware Upgrade, Quick Installation Guide, User Manual, and Exit. A logo for 'digisol.com' is in the top right. The main heading is 'Configure Wireless Settings for PtP Bridge Mode'. Below it, a note says 'Configure the Channel number you wish to use for the bridge connection and the MAC address of the other AP (has to be in Point to Point Bridge Mode as well)'. There are two input fields: 'Channel Number' with a dropdown menu showing '6'; and 'MAC Address' with the value '00:00:00:00:00:00' and a format note '(Format: XXXX.XXXX.XXXX)'. Below these are 'Back' and 'Next' buttons. At the bottom, the DIGISOL logo is on the left, and 'Service & Support' with contact info and 'DG-WA3000NP' are on the right.

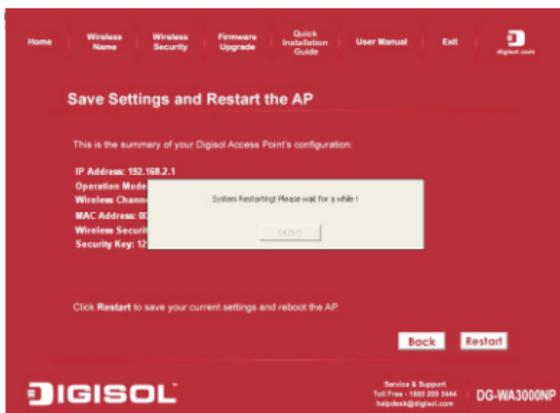
- 8 Configure the wireless security settings. It is recommended to use WPA2-PSK (AES) which is the most secured encryption for general users. Then Click 'Next'.

The screenshot shows a web interface for configuring wireless security. At the top, there is a navigation menu with links: Home, Wireless Name, Wireless Security, Firmware Upgrade, Quick Installation Guide, User Manual, and Exit. The main heading is "Configure Wireless Security". Below the heading, a message states: "Please enter the wireless security key setting that is configured on the wireless router or bridge(s) you wish to connect or repeat. You will not be able to connect to those devices if the security settings do not match." There are two input fields: "Encryption:" with a dropdown menu set to "WPA2-PSK(AES)", and "Security key:" with a masked input field containing "*****". Below the security key field, a note says "Please enter 8 to 63 characters". At the bottom right, there are "Back" and "Next" buttons. The footer contains the DIGISOL logo, "Service & Support" contact information (Tel: +86 20 3444 1000, Email: support@digisol.com), and the model number "DG-WA3000NP".

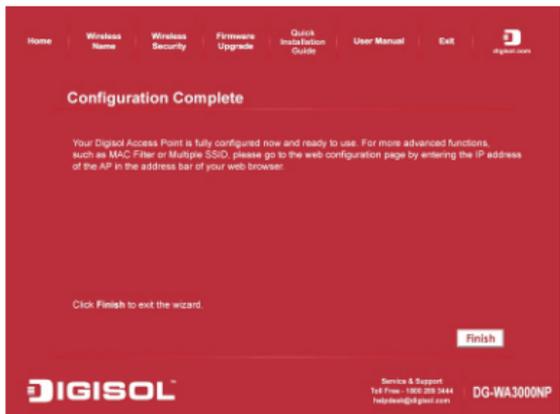
- 9 Verify the settings you have configured and click 'Restart'

The screenshot shows a web interface for saving settings and restarting the AP. At the top, there is a navigation menu with links: Home, Wireless Name, Wireless Security, Firmware Upgrade, Quick Installation Guide, User Manual, and Exit. The main heading is "Save Settings and Restart the AP". Below the heading, a message states: "This is the summary of your Digital Access Point's configuration:". The configuration summary includes: "IP Address: 192.168.2.1", "Operation Mode: Point to Point Bridge", "Wireless Channel: 6", "MAC Address: 98:99:00:00:00:00", "Wireless Security: WPA2-PSK(AES)", and "Security Key: 12345678". At the bottom, a message says: "Click Restart to save your current settings and reboot the AP." Below this message, there are "Back" and "Restart" buttons. The footer contains the DIGISOL logo, "Service & Support" contact information (Tel: +86 20 3444 1000, Email: support@digisol.com), and the model number "DG-WA3000NP".

- 10 This will take 60 Seconds. Then Press 'OK'



- 11 Click 'Finish' to complete the installation

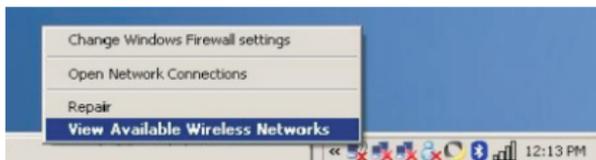


Congratulations! Your Access Point installation is now finished.

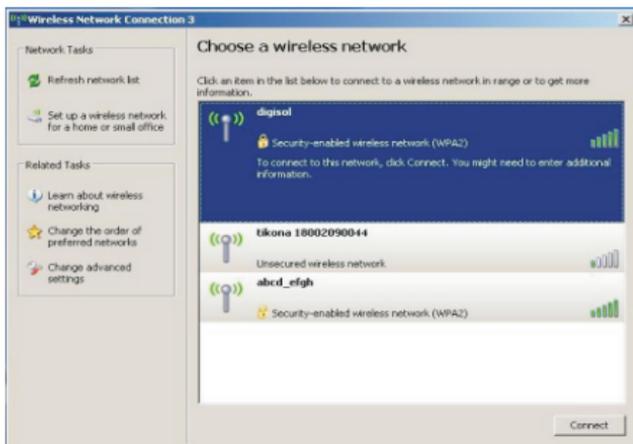
Connect to the Access Point Wirelessly

Users must configure their wireless notebook/desktop computer in order to establish a wireless connection to the Access Point. The following instructions help in establishing a wireless connection between a Windows XP computer and the Access Point.

- Right click the wireless icon in the system tray and click on "View Available Wireless Networks".



- A window displaying the available wireless networks will open. Select the wireless network you wish to connect and then click on 'Connect'.



- Enter the network security key if the wireless network you wish to connect has wireless encryption enabled. Click 'Connect'. The connection should now get established.



Web Management of the Access Point

- To access the web configuration of the Access Point, assign a static IP address to your notebook/desktop computer in the subnet 192.168.2.X with the subnet mask 255.255.255.0 and gateway as 192.168.2.1". For example, assign the IP address 192.168.2.10.
- Open a web browser and enter "http://192.168.2.1" in address bar, press 'Enter'. A login screen will appear, assign username as "admin" and password as "1234". Press 'OK' to Log in.



- Following screen will appear on successful Login. You can now configure the Access Point through this web management page.

The screenshot displays the web management interface for the DIGISOL DG-WA3000NP Wireless Access Point with PoE. The interface has a red header with the DIGISOL logo and the device name. A left sidebar contains navigation options: Home, Basic Settings, WPS Setting, Advanced Settings, Security, Radius Server, MAC Filtering, System Utility, Configuration Tool, Upgrade, and Reset. The main content area is titled 'Status and information' and includes a note: 'Below mentioned information can be used to monitor the Access Point's MAC address, software code and hardware version.' It features three tables: 'System' (Model: DG-WA3000NP 300Mbps Access Point with PoE, Uptime: 0day 0h 0m 32s, Hardware Version: Rev. A, Runtime Code Version: 1.00), 'Wireless Configuration' (Mode: AP, ESSID: Digisol, Channel Number: 11, Security: Disable, BSSID: 86:1f:52:1a:95:08, Associated Clients: 0), and 'LAN Configuration' (IP Address: 192.168.2.1).

Frequently Asked Questions

Following are the solutions to problems that may occur during the installation and operation of the DIGISOL DG-WA3000NP Wireless LAN Access Point with PoE.

1. Cannot get connected to wireless Access Point.
 - If encryption is enabled, please re-check WEP or WPA pass-phrase settings on your wireless client.
 - Try to move closer to wireless Access Point.
 - Unplug the Access Point from the power socket, and plug it again after 10 seconds. If the access point is powered through PoE, then unplug the ethernet cable from the access point and plug it again after 10 seconds.
 - If all LEDs on Access Point are OFF, please check the status of A/C power adapter, and ensure that it's correctly powered.

2. Wireless client cannot locate the Access Point.

- Verify whether 'Broadcast ESSID' is set to off in Access Point's web configuration.
- Verify whether the antenna is properly connected and in correct direction.
- Is your wireless client far away from your Access Point? Try to get closer to the Access Point.
- Ensure that you input ESSID on your wireless client manually, if ESSID broadcast is disabled.

This product comes with lifetime warranty.
For further details about warranty policy and
product registration, please visit support
section of www.digisol.com





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