







# **Green Router Upgrades Home Network Easily**

- Wireless N technology supports with data transfer rates of up to 150 Mbps\*
- WMM QoS for multimedia streaming prioritization
- Green router saves energy by detecting link status and cable length
- Wireless scheduler and output power management provide eco-friendly home network environments
- Wi-Fi Protected Setup (WPS) button to simplify secure network setup
- Enhanced security with WEP, WPA/WPA2 and firewall

# **Benefits**

# Wireless N support and upgraded data transfer rates of up to 150 Mbps\*

Featuring the 802.11n technology, the ZyXEL NBG-416N Wireless N-lite Home Router offers a cost-effective solution for users upgrading their network to the next generation. With speeds three times faster than the 802.11g standard networks, the NBG-416N provides faster speeds and more stable, reliable wireless connections for data and multimedia streaming. It not only provides you with a better Internet experience, but also offers backward compatibility with the existing 802.11b/g networks.

### WMM QoS for multimedia streaming prioritization

With the Wi-Fi Multimedia (WMM) technology, the NBG-416N enhances user experiences for audio, video and voice applications over wireless networks with the capability to prioritize different network traffic types for optimized performance.

# Green router saves energy by detecting link status and cable length

With the rich green features, the NBG-416N not only consumes less power than most home routers on the market, but also smartly adjusts power consumption by detecting the link status and the length of connected Ethernet cables. When the NBG-416N detects no active data transmission, the device automatically enters the power-saving mode to avoid energy waste. In addition, the NBG-416N can also detect the length of connected Ethernet cables and adjust power usage accordingly. The shorter the Ethernet cable length is, the less power it consumes.

# Wireless scheduler and output power management provide eco-friendly home network environments

In order to reduce unnecessary wireless radiation for a more eco-friendly network environment, the wireless scheduler and output power management of NBG-416N enable you to easily control wireless network environments. The desired operating time can be set in a few steps via the Web-based user interface, so the NBG-416N can turn itself on or off according to your wireless usage pattern. This also adds another layer of security, since external access to the device is not possible when the wireless function is deactivated. With the five-level output power control capability, the NBG-416N makes it easy for users to adjust the output power to reduce interference that affects your neighbors if you live in an area of high AP density.



















# **NBG-416N Wireless N-lite Home Router**

#### **Easy setup with WPS**

To establish a secure wireless network could not be easier. The WPS button of the NBG-416N enables you to take only a few seconds to set up a secure wireless network. Instead of entering a pass phrase, users can authenticate a new device on the network by pressing a button or by entering an automatically generated PIN code.

#### Enhanced security with WEP, WPA/WPA2 and firewall

64/128-bit WEP, and WPA/WPA2 are supported to provide stringent protection for wireless transmissions. In addition, the NBG-416N is equipped with firewall features including Network Address Translation (NAT), Stateful Packet Inspection (SPI), Denial-of-Service (DoS), and VPN Pass-through (IPSec, PPTP and L2TP) to prevent attacks from the Internet.

# **Specifications**

#### **System Specifications**

#### **Wireless Standard**

- 802.11n technology
- Backward compatible with 802.11 b/g

#### Wireless Transfer Rate

• Transmit: 150 Mbps\* · Receive: 150 Mbps\*

#### **WLAN Features**

- Wi-Fi Protected Setup (WPS)
- Wi-Fi Multimedia (WMM)
- Access Point Mode
- Client Mode\*\*
- Universal Repeater Mode\*\*
- Wireless security: 64/128 bit WEP, WPA/WPA2
- Wireless scheduling
- Wireless output power management
- Intra-Bss traffic block
- · Channel auto scan
- MAC address filtering

# Firewall

- SPI
- DOS

# Routing

- NAT (NAT session: 2000)
- DHCP server on LAN
- DHCP client on WAN
- · Connection type: PPPoE, Static IP, Dynamic IP, PPTP
- IGMP v1/v2\*\*
- DDNS\*\*
- Port-based OoS\*\*
- Auto-IP change\*\*

### **System Management**

Online auto-upgrade firmware\*\*

#### **VPN Pass-through**

- IPSec
- PPTP
- I 2TP

#### **Green Features**

· Automatically adjust the power consumption by detecting the link status and cable length

#### **Hardware Specifications**

- WAN: One 10/100 Mbps Ethernet RJ-45 port with auto MDI/MDIX support
- LAN: Four 10/100 Mbps Ethernet RJ-45 ports with auto MDI/MDIX support
- · LED indicator:
- Power
- LAN (1 ~ 4)
- WAN
- WI AN
- WPS
- · One 2 dBi detachable antenna
- WPS button
- Reset button
- Power: DC 5 V, 1 A

# **Physical Specifications**

- Item weight: 216 g (0.48 lb)
- Item dimensions (WxDxH): 162 x 115 x 33 mm (6.38" x 4.53" x 1.3")
- Packing weight: 560 g (1.24 lb)
- Packing dimensions (WxDxH): 247 x 155 x 61 mm (9.72" x 6.1" x 2.4")

#### **Environmental Specifications**

- · Operating environment:
- Temperature: 0°C ~ 40°C/32°F ~ 104°F
- Humidity: 20% ~ 90% (Non-condensing)
- Storage environment:
- Temperature: -30°C ~ 70°C/-22°F ~ 158°F
- Humidity: 20% ~ 95% (Non-condensing)

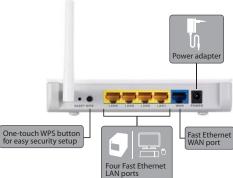
#### Certification

- Safety: CE LVD
- EMC: CE, FCC, NCC

#### **Package Contents**

- Wireless router
- One detachable antennas
- Power adapter
- Ethernet cable
- Quick start guide
- Support CD
- · Warranty card
- \* The theoretical maximum data transfer rate is 150 Mbps. The actual data transfer rate may vary depending on the network environment.
- \*\* Future release

# **Rear Panel**



# **Application Diagram**



For more product information, visit us on the web at www.ZyXEL.com









