







- 802.11n AP function built-in (1x1) with 22 dBm EIRP
- Standard based WPS for easy and secure WLAN establishment
- Robust SPI firewall protection
- **■** Effective bandwidth management for triple-play
- Remote provisioning and management through TR-069
- Stylish photo frame housing design

# **Elegant Design for Homes, Extreme Performance for Networks**

#### **Benefits**

#### 802.11n technology for extreme performance and coverage

The P-660HN-T1H featuring 802.11n technology provides the ultimate solution for speed and coverage. With data rate up to 150 Mbps, the P-660HN-T1H provides stable and reliable wireless connections for high-speed data and multimedia delivery. It eliminates dead zones and extends coverage by using IEEE 802.11n technology and is backward compatible with any IEEE 802.11b/g Wi-Fi certified device.

#### **WPS (Wi-Fi Protection Setup)**

Wi-Fi Protected Setup (WPS) is a standard for easy and secure establishment of wireless networks. With WPS, the device will automatically configure a wireless network with a network name (SSID), strong WPA data encryption and authentication. WPS makes the configuration of secure personal wireless networks as simple as pushing a button or entering a Personal Identification Number (PIN) code.

#### **Robust SPI Firewall security**

The SPI Firewall works on the network layer by examining header and footer of a packet, and it also ensures the packet belongs to a valid session. Based on Stateful Packet Inspection (SPI), DoS (Denial of Service) and DDoS features, the P-660HN-T1H provides the first-line defense against hackers, network intruders and other harmful threats.

### **TR-069 remote management**

With TR-069 standard management specifications, service providers are able to manage and configure client devices remotely without manual intervention from end users. This unique feature not only offers user true "plug-and-play" experience but also reduces the complexity of deployment, and therefore saves operating and maintenance costs for service providers.

#### Bridging customers and technology with stylish design for homes

With a unique, streamlined form factor, the P-660HN-T1H has been designed for your desktop to display your favorite photos on its 7-inch photo slot vertically or horizontally. Users can enjoy broadband services provided by operators while keeping the desktop neat with style. ZyXEL has long endeavored to integrate hi-tech products into consumers' lives through easy and stylish designs. What looks like an elegant coffee pot or a photo frame could actually be an indoor user terminal. The concept of bridging technologies and lifestyle for simplicity will help service providers delivering more innovative services to their customers easily along with attractive products that fit the study or living rooms of the subscribers.

P-660HN-T1H 802.11n Wireless ADSL2+ 4-port Gateway

















## P-660HN-T1H 802.11n Wireless ADSL2+ 4-port Gateway

## **Specifications**

### **System Specifications**

#### **ADSL Compliance**

- ITU 992.1 (G.dmt)
- ITU 992.3 ADSL2 (G.dmt.bis)
- ITU 992.5 ADSL2+
- Reach-Extended ADSL (RE ADSL)
- · Annex L/M support

#### WLAN

- IEEE 802.11n compliance, backward compatible with 11b/g
- Frequency operation: 2.4 GHz
- 64 /128 bits WEP data encryption
- WPA/WPA2 (Wi-Fi Protected Access) security
- Support IEEE 802.1x, external RADIUS server: EAP-MD5, TLS, TTLS
- Wireless scheduler
- Wi-Fi Multimedia (WMM)
- WPS (Wi-Fi Protected Setup)

#### Route

- NAT (Maximum 2048 sessions)
- SIP ALG pass-through
- NAT port forwarding
- PPPoE pass-through
- Dynamic DNS
- IP alias
- DHCP server/client/relay
- RIP I/RIP II support
- $\bullet$  IGMP v1 and v2 support
- UPnP support
- •802.1Q/1P

#### Firewall

- Stateful Packet Inspection (SPI)
- Denial of Service (DoS) prevention

#### Security

- · Multiple VPN (IPSec, PPTP) pass-through
- Packet filtering
- URL keyword blocking

#### Management

- Embedded Web configuration
- TR-069 HTTPS support
- · Logs and statistics
- SNMP v1 and v2 with MIB II
- Remote management control: Telnet, FTP, Web, SNMP, and DNS
- CLI command via Telnet/Console

## **Hardware Specifications**

- ADSL port: 1 x RJ-11
- Ethernet port: 4 x RJ-45
- Power input (12 V DC 1 A)
- Power switch button
- Reset button
- WPS and WLAN ON/OFF hardware button (coexisting)
- Single 5 dbi internal antenna
- LED displays
- Power
- Ethernet (1-4)
- WLAN/WPS
- DSL
- Internet

### **Physical Specifications**

- Item weight: 425 g (0.94 lb)
- Item dimensions: 210 (W) x 142 (D) x 55 (H) mm (8.27 (W) x 5.59 (D) x 2.16 (H) inches)
- Packing weight: 670 g (1.48 lb)
- Packing dimensions:
  359 (W) x 145 (D) x 58 (H) mm
  (14.13 (W) x 5.71 (D) x 2.28 (H) inches)

#### **Environmental Specifications**

#### **Operating Environment**

- Temperature: 0°C ~ 40°C
- Humidity: 20% ~ 85% RH (non-condensing)

#### **Storage Environment**

- Temperature: -20°C  $\sim$  60°C
- Humidity: 20% ~ 90% RH (non-condensing)

#### Certification

- Safety: CE (EN60950-1, IEC 60950-1)
- EMI: CE

## **Rear Panel**



# **Application Diagram**









