



- VDSL2/ADSL2+
- 802.11n
- Quality of Service (QoS)
- TR-069

Very High-speed VDSL2 Gateway for Triple Play Services

Benefits

Dual Mode VDSL2/ADSL2+ Functionality

ZyXEL P-870HN-51b supports dual-mode functionality that enables service providers to support both ATM and PTM networks with a single device. It offers bi-directional high speed VDSL2, VDSL connection with speed up to 100/45 Mbps in PTM mode and 24/1 Mbps ADSL2+/ADSL2/ADSL connections in ATM mode. This powerful feature ensures the service provider can support connections over newer IP networks and also on their legacy ATM networks with a single CPE gateway.

802.11n Technology for Extreme Performance and Coverage

The P-870HN-51b featuring 802.11n technology provides the ultimate solution for both speed and coverage. With a wireless data rate up to 300 Mbps, the P-870HN-51b provides stable, reliable wireless connections for high speed data and multimedia use. It eliminates dead zones and extends coverage by using coming IEEE 802.11n technology while remaining backwards compatible with any IEEE 802.11b/g Wi-Fi certified device.

Quality of Service (QoS) Support

The P-870HN-51b comes equipped with essential ATM and IP QoS features. Service providers can freely design their QoS policy and prioritize the mission-critical services such as IPTV and VoIP based on their service plan offerings. This increases network efficiency and productivity helping enable service providers to bring real multi-play into residential user's lives.

TR-069 Remote Management

With the P-870HN-51b incorporating TR-069 standard management specifications, service providers can manage and configure these client devices remotely without any end-user's intervention. This feature offers users a truly "plug-and-play" experience while reducing deployment complexity, therefore saving service provider's operational and maintenance costs.

P-870HN-51b
802.11n VDSL2
4-Port Gateway





Specifications

System Specifications

VDSL Compliance

- ITU.T G.993.1 VDSL1
- ITU.T G.993.2 VDSL2 (Profile 8a, 8b, 8c, 8d, 12a, 12b and 17a support)
- Supports VDSL band plan, Annex A, 997, 998
- Supports up to 100 Mbps downstream and 45 Mbps upstream
- Rate adaption
- SRA (Seamless Rate Adaption)
- UPBO (Upstream Power Back-Off)
- Dual latency support in VDSL mode
- INP values up to 16
- Trellis coding
- PhyR PHY level retransmission technology
- PTM mode
- PPPoE (RFC2516)

ADSL Compliance

- G.992.1 (G.dmt), Annex A compliant
- G.992.2 (G.lite), Annex A compliant
- G.992.3 (ADSL2), Annex A, L and M compliant
- G.992.5 (ADSL2+), Annex A and M compliant
- Reach-Extended ADSL (RE ADSL)
- SRA (Seamless Rate Adaptation)
- Rate adaptation
- ADSL physical connection ATM AAL5 (ATM Adaptation Layer type 5)
- Support multi-protocol over AAL5 (RFC2684/1483)
- PPP over ATM AAL5 (RFC2364)
- PPPoE (RFC 2516)
- MAC encapsulation routing
- Support VC-based and LLC-based multiplexing
- Support up to 8 PVCs
- I.610 F4/F5 OAM

Wireless

- IEEE 802.11n compliance
- Frequency: 2.4 GHz
- Data rate: 300 Mbps
- Backward compatible to 802.11b/g
- Static and dynamic WEP key (64/128 bit)
- WPA/WPA-PSK
- WPA2/WPA2-PSK

- MAC address filter (up to 32)
- Auto channel selection
- Multiple SSID (up to 4)
- WDS (Wireless Distribution System)
- Multicast traffic pass-through
- WPS (Wireless Protected Setup)

Switch

- IEEE 802.3 10Base-T Ethernet
- IEEE 802.3u 100Base-Tx Ethernet
- Flow control in full duplex mode
- Back pressure in half duplex mode

QoS

- Supports flexible packet classification
- Supports tag processing
- Queuing and scheduling
- Traffic shaping
- Queue management

Management

- Web
- CLI (Command Line Interpreter)
- SSH (Secure Shell function)
- Remote management for Web/Telnet/FTP
- Access control for remote management
- Firmware upgrade via Web/FTP/TFTP
- Text based configuration
- DSL forum TR-069
- DSL forum TR-064*
- 802.1ag (Connectivity fault management)*

Hardware Specifications

- WAN: one RJ-11 interface for VDSL (over POTS)
- LAN: four 10/100 auto MDI/MDI-X RJ-45 interfaces
- Wireless: one external 2 dBi antenna and one 2 dBi internal antenna
- WLAN/WPS button: one physical button for WLAN on-off and WPS configuration
- Power switch: one push type button
- Reset: one reset/restore factory default button
- Status LEDs indicators: POWER, ETHERNET, DSL, INTERNET, WLAN
- Power supply: 120 V/230 V/240 V
- 12 V DC 1 A

Physical Specifications

- Item weight: 420 g (0.93 lb)
- Item dimensions: 231 (W) x 147 (D) x 57 (H) mm (9.09 (W) x 5.79 (D) x 2.24 (H) inches)
- Item and package weight: 950 g (2.1 lb)
- Package dimensions: 330 (W) x 185 (D) x 93 (H) mm (12.99 (W) x 7.28 (D) x 3.66 (H) inches)

Environmental Specifications

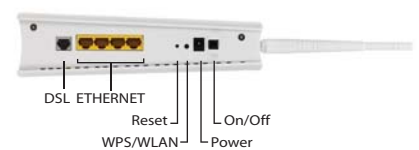
- Operating environment:
 - Temperature: 0°C ~ 40°C
 - Humidity: 20% ~ 85% RH (non-condensing)
- Storage environment:
 - Temperature: -20°C ~ 60°C
 - Humidity: 20% ~ 90% RH (non-condensing)

Certification

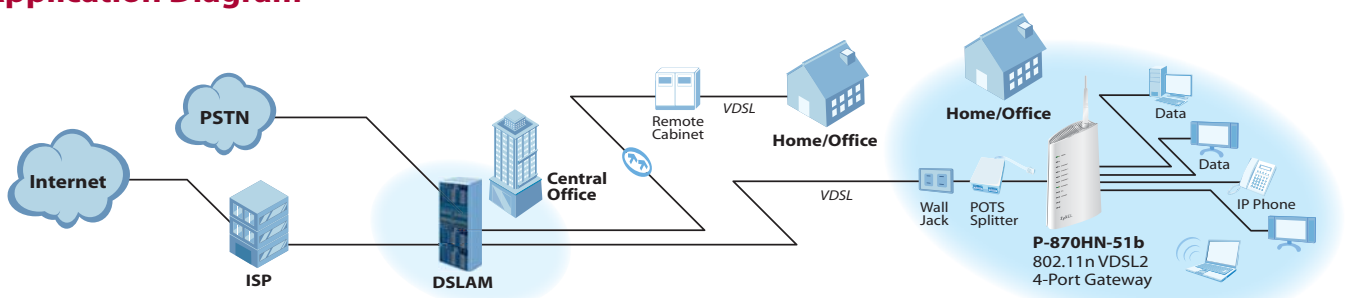
- EMC
 - EN55022 Class B
 - EN61000-3-2: 2000
 - EN61000-3-3: 1995+A1: 2001
 - FCC Part 15 (Class B)
- Safety
 - CSA 60950-1
 - UL 60950-1
 - EN 60950-1: 2001+A11
 - IEC 60950-1: 2001

* Firmware upgradeable for future enhancement.

Rear Panel



Application Diagram



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

