



- VDSL2 High-Speed Internet Access
- Ultra-high Speed Upstream/ Downstream Rates at Up to 45/100 Mbps
- 4-port 10/100 Mbps Ethernet Switch
- TR-069 Remote Management

## Very High-speed VDSL2 Gateway for Triple Play Services

### Benefits

#### VDSL2 High-speed and High-performance Internet Access

ZyXEL P-870H-51a v2 provides 5-band VDSL2 up to profile 17a with data rates up to 100 Mbps in downstream direction and 45 Mbps in upstream direction. The VDSL2 technology can support the wide deployment of Triple Play services such as voice, video, data, high definition television (HDTV) and interactive gaming. It also enables operators and carriers to gradually, flexibly, and cost-effectively upgrade existing xDSL interface.

#### QoS Support

The P-870H-51a v2 enables network administrators to allocate network resources while guaranteeing Quality of Service (QoS). QoS can be achieved by classifying packets by their ether type or source IP and then assign them with different 802.1p priority value or directly forward them to different queue or added by VLAN ID. It provides the capability to provide better service to select network traffic over VDSL technology. For example, it can help end users to enjoy the triple play service with high quality performance in the household.

#### TR-069 Remote Management

The P-870H-51a v2 provides DSL Forum compliant TR-069 remote management function, it could speed up your deployment with the default Auto-Configuration Server (ACS) for auto-configuration and dynamic service provisioning. It can also help VDSL service provider reduce operation effort as well as enhance customer satisfaction.

**P-870H-51a v2**  
**VDSL2 4-Port**  
**Switch Router**





### 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)
- Support VDSL band plan, Annex A, Annex B, 997, 998
- Support up to 100 Mbps downstream and 45 Mbps upstream
- Rate adaption
- SRA (Seamless Rate Adaption)
- UPBO (Upstream Power Back-Off)
- VDSL OAM communication channels
- Dual latency support in VDSL mode
- INP value up to 16
- Trellis coding
- PhyR PHY level retransmission technology
- PTM mode
- PPPoE (RFC2516)

##### LAN 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

- Support flexible packet classification
- Support 4 priority queues with strict priority scheme
- Support tag processing

- Queuing and scheduling
  - Traffic shaping
  - Auto priority mapping
  - 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
  - DSL forum TR-111\*
  - 802.1ag (Connectivity fault management)

##### Security

- PAP/CHAP
- Protocol and generic packet filtering
- Prevent DoS attack
- Stateful packet inspection firewall

#### Physical Specifications

- Item dimensions: 189 (W) x 132 (D) x 40 (H) mm
- Item weight: 328 g
- Package dimensions: 238 (W) x 203 (D) x 60.5 (H) mm
- Item and package weight: 711 g

#### Environmental Specifications

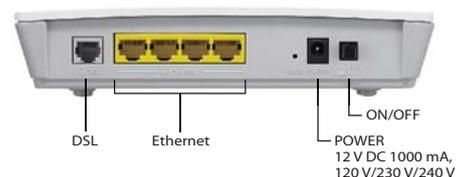
- Operating environment:
  - Temperature: 0°C ~ 40°C
  - Humidity: 20% ~ 85% RH (non-condensing)
- Storage environment:
  - Temperature: -20°C ~ 60°C
  - Humidity: 20% ~ 90% RH (non-condensing)

#### Certifications

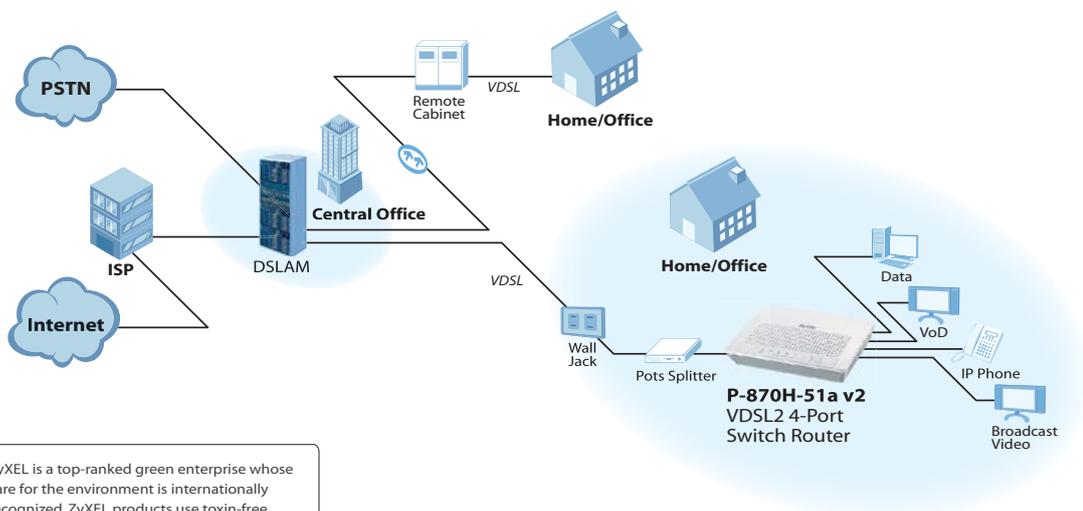
- EMC
  - EN55022 Class B
  - EN61000-3-2:2000
  - EN61000-3-3:1995+A1:2001
  - FCC Part 15 (Class B)
- Safety
  - CSA 60950-1
  - UL 60950-1
  - EN 60950-1:2001+A11
  - IEC 60950-1:2001

\* Firmware upgradeable for future enhancement.

#### Rear Panel



### Application Diagram



ZyXEL is a top-ranked green enterprise whose care for the environment is internationally recognized. ZyXEL products use toxin-free, energy-efficient and easily-recyclable materials.

For more product information, visit us on the web at [www.ZyXEL.com](http://www.ZyXEL.com)



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