

# ZyXEL



## L2TPv3 Capable Commercial Service Gateway



- DOCSIS 2.0 and PacketCable 1.5 CableLab Certified
- L2TPv3 VPN Enabled
- TACACS+ and RADIUS Authentication
- RIPv1 and RIPv2 with Key-string Authentication by MDS
- Static IP or DHCP WAN Mode with Enabled/Disabled DHCP and NAT Configuration for LAN Service
- Cable Router and 4 Ports Voice Services included in a Box

### Benefits

#### All in One Box

P2900 is CableLabs 2.0 certified and interoperable with any DOCSIS network. Cable operators can provide business class services including 4 lines Voice, High Speed Internet, Static IP Router, and Ethernet over DOCSIS in a single box.

#### L2TPv3 Capable

P-2900 series products support "Point to Point" and "Point to Multi-Points" L2TP v3 VPN scenarios including branch offices, teleworkers and SOHO users. P2900's L2TP v3 allows Cable MSO to deploy "T1 like" lease line services to SMB market at competitive price point.

#### Ease of Remote Management

P2900 series products support SNMP v1v2v3, CLI Interface, and WebGUI. Customizable Web GUI provides 2 tier password login protections. Telnet interface with TACACS+ support offers secure remote network management connection.

#### Flexible Operation Mode

Supporting static IP network coupled with DHCP and Multi NAT, P-2900 series is ideal for business class customers to build a public and private network simultaneously. The routing information uses a key-string encryption via MD5 hash algorithm for authentication. The flexibility of operation modes makes P-2900 series the perfect one-box solution for multiple services deployments.

Commercial Service Cable Gateway

P-2900 SERIES

# MODEM



Commercial Service Cable Gateway

P-2900 SERIES



## Specifications

### Router

- Dual, bridge and router mode operation
- RIPv1 and RIPv2 with key-string authentication by MD5
- DHCP client/server
- DHCP and NAT support both public and private network on the LAN ports simultaneously
- Static IP mode with enabled/disabled DHCP and NAT configuration for Local Area Network
- Supports up to 253 users
- Support VPN pass-through for PPTP, L2TP, IPsec
- Text based configuration file make deployment simplified
- TACACS+ authentication
- Support Advance QoS features
- Radius authentication\*

### Management

- Support Telnet management sessions with CLI
- Remote management via SNMP; support SNMPv1 v2 v3
- Remote management via WAN and CM interface from WAN side
- 2 tiers Web GUI for users and operators
- Backup/Restore Configuration (Local Flash)
- WEB/FTP/TFTP Firmware Upgrade
- NTP client\*

### Telephony

*(SIP and DECT protocols may be available upon request)*

- Voice Signaling: MGCP
- Voice Codec: G.711/G.729/T.38
- Echo cancellation
- Support for class services
- PLC
- Call Waiting
- Cancel Call Waiting
- Call Forwarding (no-answer, busy, variable)
- Three Way Conference
- Voicemail: Message Waiting Indicator
- Automatic Recall
- Distinctive Ringing/Call Waiting
- Calling Number Delivery
- Calling Identity Delivery on Call Waiting
- Calling Identity Delivery Blocking
- Call Blocking/Call Blocking Toll restrictions

### L2TPv3 VPN

#### (Ethernet over DOCSIS)

- L2TPv3 Authentication
- L2TPv3 interoperable with Cisco Router
- Support user specify multi-port tunneling
- LAC to LNS mode
- LAC to LAC mode
- SNMP to monitor the tunnel remotely

### Security

- BPI, BPI+
- DOCSIS packet filter
- SPI, DoS firewall

### Cable Standard

- DOCSIS 2.0
- DOCSIS 1.1/1.0 backward compatible
- PacketCable 1.5

### Downstream

- Central Frequency: 91 to 857 MHz
- Channel bandwidth: 6 MHz
- Input impedance: 75 ohms (Nominal)
- Modulation: 64 QAM or 256 QAM
- Maximum data rate: 30 Mbps (64 QAM) 43 Mbps (256 QAM)

### Upstream

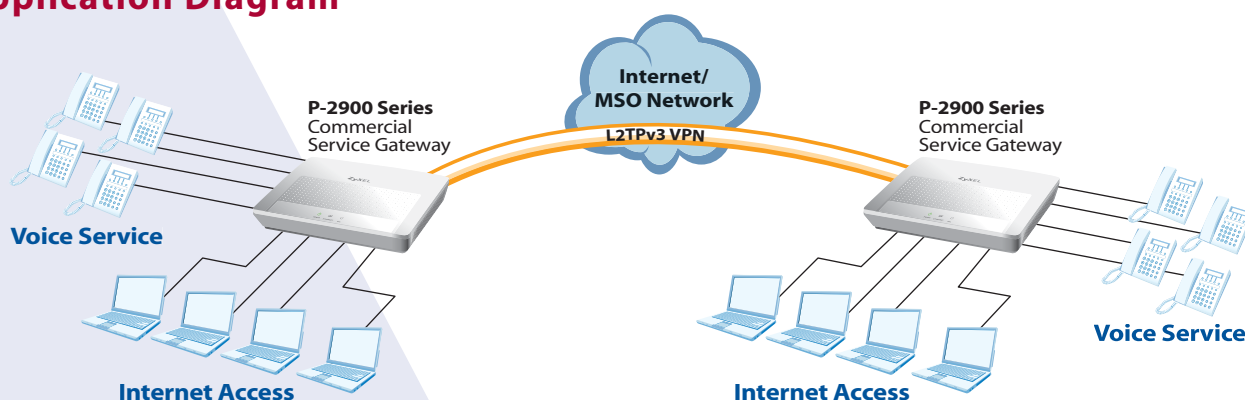
- Frequency range: 5 to 42 MHz
- Bandwidth: 200 KHz/400 KHz/800 KHz/1.6 MHz/3.2 MHz/6.4 MHz
- Output impedance: 75 ohms (Nominal)
- Modulation: 8/16/32/64/128 QAM or QPSK
- Maximum data range: 30 Mbps

### Hardware Specifications

- Female "F" Type RF connector to CATV network
- 1-port USB 1.1 series B connector
- 4-ports RJ-45 10M/100M Ethernet
- 4-ports RJ-11 Foreign Exchange Station (FXS) ports for IP telephone
- Color coating connectors: Ethernet: Yellow; USB: Blue; FXS: Grey
- Restore Factory Defaults/Reboot button
- 4 hours on hook, 2.2 hours off hook for one battery (3 cells)

\* Future enhancement

## Application Diagram



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

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