

Prestige 964 Cable Router with 11g AP

DOCSIS 2.0/1.1/1.0 Compliant



ZyXEL's Prestige 964 Cable Router with AP (P964APR) leverages the DOCSIS 2.0 Advanced Time Division Multiple Access (A-TDMA) and Synchronous Code Division Multiple Access (S-CDMA) technologies with 3 times the upstream capacity of DOCSIS 1.1/1.0 systems. The Prestige 964 is interoperable and backward compatible with DOCSIS 1.1 and 1.0 systems so cable operators can rapidly deploy the Prestige 964 today for a timely transition in service without interruption. The flexibility of Prestige 964 allows cable operators to maximize today's infrastructure investments while offering higher-bandwidth service for tomorrow's requirements.

Supporting static IP networks coupled with DHCP and NAT, P964APR is ideal for business class customers to build up a public and private network simultaneously. The routing information uses a key-string encrypted via an MD5 hash algorithm for authentication with the CMTS. The text-based configuration file (accessed through telnet interface) simplifies system deployment and TACACS+ server support also enables access control for all interfaces.

P964APR incorporates valuable features such as simplified troubleshooting with front panel status indicator LEDs, built-in 4-port 10/100M auto-sensing, auto MDI-X Ethernet switching, and remote status monitoring over the cable network. The P964APR integrated with 802.11g Access Point enables you to seamlessly roam your broadband network at 54Mbps anywhere throughout the office or surrounding your home via the built-in high performance antennas. Meanwhile, the wireless access is highly secured by rich authentication and encryption features.

Benefits

- DOCSIS 2.0™ compliant
- DOCSIS 1.1/1.0 backward compatible to current investment
- Integrated A-TDMA and S-CDMA technology-capable of providing up to 30** Mbps upstream data rate
- Remote management via SNMP
- 4-port 10/100 Base-T Ethernet and USB 1.1 connectivity
- 802.11g/11b up to 54Mbps ultra high data rate wireless connectivity
- OS Compatibility
 - Ethernet connectivity: Windows 95/98/2000/ME/XP, Macintosh, Linux and UNIX
 - USB connectivity drivers: Window 98/2000/ME/XP
- Front panel LEDs and web-based diagnostic interface for easy troubleshooting
- Remote status monitoring over the cable network
- Support up to 253 wired and wireless users (router mode)
- Bridge mode or router mode operation
- Support NAT private networks with enabled/disabled DHCP
- Support public IP networks assignment ranging from a /30 to a /24 IP addresses with enabled/disabled DHCP
- Support both public and private network on the LAN ports simultaneously
- Support both MSO and end user levels configuration, allow users to configure LAN only
- The text based configuration file makes deployment simple
- RIP support key-string encrypted with MD5 for authentication with the CMTS
- TACACS+ server support allows Telnet access control to all interfaces for MSO
- PTP and IPsec VPN passthrough provides high-end security for telecommuters or SOHO/SMB in router mode
- Public IP passthrough feature allows specific application to be transparently bridged in router mode
- WPA, RADIUS, 802.1x, SSID, MAC WLAN users authentication /access control
- AES/TKIP/WEP enable wireless data encryption

Features & Specifications

Downstream

- Frequency range: 88 to 860 MHz
- Channel bandwidth: 6MHz
- Input impedance: 75ohms (Nominal)
- Modulation: 64QAM or 256QAM
- Maximum data rate: 38 Mbps
- Symbol rates: 64 QAM (5.069 Msym/s)
256 QAM (5.361 Msym/s)
- Operating level: -15 to +15 dBmV

802.11g Access Point

- Radio data rate and receive sensitivity:
802.11g (10% PER): 54@-68, 48@-70,
36@-76, 24@-78, 18@-82, 12@-84, 9@-86,
6@-87 (Mbps@dBm)
- 802.11b (8% PER): 11@-86, 5.5@-88, 2@-90,
1@-92 (Mbps@dBm)
- Frequency range: 2.4~2.497 GHz
(depending on locality)
- Transmit power: Typical 15 dBm
- Security & authentication: IEEE 802.1x,
WPA, RADIUS support, SSID, MAC control
- Data encryption: AES, TKIP, 64/128bits WEP
- Radio modulation
802.11g: OFDM with BPSK (6/9Mbps),
QPSK (12/18Mbps), 16 QAM (24/36Mbps),
64 QAM (48/54Mbps)
- 8802.11b: CCK (11/5.5Mbps), DQPSK
(2Mbps), DBPSK (1Mbps)

Network Management

- Web-based diagnostic interfaces
- SNMP v1, v2 & v3
- Remote status monitoring
- Text based configuration file
- TACACS+ server support
- Up to 253 wired and wireless users
(router mode)

Electrical Feature

- Power consumption: 9VDC @ 1.3 Amps
(typical)
- Power adaptor
North America: 120VAC, +/- 5%, 60 Hz
Europe: 230 VAC, +/- 5%, 50~60 Hz

* With A-TDMA or S-CDMA enabled CMTS

** Speed of 30 Mbps is attainable only with A-TDMA or S-CDMA technology.

*** EuroDOCSIS version is on request

Upstream

- Frequency range: 5 to 42 MHz
- Bandwidth: 200 KHz /400 KHz /800 KHz
/1.6MHz /3.2 MHz /6.4* MHz
- Output impedance: 75 ohm (Nominal)
- Modulation: 8*/16/32*/64*/128* QAM or QPSK
- Maximum data rate: 30 Mbps
- Symbol rates: 160, 320, 640, 1280, 2560
and 5120* ksym/s

Operating level:

- A-TDMA: +8 to +54 dBmV (32QAM, 64QAM)
+8 to +55 dBmV (8 QAM, 16QAM)
+8 to +58 dBmV (QPSK)
- S-CDMA: +8 to +53 dBmV (all modulations)

Routing and IP management

- RIPv1 and RIPv2 with key-string authentication by MD5
- DHCP client/server
- NAT (Network Address Translation) support
- Static IP network assignment
- Support public and private networks simultaneously

Cable Security

- BPI, BPI+
- DOCSIS packet filter

Network Protocol

- User MAC protocol: Ethernet / IEEE802.3; IEEE802.3u
- Transparent bridging

Mechanical & Environment

- LEDs: PWR, SYS, LAN1, LAN2, LAN3, LAN4,
USB, WLAN, DATA, CABLE
- Dimension: 197(W) x 143(D) x 31(H) mm
7.76(W) x 5.63(D) x 1.22(H) inches
- Operating temperature: 0 °C to +40 °C (32 °F to 104 °F)
- Storage temperature: -30 °C to +60 °C (-22 °F to 156 °F)
- Humidity: 5% to 90% Non-condensing

Regulatory Approvals

- Electromagnetic emissions: FCC Part 15, Class B; EN50081,
50082, 55022, 61000, 301 489
- Safety approval: UL1950, CSA C22.2 No 950, EN60950,
IEC 950

Rear Panel

- Female "F" Type RF connector to CATV network
- 4-port RJ-45 connector to the 10M/100M Hub, Switch or Computer
- USB series B connector to computer
- 2 * 2.4GHz WLAN dipole antennas



Package Contents

- Prestige 964 Cable Router with 11g AP
- Ethernet cable
- USB cable
- Power adaptor
- Installation CD-ROM with USB drivers
- Quick installation guide
- 2-year standard limited warranty



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