

# Prestige 964 Cable Router

## DOCSIS 2.0 and 1.1 Based



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

Supporting static IP network and with DHCP and NAT, Prestige 964 cable router 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. Text based configuration file through telnet interface make system deployment simplified and TACACS+ server support also enables access control for all interfaces.

Prestige 964 incorporates valuable features such as simplified troubleshooting with front panel status indicator LEDs, built-in 5-port 10/100M auto-sensing, auto MDI-X Ethernet switch, remote status monitoring over the cable network, proven reliability and quality, and easy plug & play installation. What's more, Prestige 964 has new compact stylish design to meet tight space installation requirements and is priced competitively.

### Benefits

- DOCSIS™ 2.0 CableLab® Certification
- 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
- 5-port 10/100 Base-T Ethernet and USB connectivity
- OS Compatibility
  - For Ethernet connectivity: Windows®95/98/2000/ME/XP, Macintosh®, Linux and UNIX
  - For 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
- Supports up to 32 users (1 via USB and up to 31 via Ethernet or 32 users on Ethernet)
- Dual bridge and router mode operation
- DHCP and NAT support both public and private network on the LAN ports simultaneously.
- Support static IP network assignment ranging from a /30 to a /24 IP addresses.
- Static IP mode with enabled/disabled DHCP and NAT configuration for Local Area Network
- The text based configuration file make deployment simplified.
- RIP support key-string encrypted with MD5 for authentication with the CMTS
- The TACACS+ server support allows access control to all interfaces for MSO.

### Features & Specifications

#### Downstream

- Operating Frequency Range: 88 MHz 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 Range: -15 dBmV to +15 dBmV

#### Network Management

- Web-based Diagnostics Interface
- SNMP V1, V2 & V3
- Remote Status Monitoring
- Text based configuration file
- TACACS+ server support
- Up to 32 Users (1 via USB and up to 31 via Ethernet or 32 users on Ethernet)

#### 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

#### Electrical Features

- Power consumption: 5 Vor9VDC @ 1.3 Amps (typical)
- Power Adaptor  
North America: 120 VAC, +/- 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

- Operating Frequency Range: 5 MHz to 42 MHz (edge to edge)
- 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 Range:  
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)

#### CPE Network Interface

- Ethernet 10/100 BaseT, USB

#### Security

- BPI, BPI+
- DOCSIS Packet Filter

#### Cable WAN Interface

- F-connector, female 75 ohm

#### Network Protocol

- User MAC Protocol: Ethernet / IEEE802.3; IEEE802.3u
- Transparent Bridging

#### Mechanical & Environment

- LEDs: PWR, SYS, LAN, USB, 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

### Rear Panel

- Female "F" Type RF Connector to CATV network
- USB Series B Connector to computer
- 5-port RJ-45 Connector to the 10M/100M Hub, Switch or Computer

### Package Includes

- Prestige 964 Cable Router
- Ethernet cable
- USB cable
- Power adaptor
- Installation CD-ROM with USB drivers
- Read Me First
- 2-year Standard Limited Warranty



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