

# WH-FTTX-S041 Lite-Managed FTTX CPE

The Whitebox S041 is a lite-managed FTTX Customer Premise Equipment (CPE) with 4 x 10/100TX ports + an optional port of 1 x 100FX or 1 x 10/100TX. The S041 is hardware NAT capable with a throughput close to 200Mbps which provides customers with access to higher speed applications and triple player features (VoIP/Video/Data). The unit supports IGMP snooping for IPTV deployment, VLANs to separate services, Quality of Service (QoS) based on port, 802.1p, and DiffServe Code Point (DSCP), and management via an intuitive Web Interface or via SNMP. In summary the WH-FTTX-S041 is a 802.3ah OAM featuring VLANs, IGMP, QoS, enhanced security, and simplified deployment to provide a flexible configuration to meet different needs.



## Highlights

- IGMP snooping
- Management VLAN
- OAM 802.3ah
- Wire speed

## Key LAN Features

- WH-FTTX-S041 can be configured as NAT mode, Bridge mode (switch), or Mixed mode
- 4 port 10M/100M auto-detect Half/Full duplex switch ports with TX interfaces and option at either 1 port 100M FX or 1 port 10/100TX interface.
- Built-in 96K Byte SRAM buffer memory.
- Supports 2K MAC addresses entry tables with 4-ways associative hash algorithm
- Support IGMP V1, V2, and IGMP snooping for Multicast Control
- Support 32 hardware IGMP Table for IGMP V1/V2 ( Multicast Table)
- Support PPPoE/PPP video packet accelerator. PPPoE as a shortcut for IGMP streaming
- Four queues per port for QOS.
- Supports priority features by Port-Based, 802.1p VLAN, Ethernet Type and IP Diffserv.
- Supports Store & Forward architecture and performs forwarding and filtering at non-blocking full wire speed.
- Supports 802.3x Flow Control pause packet for Full Duplex in case buffer is full.
- Supports Back Pressure function for Half Duplex operation in case buffer is full.
- Supports packet length up to 1522 (Default) / Maximum 1536 bytes .
- Scalable rate limit. Per port Ingress or Per Egress Queue bandwidth Control. ( min. 15.6kbit/s, up to 100M)
- Broadcast/ Multicast Storm suppression.
- 802.1Q VLAN. Up to 16 groups
- Supports buffer allocation with 512 bytes per block
- Supports per port Single/Dual color mode with Power On auto diagnostic.
- Hardware base NAT/NAPT, 4K learning MAC addresses
- Supports self-learning bridge specified in IEEE 802.1d Transparent Bridging
- supports up to 4096 Transparent Bridging among 10/100Mb Ethernet interface

## Key Router Features

- NAT (Network Address Translation) / NPAT (Port Address Translation) ALGs (Application Level Gateways): such as NetMeeting, MSN Messenger, FTP, Quick Time, Real Player, VPN pass-through with multiple sessions, SIP, etc.
- Port Forwarding: the users can setup multiple virtual servers (e.g., Web, FTP, Mail servers) on user's local network.
- Support Static routes
- DHCP Client/Relay/Server
- Time protocol can be used to get current time from network time server
- Support IP/Bridge QoS for prioritize the transmission of different traffic classes
- Support 802.1Q VLAN Tagging

<b>Standards</b>	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.3u 100BaseTX/100BaseFX
<b>Features</b>	<b>Number of Ports:</b> 4 x 10/100BaseT with RJ-45 Connector and 1 x 100BaseFX with Fiber Connector or 1 x 10/100TX
<b>Data Transfer Rate</b>	<b>Ethernet:</b> 10Mbps/Half-Duplex 20Mbps/Full-Duplex <b>Fast Ethernet:</b> 100Mbps/Half-Duplex 200Mbps/Full-Duplex
<b>Transmission Media</b>	10BaseT Cat. 3, 4, 5 UTP/STP, up to 100 m 100BaseTX Cat. 5 UTP/STP, up to 100 m <b>100BaseFX:</b> 50/125µm or 62.5/125µm Multi Mode SC-Type Fiber optic cable, up to 2 km 9/125µm or 10/125µm Single Mode Fiber optic cable
<b>Led Indicators</b>	<b>Per Port:</b> (TX): Link/Act, Speed, FDX/COL (FX): Link/Act, FDX/COL Per Unit: Power
<b>Power Requirement</b>	DC 9V/1A
<b>Power Consumption</b>	8 Watts (Max)
<b>Dimensions</b>	14.8 x 9.5 x 3 (L x W x H)
<b>Weight</b>	0.3 5kg
<b>Operating Temperature</b>	0 to 45°C
<b>Storage Temperature</b>	-20 to 90°C
<b>Humidity</b>	10 to 90% RH (non-condensing)
<b>Certifications</b>	FCC Class B, CE

## Web Management Features

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- Web UI management
- HTTP Web-based Management
- Port base VLAN optional
- Tag-base VLAN ( IEEE 802.1q)
- IEEE 802.1p Priority Queuing ( CoS)
- QoS
- LAN TOS/DSCP priority
- Fire Wall – LAN MAC filter
- Telnet ( optional )
- Remote Reboot ( optional )
- System IP configuration
- Default at NAT mode, or Convert Bridge mode to Switch, or Special mode to mix at NAT and Bridge mode
- HTTP firmware upgrade
- Port Mirror ( optional )
- Bandwidth control
- IGMP v1/v2/v3 snooping
- IGMP fast leave
- IEEE802.3ah OAM
- IEEE802.3d spanning tree
- IEEE802.3x flow control
- Port speed config
- SNMP global config & Trap config
- SNMP V2c Agent