# **ZyXEL GS2210-24LP V4.30(ABEO.0)C0**

# Release Note/Manual Supplement

Date: May.16, 2016

This document describes the features in the GS2210-24LP product for its 4.30(ABEO.0)C0 release.

# Support Platforms:

ZyXEL GS2210-24LP V4.30(ABEO.0)C0 supports models: ZyXEL GS2210-24LP.

# Version:

OS Version: V4.30(ABEO.0) | 05/16/2016 13:37:55 BootBase Version: V1.00 | 04/14/2016 10:47:40

# Default Bootbase Setting:

ZyNOS Version	V4.30(ABEO.0)   05/16/2016 13:37:55	
Bootbase Version	V1.00   04/14/2016 10:47:42	
Serial Number	xxxxxxxxxxxx	
Vendor Name	ZyXEL	
Product Model	GS2210-24LP	
ZyNOS Code Model	GS2210	
ZyNOS ROM address	b40a0000	
System Type	8	
First MAC Address	0019CB000001	
Last MAC Address	0019CB00001D	
MAC Address Quantity	29	
Default Country Code	FF	
Boot Module Debug Flag	00	
CPLD Version	N/A	
RomFile Version	41	
RomFile Checksum	c06f	
ZyNOS Checksum	6983	
SNMP MIB level & OID	060102030405060708091011121314151617181920	
Main Feature Bits	C0	
Other Feature Bits		
02 5F 00 00 00 00 00 00-00 00 00 00 00 00 00		
00 00 00 00 00 00 00 00-00 13 00 00 00 00		

# Main Features:

- 1. 24 Auto MDI/MDI-X 10Base-T/100Base-TX/1000Base-T
- 2. 4 dual personality GbE
- 3. PWM Fan module
- 4. Locator LED
- 5. 24 PoE ports with 802.3af and 802.3at compliant.
- 6. 16K layer 2 MAC addresses table
- 7. Jumbo frame length 9K
- 8. IEEE 802.1D transparent bridging
- 9. IEEE 802.1w, RSTP
- 10. IEEE 802.1s, MSTP

- 11. ZyXEL MRSTP
- 12. Rule-based bandwidth control
- 13. Port-based egress traffic shaping
- 14. IEEE 802.3x flow control.
- 15. DSCP to 802.1p priority mapping
- Port-based VLAN
- 17. Protocol-based VLAN
- 18. IP subnet based VLAN
- 19. IEEE 802.1Q Static VLANs
- 20. IEEE 802.1Q dynamic VLANs
- 21. VLAN trunking
- 22. GVRP
- 23. IEEE 802.3ad LACP
- 24. Port mirroring
- 25. Support rate limiting, minimum step 64K both ingress and egress
- 26. Broadcast Storm Control
- 27. Layer 2 MAC filtering
- 28. Layer 3 IP filtering
- 29. Layer 4 TCP/UDP socket filtering
- 30. DHCP snooping
- 31. DHCP client
- 32. DHCP relay/DHCP relay per VLAN
- 33. DHCP option 82
- 34. IGMP v1/v2/v3 snooping
- 35. Static multicast forwarding
- 36. 802.1x port authentication
- 37. Port Security
- 38. Static MAC filtering/forwarding
- 39. Multiple RADIUS servers
- 40. Multiple TACACS+ servers
- 41. AAA by RADIUS / TACACS+
- 42. SSH v1/SSH v2/SSL
- 43. Intrusion Lock
- 44. MAC Freeze
- 45. ARP Inspection
- 46. Static IP/MAC/Port binding
- 47. Policy-based security filtering
- 48. IEEE 802.1Q VLAN port isolation
- 49. IP Source Guard
- 50. Guest VLAN
- 51. ACL packet filtering
- 52. PPPoE IA and option 82
- 53. CPU protection
- 54. Recovery mechanism for Error disable port/reason
- 55. Loop guard
- 56. Dual configuration files
- 57. Dual images
- 58. IGMP snooping fast leave
- 59. IGMP snooping statistics
- 60. IGMP throttling
- 61. SNMP v1, v2c, v3
- 62. SNMP trap group
- 63. Interface related trap can be enable/disable by port
- 64. RMON
- 65. ICMP echo/echo reply
- 66. Syslog
- 67. DHCPv6 client and relay
- 68. NDP: host
- 69. IPv6 address stateless auto-configuration
- 70. ZyXEL clustering management

- Management through console, telnet, SNMP or web management
- 72. Firmware upgrade by FTP/WEB/TFTP
- 73. Configuration saving and retrieving by WEB/TFTP/FTP
- Support Multiple login
- 75. Configure Clone
- Multilevel CLI
- 77. Daylight Saving
- 78. NTP
- 79. RS232 console port
- 80. Service Access Control Timeout
- 81. IEEE 802.1AB LLDP
- 82. IEEE 802.1AB LLDP-MED
- 83. Authorization on console
- 84. Password encryption
- 85. User access right
- 86. ZyXEL Feature-based private MIB
- 87. ZyXEL ESBU common MIB
- 88. Green Ethernet
- 89. Cable diagnostics
- 90. Support PoE/Voltage/Temperature/Fan Fault Trap
- 91. Support show PoE per port power consumption information, and classification
- 92. SNMP trap for error recovery
- 93. MAC aging time
- 94. MAC-based VLAN
- 95. Voice VLAN96. Private VLAN
- 97. MLD snooping proxy
- 98. ZyXEL One Network (ZON)
- 99. ZyXEL Neighbor Management
- 100. MAC authentication (per-port)
- 101. MAC authentication (trust VLAN)
- 102. PoE power-up mode
- 103. ACL 2.0
- 104. Time Range
- 105. Reload Factory Default
- 106. Auto Port Speed
- 107. Time-based PoE
- 108. BPDU Guard
- 109. Anti-ARP scan
- 110. Root Guard
- 111. ZULD
- 112. Broadcast/Multicast storm control log
- 113. Default IP setting to DHCP
- 114. IPv6 source guard
- 115. DHCPv6 snooping
- 116. DHCPv6 Trust/Untrust Server
- 117. System Log Enhancement (Add Port description)
- 118. CLI add current configuration information
- 119. WEB support OAM & ZULD
- 120. Trunk and mirror co-worked
- 121. ZyXEL Neighbor Management enhancement
- 122. WEB add refresh button
- 123. Logging trap
- 124. IPv6 DNS
- 125. IPv6 trace route
- 126. WEB status add SNMP field message.
- 127. ZON support DNS2.
- 128. SSL DHparam length from 512 bits to 2048 bits

### **Enhanced Features:**

None

### Bug Fix:

None

#### Known Issue:

- 1. Policy rule: for the ARP/RARP packet, policy rule qualifies the sender MAC address, not the source MAC address.
- 2. IP source guard: creates a legal static IP source binding first, and then send illegal IP traffic (the same MAC address but different IP address). DUT cannot filter the illegal IP traffic.
- 3. Green Ethernet: short reach does not support display short reach status.
- 4. RSTP: enable RSTP and connect with D-Link, DUT would run STP state machine.
- MSTP: When set port to be non-edge port, the port's MSTP state changes immediately from discarding->forwarding.
- 6. Cable diagnostic: the accuracy of cable diagnostic is  $+15m \sim -15m$ . And plug out the cable line, the value of distance to fault would not be 0.00.
- 7. When RSTP is enabled with ring topology, LACP can't be activated at the same ports.
- 8. Switch can learn remote LLDP information on LACP not sync port.
- 9. GS2210 is cluster manager. The cluster member (GS3700/XS3700) didn't upgraded F/W via FTP.

# Limitation of Settings:

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1.	802.1Q Static VLANs	1K
2.	Static MAC forwarding entry	256
3.	MAC filtering entry	256
4.	Cluster member	24
5.	Protocol based VLAN entries per port	7
6.	Port-security max address-limit number	16K
7.	Syslog server entry	4
8.	IP source guard entry	512
9.	IP subnet based VLAN entry	16
10.	DHCP snooping binding table	16K
11.	Multicast group	1024
12.	ACL	256
13.	DHCP relay Entry	16
14.	Trunk groups	14
15.	Per trunk group port number	8
16.	MSTP instance	0-15
17.	MAC-based VLAN	50
18.	Voice VLAN OUI entry	6
19.	ZON neighbor per-port maximum clients	10

# Firmware Upgrade:

The GS2210-24LP uses FTP to upgrade firmware in run-time through its built-in FTP server. You can use any FTP client (for example,  $\underline{\text{ftp.exe}}$  in Windows) to upgrade GS2210-24LP. The upgrade procedure is as follows:

# **Upgrade GS2210-24LP Firmware:**

C:\> ftp <GS2210-24LP IP address>
User : admin
Password: 1234

230 Logged in

```
ftp> put 430ABEOOCO.bin ras-0
ftp> bye
```

#### Where

- User name: the management user name, admin by default.
- Password: the management password, 1234 by default.
- 430ABE00b1.bin: the name of firmware file you want to upgrade.
- $\bullet$  ras-0: the internal firmware name in GS2210-24LP (store at first flash).
- ras-1: the internal firmware name in GS2210-24LP (store at second flash).

# Configuration Upgrade:

The GS2210-24LP uses FTP to upgrade configuration in run-time through its built-in FTP server. You can use any FTP client (for example, <a href="ftp.exe">ftp.exe</a> in Windows) to upgrade GS2210-24LP. The upgrade procedure is as follows:

# **Upgrade GS2210-24LP Configuration:**

```
C:\> ftp <GS2210-24LP IP address>
User name: admin
Password: 1234
230 Logged in
ftp> put 430ABEOOCO.rom rom-0
ftp> bye
```

#### Where

- User name: the management user name, admin by default.
- Password: the management password, 1234 by default.
- 430ABEO0b1.rom: the name of configuration file you want to upgrade.
- rom-0: the internal configuration name in GS2210-24LP.