

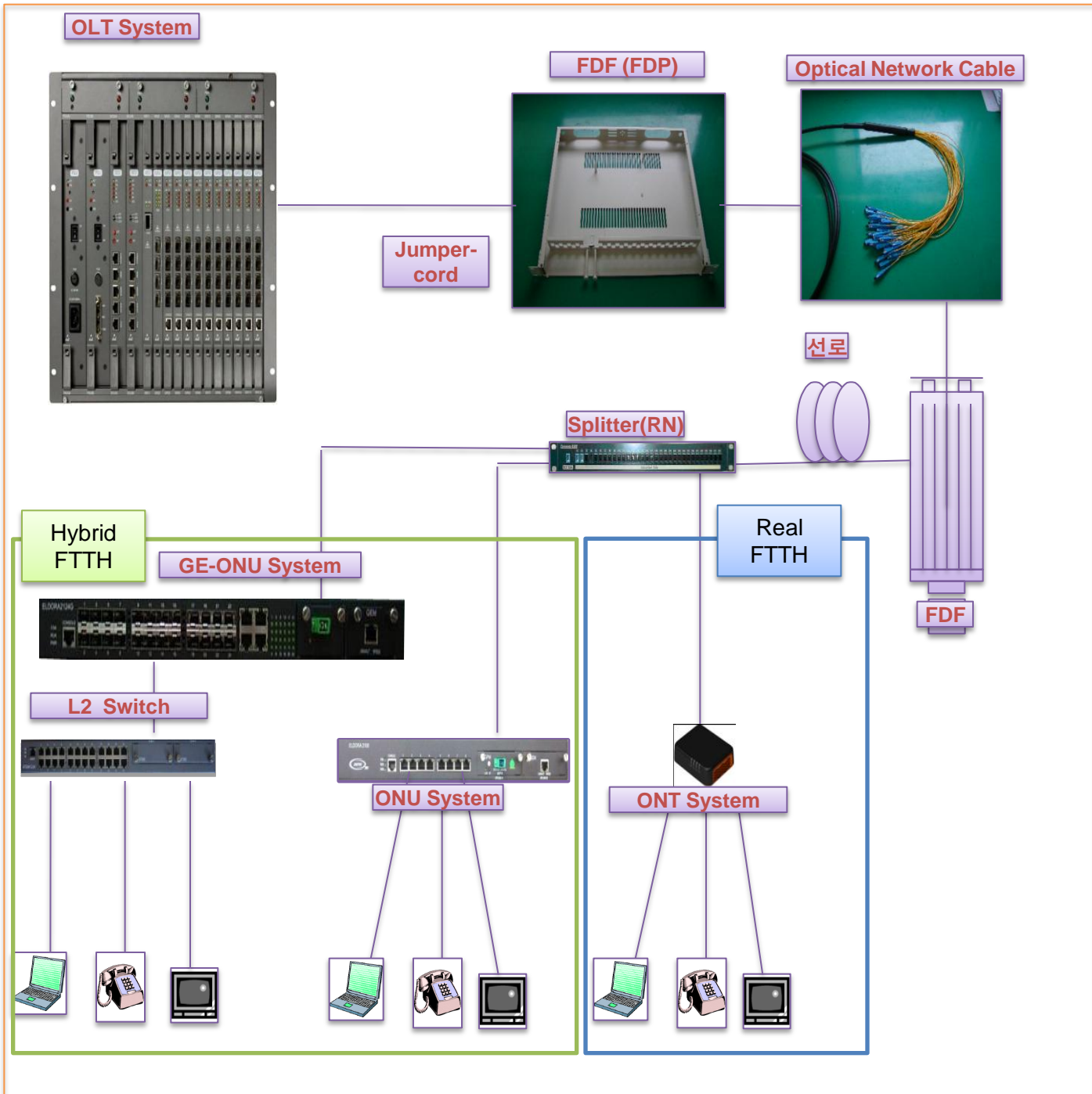
16. G-PON system

a. OLT

b. ONU

c. ONT

G-PON Network Solution



16. G-PON System

a. OLT (Optical Line Terminal)

ELDORA-5116



6U X 19"



A



B



C



D



E



F

- A. PSU – Power module (AC/DC)
- B. SCU - System control and L2/L3 switching unit (basic, extended)
- C. GEU - GbE Uplink unit (4port, Giga SFP interface)
- D. GPU - GPON Interface unit (4port, PON SFP interface)
- E. XEU - 10GbE Uplink unit (1port, 10G SFP interface)
- F. FAN – Detachable FAN Module

Characteristics

ITU-T G.984 Standard support

- Other Vendor access support by standard OMCI
- PON duplication support
- Perfect DBA (Dynamic Bandwidth Allocation) support

Interface

- 4 Ports PON Interface Card support
- 4 Ports 1Gbps Interface Card support
- 1 Port 10Gbps Interface Card support

Traffic and security control

- Per-port transmission bandwidth management support
- Provides CPU overload protection
- Broadcast/ Multicast Storm Control support
- MAC, DHCP, NetBIOS, NetBEUI, NBT Filtering
- Per-port MAC address learning limiting support
- Access control support
- TCP-SYN Attack Prevention function support
- TACACS+ function support
- IP Based QoS function support (Diff Serve, RSVP)
- PON section Traffic control function support (OMCI)

High-performance switching/routing technology

- Wire speed L2/L3 forwarding without packet loss
- 32K MAC address table (16K ARP Table)
- 4K 802.1Q VLAN
- IGMP v2/3, IGMP snooping and proxy support
- PIM-SM/ SSM and IP Multicasting support
- 8 ports /group link aggregation (802.3ad)
- Fast/Multiple STP of 802.1w/1s* support
- 802.1p Class of Service support
- Unicast IP Routing(RIP, OSPF, BGP) support

System management

- CLI and Telnet based management
- SNMP v1/2c based network management
- Statistics support through MIB-II, RMON MIB, Bridge MIB
- Remote software upgrades via FTP, TFTP
- System event logging
- 10/100BaseTX Management Port support
- Separate System Mirror Port support (100/1000-TX)
- ALARM function support
- Easy-to-Control function support via EMS

b. OLT (Optical Line Terminal)

GE-ONU(Gigabit Ethernet ONU)

ELDORA-2324G ONU(Optical Network Unit) System

ELDORA-2324G is L2 Ethernet and GPON switch. It provides Option Module 2port which is capable of Gigabit Ethernet, GPON interface to the uplink and 24 1000Base-Xs to the downlink.



1U X 19”



G-PON, Ethernet type
Option Board

Layer 2 switching

IEEE 802.1p : Packet Priority
IEEE 802.3ad : Link Aggregation
IEEE 802.1d : STP
IEEE802.1w : RSTP
IEEE 802.1q : VLAN ID/Trunking
Storm Control processing
function(port unit setup)
MAC Entry - 16K Entry

QOS

Classification : VLAN ID, 802.1p,
SRC/DST IP, DSCP, TCP/UDP
SRC/DST Port
Marking : 802.1p, DSCP
Scheduling : SPQ+(WRR or WFQ)

Multicast

IGMP v2
IGMP Snooping, IGMP Join/Leave Suppression
IGMP Fast Leave, IGMP Static Join

DHCP-related

DHCO Relay
DHCP Option: Option 82, 77

Security

DHCP Filtering function
NetBeui, NetBIOS, NBT,
Vista LLTD blocking
Mac flood guard function
ARP Spoofing blocking
function
Max Host
MAC Filter

Management

CLI / SNMP / port mirroring /
remote software upgrade

FE-ONU(Fast Ethernet ONU)

ELDORA-2124 ONU System

ELDORA-2124 is L2 Ethernet and GPON switch. It provides Option Module 2port which is capable of Fast Ethernet, Gigabit Ethernet, GPON interface to the uplink and 24 Fast Ethernet interfaces to the downlink.



1U X 19”



**G-PON, Ethernet type
Option Board**

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Storm Control processing
function(port unit setup)
MAC Entry - 16K Entry

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DHCP-related

DHCO Relay
DHCP Option: Option 82, 77

Security

DHCP Filtering function
NetBeui, NetBIOS, NBT, Vista
LLTD
blocking
Mac flood guard function
ARP Spoofing blocking
function
Max Host
MAC Filter

Management

CLI / SNMP / port mirroring /
remote software upgrade

FE-ONU(Fast Ethernet ONU)

ELDORA-2108 ONU System

ELDORA-2108 is L2 Ethernet and GPON switch. It provides Option Module 2port which is capable of Fast Ethernet, Gigabit Ethernet, GPON interface to the uplink and 8 Fast Ethernet interfaces to the downlink.



1U X 19"



G-PON, Ethernet type Option Board

Layer 2 switching

IEEE 802.1p : Packet Priority
IEEE 802.3ad : Link Aggregation
IEEE 802.1d : STP
IEEE802.1w : RSTP
IEEE 802.1q : VLAN ID/Trunking
Storm Control processing
function(port unit setup)
MAC Entry - 16K Entry

QOS

Classification : VLAN ID, 802.1p, SRC/DST IP, DSCP, TCP/UDP SRC/DST Port
Marking : 802.1p, DSCP
Scheduling : SPQ+(WRR or WFQ)

Multicast

IGMP v2
IGMP Snooping, IGMP Join/Leave Suppression
IGMP Fast Leave, IGMP Static Join

DHCP-related

DHCO Relay
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DHCP Filtering function
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LLTD blocking
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CLI / SNMP / port mirroring /
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c. ONT (Optical Network Terminal)

ONT System

ELDORA-1102 ONT(Optical Network Terminal) System

ELDORA-1102 provides the highest class of Real-FTTH solution in the multimedia network environment needing a lot of bandwidth by supporting 1 Core G-PON, 2 port 10/100/1000 Ethernet port in the G-PON environment.



**1 Port G-PON
2 Port
10/100/1000Base-TX**

Excellent switch system

- Up 1.25Gbps /Down 2.5Gbps speedy traffic transmitting G-PON ONT system
- 16MB DRAM, 8MB Flash Memory
- Operating status can be confirmed via LED
- Dying Gasp Message transmission function
- SF(Signal Failure), SD(Signal Degrade) Monitoring
- Rx Optical Level Measurement and search function
- Provides switching function for multimedia services(IGMP Snooping v2, QoS)
- ONT software image upgrade using OMCI is possible

Layer 2 switching functionality

- 가입자 Port Up/Down function
- 802.1Q VLAN Tagging
- Marking in accordance with the value of 802.1p
- SPQ Scheduling provided
- IGMP Snooping v2 function
- Ingress and Egress Rate Limit function with 1M as a unit

Network Security Technology

- MAC Limit function
- AES encryption function