

S5 Scalable Service Platform



Product Overview

The S5 platform is high performance switch router that acts as PON OLT and Ethernet Aggregation Switch. It provides various optical links while generating and controlling the services. It offers the optical links of Gigabit Ethernet, GEAPON and WDM PON. The S5 platform makes access network simple by integrating multiple functions into a single scalable platform. With its high functionalities and scalability, it enables both of residential and commercial services with a single platform.

The S5 consists of 3 different types of chassis with various Switching & Control Module(SCM) and Line Interface Module(LIM). The capacity of back plane, SCM and LIM are scalable in terms of throughput and density. The 10 Gigabit Ethernet is ready for the service of today and future. SCM and LIM are compatible between chassis to implement a system with mix and match. With this modular designs, it provides the great flexibility for operators to have wide ranges of options depending on their services and density while keeping simplicity with same function and performance

Chassis

S506	1 SCM slots, 4 LIM slots, 4 RU, DC/AC
S511	2 SCM slots, 8 LIM slots, 7 RU, DC/AC
S518	2 SCM slots, 16 LIM slots, 12 RU, DC only

Switching & Control Module


SCM72G	88Gbps Switch Fabric, 4 GbE SFP for default uplink, optional 2 ports of 10GbE XFP or 4 GbE Tx for additional uplink
SCM24G	24Gbps Switch Fabric, 4 GbE SFP for default uplink, optional 4 GbE Tx for additional uplink

Line Interface Module


Gigabit Ethernet	4, 8GbE Tx and Fx SFP
GEAPON	4 ports GEAPON / 2 ports 2.5G EPON
	8 ports GEAPON / 4 ports 2.5G EPON
WDM-PON	16 channels of Gigabit with double slot form factor

Key Features

- **High performance OLT platform**
 - Future proofed optical links : Gigabit Ethernet, GEAPON and WDM PON
 - Multiple function including control of services and management of subscribers
 - Common platform for both of residential and commercial service
 - Common platform for both of all-fiber network and deep-fiber network
- **Scalable and flexible architecture**
 - Capacity of backplane and SCM, throughput speed of interface and port density are scalable
 - SCM and LIM are common and compatible for 3 different types of chassis
 - Supports multiple topology of network including star, ring and tree
- **Easy deployment and maintenance**
 - Full front access and compliance on ETSI standard form factor
 - Hot swappable SCM and LIM
 - Integrated management including ONU and ONT
- **Superior performance of GEAPON**
 - Supports multiple Logical Link Identifier
 - Hardware based high speed Dynamic Bandwidth Allocation
- **Equipped with advanced WDM technology**
 - Colorless operation
 - Economic simple architecture
- **High reliability and availability**
 - System redundancy : power and SCM
 - Network redundancy : uplink and line link including GEAPON and WDM PON
 - Graceful restart
 - S/W & H/W upgrade without service discontinuity
- **Packet processing functionalities for IP-based Triple Play Service delivery**
 - multiple priority queue support, congestion control, traffic shaping & policing and modification
 - VLAN processing including 802.1Q and Q-in-Q
 - IP routing including RIP, OSPF, BGP, IS-IS and VRRP
 - ACL based filtering
 - DHCP server and relay
- **Supports QoS management and multicast routing**
 - Packet classification and marking
 - Class - based packet scheduling
 - SLA using multiple LLID of GEAPON
 - PIM-SM, PIM-DM and DVMRP
 - IGMP & IGMP snoop
- **Network protection technology (Patent)**
 - Secured network from bad users' threats
 - Protection from IP/ARP spoofing, packet storming & TCP sync flooding
- **Management features**
 - ViewlinX EMS support
 - In-band and out-band management
 - Remote monitoring and system OS upgrade
 - Multi-level security enforcements and authentication for administrative log-in




- ❖ **Switching and Control Module (SCM)**
Non-blocking 24G Switching Fabric
 - ❖ 4 X 1000BaseFx + 4 X1000BaseTx
 - ❖ Full L3 features
- ❖ **2 different kinds of Line Interface Module (LIM)**
with total 16Gbps
 - ✓ 4 ports GEAPON/2 ports 2.5G EPON LIM
 - ✓ 4 ports 1000Base-FX SFP LIM
- ❖ **1+1 of -48VDC or 100~220VAC Power supplier**



- ❖ **1+1 Switching and Control Module (SCM)**
- ❖ **88G Switching Fabric**
- ❖ **2 X 10GbE + 4 X GbE for uplink**
- ❖ **Full L3 features**
- ❖ **4 different kinds of Line Interface Module (LIM)**
with total 64Gbps
 - ✓ 16 GbE WDM PON LIM
 - ✓ 8 ports GEAPON/4 ports 2.5G EPON LIM
 - ✓ 8 ports 1000Base-FX SFP LIM
 - ✓ 8 ports 10/100/1000Base-TX LIM
- ❖ **2+1 of -48VDC or 100~220VAC Power supplier**

- ❖ 18 Slots: 2 SCM + 16 LIM
- ❖ 12 RU, ETSI compliant form factor with full front access
- ❖ 64Gbps backplane capacity and 4Gbps slot capacity



- ❖ **Built-in -48VDC Power inlet with alarm**
- ❖ **Hot -swappable 2 FAN trays**
- ❖ **1+1 Switching and Control Module (SCM)**
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