XGSPON 10G SPF+ ONT

ZARAM XGSPON STICK

ZARAM XGSPON STICK is a 10-Gigabit-capable Symmetric Passive Optical Network (XGSPON) Stick type ONT in a compact SFP+ package. The XGSPON Stick provides a pluggable XGSPON interface for FTTx and wireless backhaul applications with a compact size and lower power consumptions.

By being plugged into the L2/L3 switch or CPE with standard SFP+ uplink port directly, the XGSPON Stick provides a 9.95Gbps Upstream/downstream data link over a single fiber.
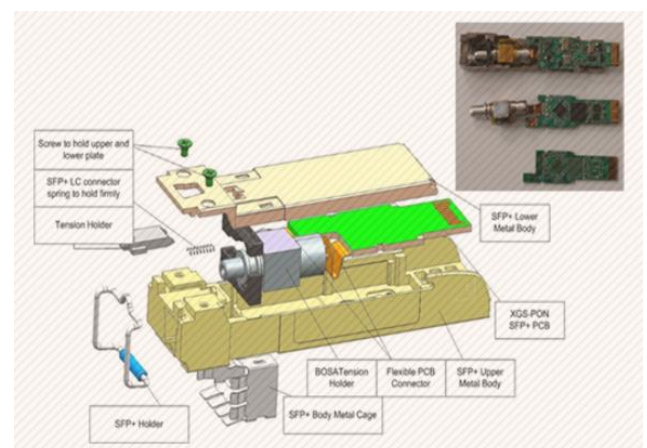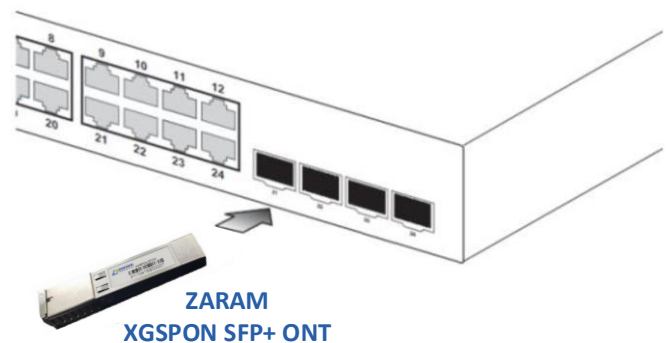
Any standard Ethernet SFP+ switch port can simply convert to a XGSPON ONT port and interconnect to an existing XGSPON network with the insertion of the module. It is built in compliance with ITU-T G.9807.1 specifications, an industry standard witch defines XGSPON access networks.

XGSPON Features

- Complete XGSPON ONT functionality in a compact SFP+ package
- ITU-T G.9807.1 compliant XGSPON ONT
- Data rate of 9.95328 Gbps (US/DS)
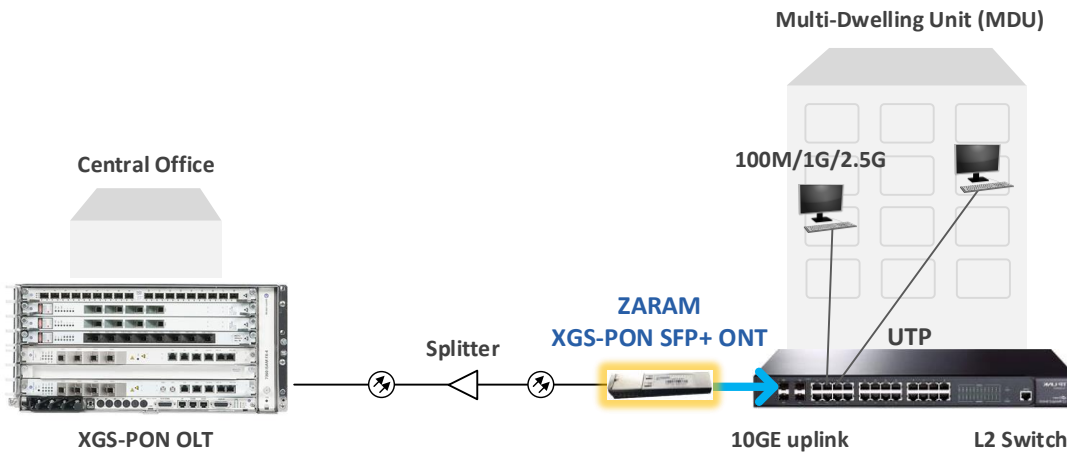- Managed by OLT over XGSPON via G.988 OMCI channel

Product Features

- Supports many new applications, including FTTx and small-cell backhaul services
- No separate power supply and cables
- Low power consumption
- Designed to inter-operate with other L2/L3 switch with SFP+ type uplink port

**ZARAM
XGSPON SFP+ ONT**

Applications: Use Cases of Zaram XGSPON ONT Stick

FTTB + LAN: MDU ONU	5G Small Cell (Femto) Backhaul	Enterprise Passive Optical LAN

FTTB + LAN: MDU ONU

Multi-Dwelling Unit (MDU)

Central Office

100M/1G/2.5G

ZARAM
XGS-PON SFP+ ONT

UTP

XGS-PON OLT

Splitter

10GE uplink   L2 Switch

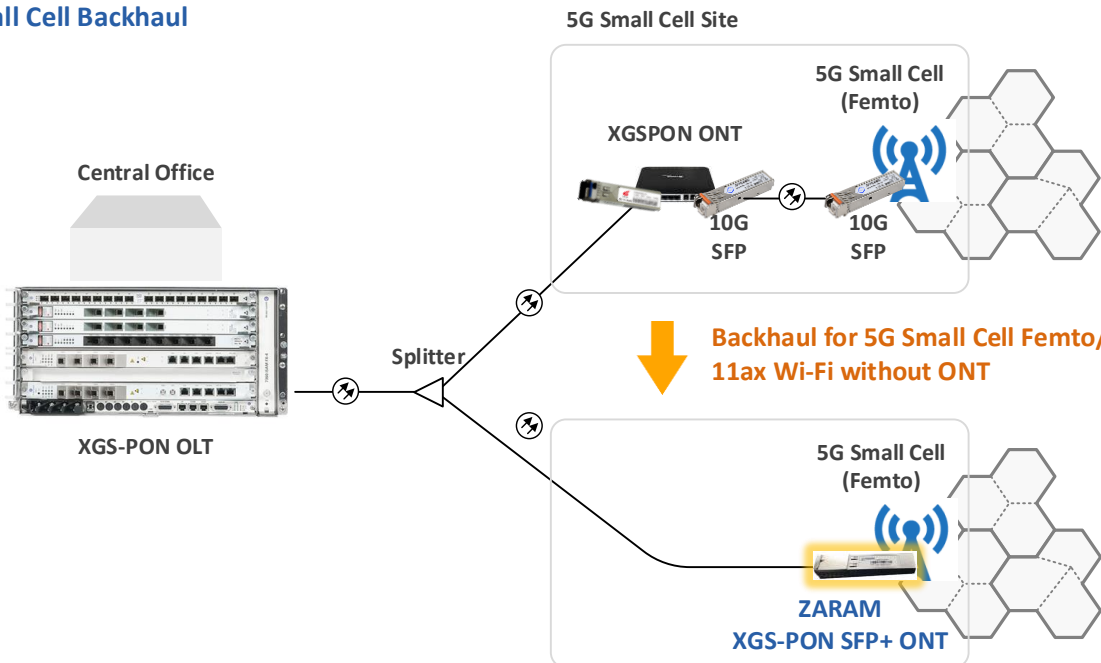**Enabling to use a general L2 switch in PON network**

When The ONT stick is applied to the uplink port of the general L2 switch, the PON access network can be constructed without the OLT provided by the PON vendor.

5G Small Cell Backhaul

5G Small Cell Site

5G Small Cell (Femto)

Central Office

XGSPON ONT

10G SFP   10G SFP

Backhaul for 5G Small Cell Femto/ 11ax Wi-Fi without ONT

XGS-PON OLT

Splitter

5G Small Cell (Femto)

ZARAM
XGS-PON SFP+ ONT

If ONT stick is applied to uplink of 5G small cell which requires a maximum speed of 2Gbps or more per cell in future, addition of ONT to the cell site is unnecessary, which reduces the cost of building a cell site.

Enterprise Passive Optical LAN

Specification

Hardware	
Main Chip	ZARAM ASIC (ZX100)
Flash Memory	16 MBytes
Memory	Embedded 512Mbit, DDR2 SDRAM
Capacity	XGPON : 9.95328 Gbps (US/DS)
Uplink Interface	10 GPON port (SC/PC, SFP+ compliant interface)
Service Interface	1 port SFI (10G) : SerDes/SFP+ compliant interface
Environment Conditions	
Input Power	Single 3.3V Power supply
Power Consumption	Max 1.98W
Operating Temperature/Humidity	-40℃~ 85℃ / 0 ~ 95% non-condensing
Storage Temperature	-40℃~ 85℃
Product Standards	
Type	XGSPON ONT in SFP MSA Footprint
MAC	Integrated XGSPON ITU-T G.9807.1 MAC
Standards	ITU-T G.9807.1-compliant XGSPON TC sublayer Complies with ITU-T G.988 OMCI 9.95328Gbps, 1260-1280nm Burst Mode Transmitter 9.95328Gbps, 1575-1580nm Continuous Mode Receiver Meets MSA specification of 1.98W max. supply Typical Power Consumption ~ 1.4W SFI interface operating at 10 Gbps Digital diagnostic monitor interface compatible with SFF-8472 Compliant with sfp+ MSA, INF-8074i
Software	
Layer 2	Untagged port configuration Supports IEEE 802.1D compliant bridging/learning /filtering Supports IEEE 802.1Q VLAN aware/unaware bridging Standard Ethernet bridging MAC address learning with auto aging (Up to 1K MAC addresses)
VLAN	VLAN processing according to IEEE 802.1Q, BBF TR-156 and G.988 Supports VLAN tag insertion, removal, translation Up to 128 Extended VLAN tagging instances Up to 1024 VLAN filter rules VLAN filtering according to VLAN Tagging Filter Data ME
Multicast	Performs IGMP transparent snooping as defined in IGMPv2/MLDv1 and IGMPv3/MLDv2 L2 and L3 multicast filtering as defined in BBF TR-156 and G.988 L2 and L3 multicast filter table with 1K entries.
QoS	Supports IEEE 802.1p QoS/CoS model Supports QoS related Traffic Classification (DSCP, PCP, DEI) Supports Traffic Scheduling combined WFQ and SP Supports Traffic Shaping range from 20 kbit/s up to 1 Gbit/s Supports 8 queues per port
OAM	Standard compliant OMCI interface ITU-T G.988 and G.9807.1 Alarming and AVC report

Contact Information

2nd Fl. FineVenture Bldg. 345-1, Yatap-dong, Bundang-gu, Seongnam-si, Gyeonggi-do, 13496, Korea
Web: www.zaram.com
Tel: +82-31-779-6700, 779-6701
Fax +82-31-779-6799

Joon Hyun Baek, CEO
Email : john@zaram.com
Tel : +82-31-779-6777
Fax : +82-31-779-6799

Seo In Shik, President
Email : inshiks@zaram.com
Tel : +82-31-779-6700
Fax : +82-31-779-6799