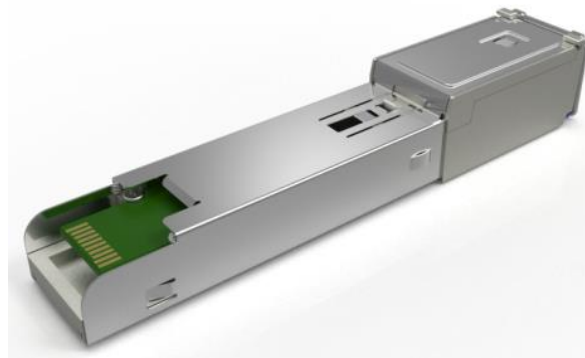# HL-GSFP GPON STICK

Product description

GPON Optical Network Termination products are designed for operators and service providers who seek advantage from the expanded capacity of a fiber access network.

HL-GSFP is a GPON ONT hidden in SFP transceiver and called GPON STICK. **HL-GSFP** can acts as GPON Demarcation Device and is designed to provide affordable access to FTTH networks for Business and Residential use. The products use a single fiber to connect individual homes and businesses to the network for broadband services up to gigabit speeds.

It can be used in the any switch (L2/L3), router, CPE or any other device which has SFP port. This gives possibility to connect to GPON network devices like IP DSLAM, CCTV cameras, mobile backhaul devices, WiMAX base stations and other.

GPON STICK can operate at extended temperature range (-40 ~ 85℃) so it can be used in localizations where restricted environmental conditions are important.

All products within the GPON family are compliant to current ITU-T standards for gigabit passive optical networks (GPONs). The solution is designed to optimize the deployment and roll-out of the service provider. The ONT/ONU products are tested and have proven interoperability with most major GPON OLT Vendors.

The flexible product design enables a variety of product features and available interfaces. All units have Layer 2 functionality by default. This includes advanced support for L2 VLAN's, L2 QoS and Multicast IGMP.

HALNy specializes in cost-effective designs, and works closely with service providers to improve their business case through a comprehensive range of standard products, supporting the industry's common demands. HALNy also provides custom designs and services to meet unique customer needs.

The network interface is compliant to ITU-T G.984.5 to provide 2.5 Gb/s downstream and 1.25 Gb/s upstream. LAN interface allow to provide Gigabit service.

HL-GSFP GPON STICK

Hardware Specification

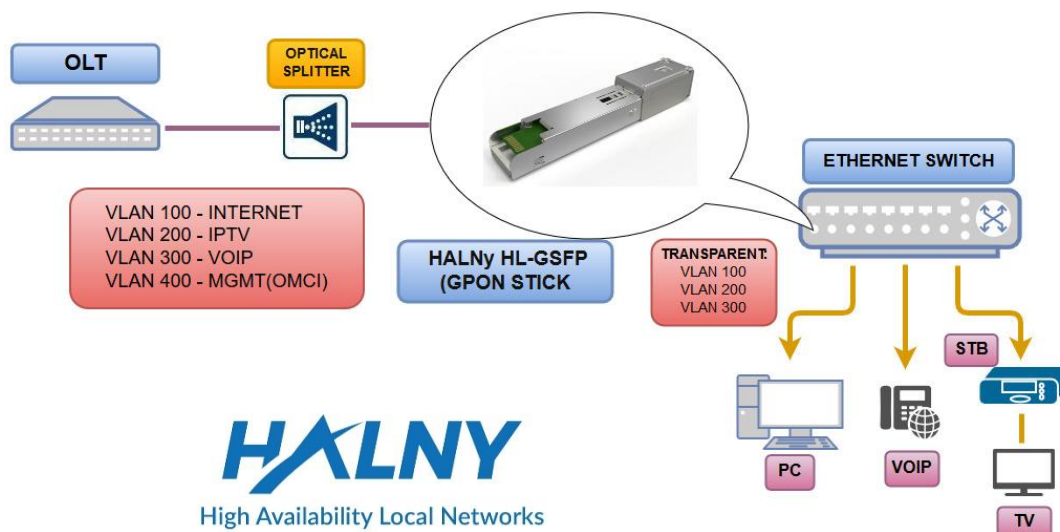|			
Flash Memory	8MB	Storage Temp.	-40~85ºC
WAN Port	1 x GPON Port (SC/APC, BOSA) Class B+ Rx sensivity -28dBm Rx overload -8dBm	Operating Humidity	5~95 % (non-condensing)
		Power Voltage	SFP, single 3.3V power
WAN Port Speed	GPON: 2,5Gbps/1,25Gbpc (DS/US)	Power Consumption	1.8 W (at 25ºC) 2.2 W (at 60ºC)
LAN Port	1000Base-X		
		SFP Standards	SFP MSA, INF-8074i, SFF-8472 FDA 21 CFR 1040.10&1040.11
INSTALLATION	SFP – hot plugable		
		Dimension (W x H x D)	Compliant with SFF 8472i 74.7 mm x 14.1 mm x 12.4 mm
Operating Temp.	-40 ~ 85ºC (Case)		

Software Specification

GPON
- ITU-T G.984 Compliant (G.984.1, G.984.2, G.984.3, G.984.4)
- ITU-T G.988 Compliant (OMCI Model)
- Dying gasp
- Dynamic Bandwidth Allocation
- Downstream and upstream data Security (AES Encryption)
- Forward Error Correction (FEC)
- Support 32 T-CONTS and 256 GEM Port
- BBF TR-156 Compliant

QoS
- Ingress / Egress Rate Limiting
- Packet Classification based on COS, DSCP

Multicast
- IGMP Snooping

L3
- IP HOST for remote management

L2
- IEEE 802.1D Bridging
- IEEE 802.1Q and IEEE 802.1P compliant
- VLAN Translation
- VLAN Filter
- Up to 10 VLANs
- Access | Trunk | Native port
- Storm-Control
- QinQ (Transparent and begin/end of tunnel)

Interoperability Test Result

DASAN ZHONE Solutions	V5824G	1.12 #0105
DASAN ZHONE Solutions	V8102	2.02 #0048
HUAWEI	MA5683T	MA5600V800R015C10
ZTE	C320	V2.1.0
ZTE	C220	V1.2.2
CISCO	ME4601	3.7.3
FIBERHOME	AN5116-06B and other	RP1000

Sample scenario