

G3800 Series

High-density Pizza-box GPON OLT

Product Overview

STEC G3800 Series complies with ITU-T G.984/G.988 and meets requirements about GPON OLT in Network Access Technical Requirements. It fully supports CTC2.0, automatic discovery and cooperation with ONUs of different manufacturers.

STEC G3800 Series supports the Asymmetric uplink 1.25Gbps/ downlink 2.5Gbps PON transmission rate, efficient bandwidth usage and Ethernet services, helping carriers to provide reliable services to their users.

Its coupling ratio ups to 1:128, and its support of different hybrid ONU networks minimize the carrier's investment.

STEC G3800 Series supports routing functions such as RIP, OSPF and BGP.

STEC G3800 Series, based on the edge-cutting technologies, is strong in functions and QoS guarantee, SLA and DBA can be easily listed out.



Product Characteristics

GPON: Abiding by ITU-T G.984/ G.988, STEC G3800 Series OLT meets relevant requirements of GPON OLT regulated in Network Access Technical Requirements and China Telecom GPON Technical Requirements CTC2.0;

System Capacity: G3800 Series supports 4/8/16 GPON ports.

Uplink Interface: G3800 Series is equipped with maximum 4 GE SFP ports, 4 GE combo ports and 4 10GE SFP+ ports.

Dimensions: 1U, occupies a small space.

Environmental Protection: low power consumption and low operating cost.

Bus Optical Fiber Protection: the link can be automatically switched when trouble occurs in the optical fiber;

Power Characteristics: supports dual-AC, dual-DC and AC/DC power supply. The power supply supports modularized design, hot-swap and EMC-3 standard. It well adapts to the environment.



Support 1.25Gbps uplink/downlink bandwidth



Efficient bandwidth usage and Ethernet services



The splitting ratio ups to 1:64

Model Lists

G3800-04

Pizza-box GPON OLT



- 1 console port
- 1 out-band 10/100M port
- 4 fixed PON ports
- 4 GE TX ports
- 4 10GE/GE SFP+ ports

G3800-08

High-density Pizza-box GPON OLT



- 1 console port
- 1 out-band 10/100M port
- 8 fixed PON ports
- 4 10GE SFP+ ports
- 4 GE SFP ports
- 4 GE TX/SFP combo ports

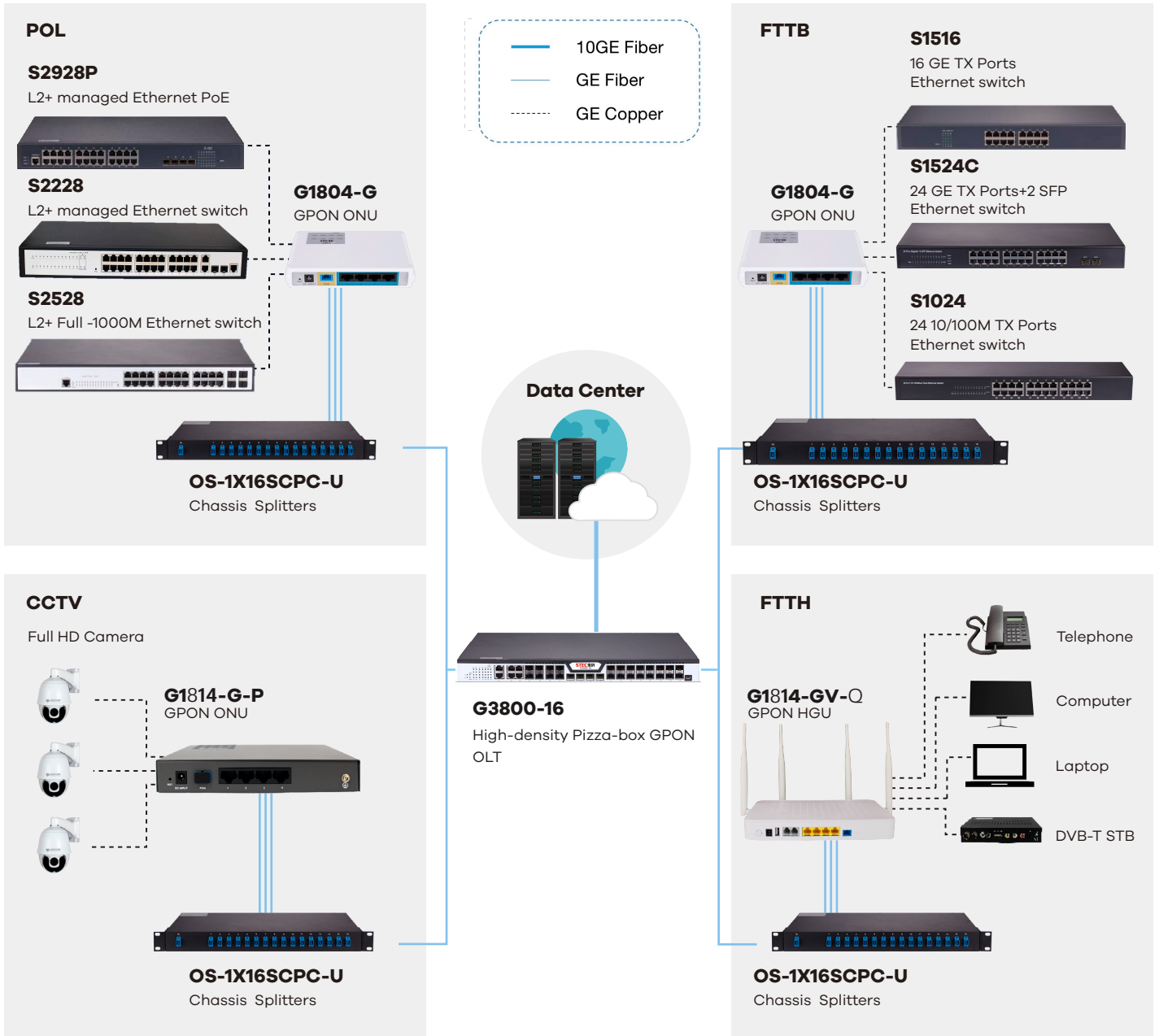
G3800-16

High-density Pizza-box GPON OLT



- 1 console port
- 1 out-band 10/100M port
- 16 fixed PON ports
- 4 10GE SFP+ ports
- 4 GE SFP ports
- 4 GE TX/SFP combo ports

Application Diagram



STEC G3800 Series

System Performance

Item	G3800-04	G3800-08	G3800-16
Service interface			
PON ports	4	8	16
GE uplink	4 GE TX	4 100/1000M SFP + 4 GE SFP/TX	4 100/1000M SFP + 4 GE SFP/TX
10GE uplink	4 10GE/GE SFP+	4 10GE SFP+	4 10GE SFP+
Supported GPON SFP module	Class B+, Class C+, Class C++		
Management interface			
RJ45 console	1		
Mini-USB console	1		
Out-of-Band	1		
System capacity			
DRAM (MB)	1024		
Flash (MB)	32		
Backplane (Gbps)	176		
MAC table	40K		
Buffer size (MB)	3		
Jumbo frame (KB)	9		
IPv4 routing table	32K		
IPv6 routing table	8K		
Active VLAN	4,094		
SVI number	512		
Forwarding mode	Store-and-forward		

Technical Specifications

Standards

- ITU-T G.984/G.988
- IEEE 802.11D, Spanning Tree
- IEEE 802.1Q, VLAN
- IEEE 802.1w, RSTP
- IEEE 802.3ad physical link static/dynamic aggregation (LACP), Ethernet - II

VLAN

- Port/IP/Protocol/MAC-based VLAN
- 4K VLAN
- QinQ and flexible QinQ

Multicast

- L2 multicast
- IGMP snooping
- MLD snooping
- Fast-leave

Layer 3 Function

- Static route
- RIPV1/V2
- OSPF
- BGP

QoS

- Backpressure flow control (half duplex)
- IEEE 802.3x flow control (full duplex)
- IEEE 802.1p, CoS
- WRR, SP and FIFO queue schedule
- Limiting the uplink/downlink rate based on each ONU
- DBA and SLA

Reliability

- Unidirectional Link Detection (UDLD)
- Hot swap of the GPON optical module
- Optical path protection of GPON (type B/C, hand-in-hand)
- Abnormal luminescence ONU detection such as long luminescence
- IEEE 802.3ad LACP

DHCP Function

- Server/Relay/Client
- DHCP snooping
- DHCP option 66,67,82
- DAI
- IP source guard

Network Security

- L2~4 ACL
- Flow-based ACL
- MAC limitation
- MAC sticky
- Port isolation
- Packet storm control
- Transmission data encryption on the PON interface
- Anti attack for DDOS, TCP-SYN-flood, UDP-flood, ARP-flood, etc.

Management

- Various management modes such as CLI, Telnet, SSH, HTTP, SSL and SNMP
- ISSU
- FTP/TFTP
- SPAN/RSPAN
- NTP

Network Availability

- STP/RSTP/MSTP
- BPDU guard
- EAPS

Physical Characteristics

Item	G3800-04	G3800-08	G3800-16	
Power supply				
AC (V)		90 ~ 264		
DC (V)		36~72		
Power slots		2		
Max. consumption (W)	50	60	70	
Total output BTU (note: 1000 BTU/hr = 293W)	170.6	204.8	238.9	
Cooling system				
Fan number		3		
Air-flow		Left-right		
Noise@25°C(dBA)		< 45		
Appearance				
Chassis	Dimensions(WxDxH mm)	442.5 x 304 x 44	442.5 x 304 x 44	442.5 x 304 x 44
	Weight (Kg)(empty)	5.3	5.5	5.6
Package	Dimensions(WxDxH mm)	576 x 448 x 94	576 x 448 x 94	576 x 448 x 94
	Weight (Kg)	6.2	6.4	6.5
Environmental specifications				
Operating	Temperature		0~50°C	
	Humidity (non-condensing)		10%~85%	
Storage	Temperature		-40°C~80°C	
	Humidity (non-condensing)		5%~95%	
Accessories				
Parts			Power cord rackmount kits console cable	
Reliability				
MTBF (Hr)			95,000	
Certification			CE, FCC, ROHS	

Ordering Information

Model	Description
STEC G3800-04	GPON OLT with 4 PON ports (1 console port, 1 out-band 10/100M port, 4 fixed PON ports (excluding the OLT SFP module), 4 GE TX ports, 4 10GE SFP+ ports; 2 power slots with 1 hot-swap AC220V power supply; 19-inch rack-mounted installation)
STEC G3800-04-DC	GPON OLT with 4 PON ports (1 console port, 1 out-band 10/100M port, 4 fixed PON ports (excluding the OLT SFP module), 4 GE TX ports, 4 10GE SFP+ ports; 2 power slots with 1 hot-swap DC36-72V power supply; 19-inch rack-mounted installation)
STEC G3800-08	GPON OLT with 8 PON ports (1 console port, 1 out-band 10/100M port, 8 fixed PON ports (excluding the OLT SFP module), 4 GE SFP ports, 4 GE TX/SFP combo ports, 4 10GE SFP+ ports; 2 power slots with 1 hot-swap AC220V power supply; 19-inch rack-mounted installation)
STEC G3800-08-DC	GPON OLT with 8 PON ports (1 console port, 1 out-band 10/100M port, 8 fixed PON ports (excluding the OLT SFP module), 4 GE SFP ports, 4 GE TX/SFP combo ports, 4 10GE SFP+ ports; 2 power slots with 1 hot-swap DC36-72V power supply; 19-inch rack-mounted installation)
STEC G3800-16	GPON OLT with 16 PON ports (1 console port, 1 out-band 10/100M port, 16 fixed PON ports (excluding the OLT SFP module), 4 GE SFP ports, 4 GE TX/SFP combo ports, 4 10GE SFP+ ports; 2 power slots with 1 hot-swap AC220V power supply; 19-inch rack-mounted installation)
STEC G3800-16-DC	GPON OLT with 16 PON ports (1 console port, 1 out-band 10/100M port, 16 fixed PON ports (excluding the OLT SFP module), 4 GE SFP ports, 4 GE TX/SFP combo ports, 4 10GE SFP+ ports; 2 power slots with 1 hot-swap DC36-72V power supply; 19-inch standard rack-mounted installation)
PWR-75-DC	Hot-swap DC power supply for OLT (Max Power 75W, DC-36 ~ -72V input)
PWR-75-AC	Hot-swap AC power supply for OLT (Max Power 75W, AC100-240V input)
OLT-GSFP-B+	OLT SFP module, Class B+ standard, downlink 2.5G/uplink 1.25G, TX wavelength 1490nm, RX wavelength 1310nm, SC interface
OLT-GSFP-C+	OLT SFP module, Class C+ standard, downlink 2.5G/uplink 1.25G, TX wavelength 1490nm, RX wavelength 1310nm, SC interface
OLT-GSFP-C++	OLT SFP module, Class C++ standard, downlink 2.5G/uplink 1.25G, TX wavelength 1490nm, RX wavelength 1310nm, SC interface

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