TSCOM GP6800 OLT

Carrier Grade Optical Access Platform

Large Capacity Gigabit-Capable Passive Optical Network (GPON) Platform Delivers Voice, High-Speed Data And Video Services To Residential And Business Subscribers

TSCOM GP6800 GPON OLT

- ITU-T G.984/G.988

- 128 SPLITS, MAXIMUM 128 PON,
  16K ONT

- ADVANCED L2/L3/L4 FUNCTIONS

- DYNAMIC BANDWIDTH ALLOCATION

- INDIVIDUALIZED BILLING PER
  SERVICE LEVEL AGREEMENT

- PORT AGGREGATION AND SPANNING-
  TREE SUPPORT FOR REDUNDANT
  DATA NETWORK ACCESS

- MODULARIZED DESIGN,HOT SWAP

- MULTICAST SUPPORT FOR VIDEO
  STREAMING

- REMOTE PROVISIONING AND
  MANAGEMENT

- ADVANCED SECURITY

- SNMP NETWORK MANAGEMENT
  INTERFACE

- CIRCUIT TESTING AND LOOP BACKS
  FOR TELEPHONY SERVICES

Telesail's GP6800 Optical Line Terminal (OLT) provides a direct optical interface to the Ethernet/IP network core. Together with Telesail's Optical Network Unit(ONU), it completes the end-to-end FTTx with up to 1 Gbps of bandwidth to residential and business customers. Combining the economic benefits of Gigabit-capable Passive Optical Network (GPON) with built-in L2/L3 switching and routing functionalities, TSCOM GP6800 is the ideal carrier class optical access and transport platform for FTTx (FTTB, FTTH, FTTC).

GP6800 OLT series includes GP6806 (6 slots), GP6810 (10 slots) . It develops the GPON service card which can supports 16 PON interfaces, while GP6800 OLT can support up to 128 GPON interfaces at most .All GP6800 OLT products support the MSU cards and power "1+1" redundancy.

Highlights and Benifits

Flexible and Cost-effective Triple Play Transport

TSCOM GP6800 OLT supports various interface types such as 10GE, GE and GPON.High port density, wire-speed routing/switching can thus be really reached.The whole system supports up to 128/64 OLT GPON interfaces,96/48 10G interfaces . Each PON interface delivers 1 Gbps of shared bandwidth for up to 128 subscribers, serving a maximum of 16K GPON subscribers . High subscriber density combined with the operational cost savings of GPON technology make GP6800 a compelling alternative to legacy, firstmile access solutions. It supports flexible concentration ratio between OLT and GE uplink modules thus providing wide variety of Service deployment option.

Customized Broadband Service Offerings

TSCOM GP6800 features allow operators to oversubscribe bandwidth while protecting delay-sensitive traffic based on individualized Service Level Agreement (SLA). Dynamic bandwidth allocation enables operators to bill bandwidth in 1 Mbps increments. For video services, multicast handling with IGMP proxying and snooping ensures efficient utilization of network infrastructure.

Strong value-added service functions

TSCOM GP6800 OLT has L2/L3/L4 wire-speed switching ability and advanced performances like QoS, MPLS, NAT, bandwidth control and multicast. Hence, it becomes the first option for being used in the core layer of the network or for network's value addition. Meanwhile,hardware-based flow classification, multicast, rate limitation and advanced QoS give strong supports for users to operate the value-added services.

Specification

Physical

- 19" rack chassis
- Dimensions
  GP6806:
  399.7mm H×482.6mm W×548mm D
  GP6810:
  533.1mm H ×482.6mm W×548mm D

Power and Environmental

- Dual Power modules redundancy
  DC: -48V input (-36~-72V)
  AC: 90-240VAC,50/60 Hz
- 0°C to +50°C ambient air temperature
- 10% to 90% operating humidity
  (non condensing)

Architecture

- GP6806:
  2 slots for 1+1 Redundant MSU
  4 slots for line card
- GP6810:
  2 slots for 1+1 Redundant MSU
  8 slots for line card

Standards

- ITU-T G.984/G.988 compliant
- IEEE 802.11D,Spanning Tree
- IEEE802.1Q, Vlan
- IEEE802.1w, RSTP
- IEEE 802.3ad (Link Aggregation Control
  Protocol (LACP)) Ethernet II

GPON Interface

- Downlink 2.5Gbps/uplink 1.25Gpbs
  transmission rate
- Class B+, Class C+ GPON module
- Maximum coupling ratio: 1:128
- ONU authentication mechanism

Data Network Network

- 10GE SFP+
- Backplane bandwidth: 4Tbps
- Switching capacity: GP6806: 960Gbps
  GP6810: 1920Gbps

Quality of Service (QoS)

- 8 CoS queuing
- IEEE 802.1 p
- IPv4 Diffserv/TOS
- SP and WRR,FIFO congestion management
- Classification based Traffic Metering,
  Shaping and Marking
- Buffer Management: WRED
- Dynamic Bandwidth Allocation (DBA),SLA

Layer 2 switching Functions

- STP/RSTP/MSTP
- IEEE802.1Q with 4K VLANs handling
- GVRP,PVLAN,VLAN Stacking(QinQ)
- IEEE 802.3ad link aggregation
- IEEE802.3x in full duplex, back pressure in
  half duplex,HOL block prevention

Multicast

- IGMPv2 Proxy and Snooping
- DVMRP,PIM-SM,PIM-DM
- MSDP,MOSPF,MBGP

Network Management

- 1 10/100BaseT OAM Ethernet port (RJ45)
- 1 RS232 for console
- Web-enabled GUI based local configuration
- SNMP v1,v2,v3
- RMON
- CLI via console or telnet
- FTP/TFTP supporting
- ONU Remote Upgrade and Management

Security

- ACL and Packet filtering, based on source/
  destination IP, layer-3 IP ID, layer-4 TCP/UDP
  ID, IP priority, ToS or time range
- Port/MAC binding,MAC filtering and Limit
- IEEE 802.1x with RADUIS or Local
  authentication
- Port Mirror
- Supporting active/standby switchover, hot
  swap, and VRRP

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About Technology Co., Ltd

Telesail Technology is professional in IP-based, end-to-end networking solutions and international service and support. The company sells its broadband, wireless,transmission solutions to operators in both emerging and established telecommunications markets around the world. Telesail enables its customers to rapidly deploy revenue-generating access services using their existing infrastructure, while providing a migration path to cost-efficient, end-to-end IP networks.
For more information about Telesail, visit the company's Web site at http://www.telesail.com.

Order Information

Chassis of TSCOM GP6800 OLT

GP6806-Chassis	6-slots chassis,2 slots for MSU card,4 slots for service cards,standard fan
GP6810-Chassis	10-slots chassis,2 slots for MSU card,8 slots for service cards,standard fan

Power Card of TSCOM GP6800 OLT

PWR-1200-AC	OLT AC Power Module,Max1200w ,input voltage AC90-240V
PWR-1200-DC	OLT DC Power Module,Max 10w, input voltage DC36~72V

MSU Card of TSCOM GP6800 OLT

GP68-MSU	MSU Master Switch Unit: UltraEngine for GP6800

Standard Service Cards

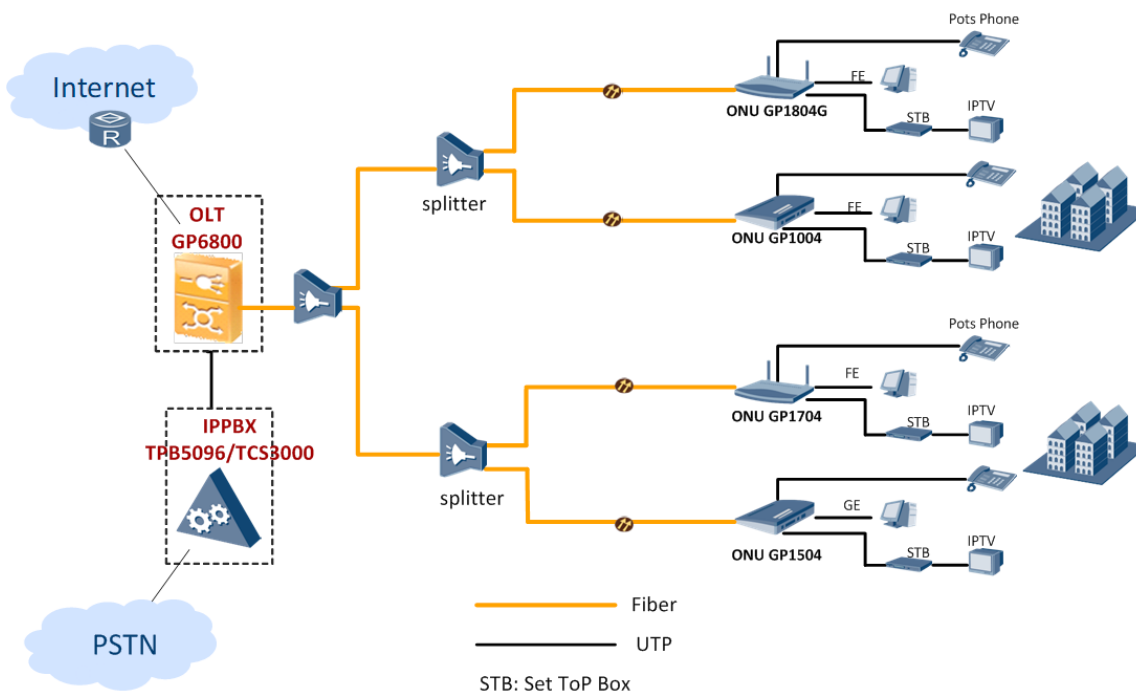|	
GP68-16GPON-4TE	Service card with 16 OLT GPON interfaces, 4 10GE SFP+ interface (without optical module)
GP-12TE-SFP+	Service card with 12 10GE SFP+ interface (without optical module)

GPON Optical Module

OLT-GSFP-B+	OLT SFP module, Class B+, TX:1490nm,2.488Gbps,RX:1310nm,1.244Gbps,SC/UPC Receptacle,0-70°C Temerature
OLT-GSFP-C+	OLT SFP module, Class C+, TX:1490nm,2.488Gbps,RX:1310nm,1.244Gbps,SC/UPC Receptacle,0-70°C Temerature

Typical Application

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