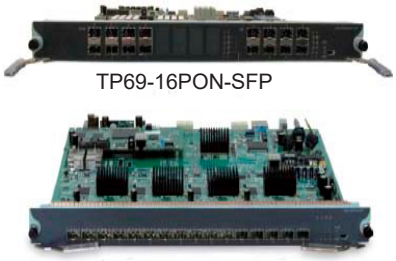
TSCOM TP6900 OLT Series

Carrier Grade Large Capcaity EPON OLT

TP6903 TP6910 TP6906



TP69-16PON-SFP

TP69-16PON-8GE-SFP

Delivers Voice,High-speed Data and,Video Service To Residential And Business Subscribers

- **IEEE802.3AH, GEPON**
- **COMPACT CHASSIS**
- **64 SPLITS, 20KM REACH, MAXIMUM 8192 SUBSCRIBERS**
- **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**
- **VLAN MANAGED SERVICES WITH PRIORITY QOS PROCESSING**
- **MULTICAST SUPPORT FOR VIDEO STREAMING**
- **REMOTE PROVISIONING AND MANAGEMENT**
- **ADVANCED SECURITY**
- **SNMP NETWORK MANAGEMENT INTERFACE**
- **CIRCUIT TESTING AND LOOP BACKS FOR TELEPHONY SERVICES**

TSCOM TP6900 OLT is a new-generation carrier grade multi-service access platfrom. The service card can supports 16 PON ports, while TP6900 OLT can support up to 128 PON ports. Combining the economic benefits of Ethernet Passive Optical Network (GEPON) with built-in L2/L3/L4 switching and routing functionalities like MPLS, IPv6, and graceful restarting and loop network protection etc. 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. TSCOM TP6900 is the ideal carrier class optical access and transport platform for FTTx (FTTB, FTTH, FTTC).

Highlights and Benifits

Flexible and Cost-effective Triple Play Transport

TSCOM TP6900 OLT supports various interface types such as 10GE, GE, FE and EPON.High port density, wire-speed routing/switching can thus be really reached. The whole system supports up to 128 OLT EPON interfaces,64 10G interfaces and 384GE interfaces. Each PON interface delivers 1 Gbps of shared bandwidth for up to 64 subscribers, serving a maximum of 8192 GEPON subscribers . High subscriber density combined with the operational cost savings of GEPON technology make TSCOM TP6900 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 TP6900 features allow operators to oversubscribe bandwidth while protecting delaysensitive 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 TP6900 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
  TP6903: 266.4mm H x 482.6mm W x 548mm D
  TP6906: 399.7mm H x 482.6mm W x 548mm D
  TP6910: 533.1mm H x 482.6mm W x 548mm D

Power and Environmental

- Power Consumption (Full load)
  TP6903: 600W TP6906: 600W
  TP6910: 1000W
- Dual Power modules redundancy
  DC: -48V input (-40~-57V)
  AC: 200-240VAC,50/60 Hz
- 0°C to +50°C ambient air temperature
- 5% to 95% operating humidity (non condensing)

Architecture

- TP6903:
  1 slot for MSU,2 slots for line card
- TP6906:
  2 slots for 1+1 Redundant MSU
  4 slots for line card
- TP6910:
  2 slots for 1+1 Redundant MSU
  8 slots for line card
- Interface number

Max number	TP6903	TP6906	TP6910
10G Port	24	48	96
GE Port	96	192	384
FE port	96	192	384
EPON Port	32	64	128
10G EPON	8	16	32

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

GEPON Interface Line Card

- 1310nm burst receive
- 1490nm continuous trans
- Symmetric 1.25Gbps per PON port
- 20km distance
- Splits per OLT port Max: 1:64
- Tx Power:+2dbm ~ +7dbm
- Rx Sensitivity:-30dbm

10G EPON Asymmetric Interface

- 1310nm burst receive
- 1577/1490nm continuous transmit
- 1.25Gbps downstream, 10Gbps upstream
- Splits per OLT port Max: 1:128
- Tx Power:+2dbm ~ +7dbm
- Rx Sensitivity:-30dbm

10G EPON Symmetric Interface

- 1310nm burst receive
- 1577/1490nm continuous transmit
- 10Gbps downstream, 10Gbps upstream
- Splits per OLT port Max: 1:128
- Tx Power:+2dbm ~ +7dbm
- Rx Sensitivity:-30dbm

Data Network Network

- 10GE XFP
- 1000Base-FX Ethernet interface
- 10/100/1000Base-T Etherent interface
- 1000M Combo
- 100Base-T Fast Ethernet Interface
- Switching capability
  TP6903: 384Gbps TP6906: 1.5Tbps
  TP6910: 2.3Tbps
- Backplane
  TP6903: 1.2Tbps TP6906: 2.4Tbps
  TP6910: 3.2Tbps
- Flash 16MB
- MAC address: 512K
- IP route table: 512K

Layer 3 Switching & Routing

- Static Routing,RIPv1/2,OSPF,BGP,with up to 512K host routes
- Routed Interfaces, Super VLAN Interface (RFC 3069)
- DHCP Server/Client/Relay (Option 82)
- ARP support(static ARP, proxy ARP per RFC1027,ARP per RFC826)
- MPLS,MPLS VPN,MPLS TE Support
- IPv6 ND,IPv6 PMTU,IPv6 FIB,IPv6 ACL, NAT-PT,IPv6 6PE,Ipv6 static routing, RIPng,OSPFv3,BGP4+

Quality of Service (QoS)

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

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, HSRP and VRRP

Telesail Technology Co., Ltd

3F,TAIWEI Tower, No. 31 Jiancai West St.
Haidian District, Beijing, China 100096
Email : sale@telesail.com
Tel: +86 185 8842 7281
Fax: +86 719 8243 163
Web Site: http://www.telesail.com

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

TSCOM TP6900 OLT

LS6910-Chassis	12U,10-slots chassis;including one AC power; 2 slots for MSU Master Switch Unit;8 slots for service cards;1+1 power redundance
LS6906-Chassis	9U,6-slots chassis,including one AC power;2 slots for MSU Master Switch Unit; 4 slots for service cards;1+1 power redundance
LS6903-Chassis	3U,3-slots chassis,including one AC power;1 slot for MSU Master Switch Unit;2 slots for service cards;1+1 power redundance
LS69-MSU-I/II/III/IV/V	MSU Master Switch Unit: UltraEngine I/II/III/IV/V
LS69-PWR-AC-1000	220V/AC Power Supply Module(1000W) for TSCOM TP6910
LS69-PWR-AC-600	220V/AC Power Supply Module(600W) for TSCOM TP6903,TP6906
LS69-PWR-DC	-48V/DC Power Supply Module for TSCOM TP6910,TP6906,TP6903

Standard Service (EPON) Cards

LS69-8PON-SFP	Service card with 8 OLT EPON interfaces (without the OLT SFP optical module)
LS69-8PON-8GE-SFP	Service card with 16 OLT EPON interfaces ,8 gigabit SFP optical interfaces (without OLT SFP optical module)
LS69-16PON-SFP	Service card with 16 OLT PON interfaces (without OLT SFP optical module)
LS69-16PON-8GE-SFP	Service card with 16 OLT EPON interfaces,8 gigabit SFP optical interfaces (without OLT SFP optical module)
LS69-4TPON-XFP	Service card with 4 10G OLT EPON interfaces ((without OLT SFP optical module), Symmetric and Asymmetric can be changed by replace SFP modle

Standard Service Cards

LS69-48FE-TX	Service card with 48 10/100M Ethernet interfaces (RJ45)
LS69-24FESFP-2GE	Service card with 24 10/100M Ethernet interfaces (SFP), 2 1000M Combo interface
LS69-12GE-Combo	Service card with 12 1000M Combo interface
LS69-24GE-SFP	Service card with 20 1000M Ethernet interface(SFP),4 1000M Combo interface
LS69-24GE-TX	Service card with 24 10/100/1000M Ethernet interfaces(RJ45)
LS69-48GE-TX	Service card with 48 10/100/1000M Ethernet interfaces(RJ45)
LS69-1TE-XFP	Service card with one 10G Ethernet interface(XFP)
LS69-2TE-XFP	Service card with 2 10G Ethernet interface(XFP)
LS69-4TE-XFP	Service card with 4 10G Ethernet interface(XFP)
LS69-8TE-XFP	Service card with 8 10G Ethernet interface(XFP)

EPON Optical Module

OLT-SFP-20	OLT SFP module, 20km range, TX 1490nm ,RX 1310nm , SC interface
OLT-SXFP-30	Symmetric 10GE PON XFP: RX: 1310/1270, TX: 1490/1577. Uplink: 1/10G, Downlink: 1/10G XFP, 20Km, DDM
OLT-AXFP-30	Asymmetric 10GE PON XFP: RX: 1310, TX 1490/1577. Uplink: 1G, Downlink: 1/10G XFP, 20Km, DDM

Telesail Technology Co., Ltd

3F,TAIWEI Tower, No. 31 Jiancai West St.
Haidian District, Beijing, China 100096
Email : sale@telesail.com
Tel: +86 10 8291 2638
Fax: +86 10 5141 7010
Web Site:http://www.telesail.com.

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.