TSCOM TP5500 OLT

Carrier Grade Optical Access Platform

Compact 10Gigabit Ethernet Passive Optical Network (10GEPON) Platform Delivers Voice, High-Speed Data And Video Services To Residential And Business Subscribers

TSCOM TP5500 10G EPON OLT

- **IEEE 802.3av GEPON**
- **COMPACT   CHASSIS**
- **128 SPLITS, 10G EPON OLT SUPPORT**
- **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**

TP5500 Optical Line Terminal (OLT) complies with IEEE802.3av and P.R.C intercommunication standard (YD/T-1475-2006) and supports CTC3.0. It can automatically discover and is compatible with ONUs of different manufacturers.

TP5500 OLT develops the 10G EPON service which can supports 8 10G EPON interfaces,
Its coupling ratio ups to 1:128, and its support of different hybrid ONU networks saving the carrier's investment, 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 Ethernet Passive Optical Network (GEPON) with built-in L2/L3 switching and routing functionalities, TSCOM TP5500 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

TP5500 OLT supports various interface types such as 10GE, GE and 10G EPON.High port density, wire-speed routing/switching can thus be really reached.The whole system supports up to 8 OLT 10G EPON interfaces,4 10G interfaces and 8 GE interfaces. It supports two configurations: symmetric, operating at 10 Gbit/s data rate in both directions, and asymmetric, operating at 10 Gbit/s in the downstream (provider to customer) direction and 1 Gbit/s in the upstream direction. High subscriber density combined with the operational cost savings of GEPON technology make TP5500 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 TP5500 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.

Specification

Physical

- 19" rack
- Compact 1U chassis
- Dimensions
  442.5mm Wx 300mm Dx 44mm H
- Weight: ‹8Kg

Power and Environmental

- Dual Power modules redundancy
  DC: -48V input (-30~-72V)
  AC: 90-264VAC, 50/60 Hz
- 0°C to +45°C ambient air temperature
- 10% to 85% operating humidity
  (non condensing)

Architecture

- 8 fix OLT 10G EPON
- 4 1000Base-FX ethernet interface
- 4 1000Base-T ethernet interface
- 4 10GE SFP+
- Backplane: 256G

10G EPON Symmetric Interface

- 1310nm burst receive
- 1577/1490nm continuous transmit
- Symmetric mode:
  10Gbps downstream, 10Gbps upstream
  Asymmetric mode:
  10Gbps downstream, 1.25Gbps upstream
- Splits per OLT port Max: 1:128
- Tx Power:+2dbm ~ +7dbm@1.25Gbps
           +2dbm ~ +5dbm@10Gbps;
- Rx Sensitivity:-30dbm
- PR30,PR30+ support
- PX20,PX20+,PX20++ support

VLAN

- Port based VLAN
- QinQ,support flexible QinQ

Multicast

- IGMP
- IGMP Snooping

Standard

- IEEE802.3av
- IEEE 802.1D, Spanning Tree
- IEEE 802.1Q, VLAN
- IEEE 802.1w, RSTP
- IEEE 802.3ad LACP
- Ethernet – II
  YD/T 1771-200

Security

- Limiting the maximum number of users on each port
- Port isolation
- Packet storm control
- Flow-based ACL access control function
- Transmission data encryption on the PON interface

Quality of Service (QoS)

- IEEE 802.1 p
- IPv4 Diffserv/TOS
- SP and WR,FIFO congestion management
- Dynamic Bandwidth Allocation (DBA)
- Backpressure flow control (half duplex)
  IEEE 802.3x flow control (full duplex)

Network Management

- Web-enabled GUI based local configuration
- SNMP v1,v2c
- RMON
- FTP/TFTP,Telenet,Console interface with CLI
- ONU Remote Upgrade and Management
- In-Band/Out-of-band management
- Environmental monitoring

Order Information

TSCOM TP5500 10G EPON OLT

TP5500	1U,19-inch cabinet ,provides 8 fix 10G EPON interfaces(without OLT XFP optical module),4 1000Base-T interfaces, 4 1000Base- FX interfaces,single power supply ,4 10GE SFP+,1 console port, 1 out-of-band 10/100M port,single power supply, AC90-264V, power expandable
TP5500 -DC	1U,19-inch cabinet ,provides 8 fix 10G EPON interfaces(without OLT XFP optical module),4 1000Base-T interfaces, 4 1000Base- FX interfaces,single power supply ,4 10GE SFP+,1 console port, 1 out-of-band 10/100M port,single power supply, DC 36~72V, power expandable
PWR-150-AC	TP5500OLT AC power supply (input voltage: AC 90~264V, 150W max power, independent cooling fan)
PWR-150-DC	TP5500 OLT AC power supply (Input voltage: DC -36~-72V, 150W max power, independent cooling fan)

EPON Optical Module

OLT-XFP-A	OLT XFP module, asymmetric 10G EPON optical module (downlink 10G, uplink 1.25G)
OLT-XFP-S	OLT XFP module, symmetric 10G EPON optical module (downlink 10G, uplink 10G)

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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.