

# TSCOM TP1001-GE

## COST-EFFECTIVE GEAPON CUSTOMER PREMISE DEVICE

*Integrated With 1-Port 10/100/1000 Base-T Switch  
Delivers High Speed Data Services Over Gigabit Ethernet Passive Network(Gepon)*



- **FULL IEEE802.3/802.3AH COMPLIANCE**

- **COMPACT CHASSIS**

- **64 SPLITS, 30KM REACH**

- **SERVICE SUPPORTED:**

**VOIP, IP VIDEO AND DATA**

- **MULTIPLE SUBSCRIBER/ MULTIPLE**

**SERVICE SUPPORT FROM SINGLE ONU**

- **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**

- **Circuit Testing And Loop Backs For**

**Telephony Services**

Telesail provides TP1001-GE ONU supporting cost-effective GEAPON customer premise solutions designed for for single indoor residential applications. The solutions provide 1000Mbps broadband services to a connected subscriber's gateway and/or computers. The TP1001-GE provide 1 10/100/1000M Base-T Ethernet ports with advanced L2 functionality for Data and IPTV video services, and are configured and managed remotely via the Telesail product family (OLT). Multi-Dwelling Unit elements are also available to manage networking in areas as vast as apartment buildings, business units and campus settings.

The ONU TP1001-GE provides an uplink to the central office through its GEAPON port, and LAN connectivity to the individual residential user or business subscribers via its 10/100/1000Mbps Ethernet port. A future-proof, Fiber To The Home (FTTH) solution, the ONU TP1001-GE is a critical element in the successful delivery of multimedia video, voice and data over a single optical fiber.

### KEY BENEFITS

- Full IEEE 802.3/802.3ah compliance
- Services supported: VOIP, IP Video and Data
- Wire-speed Layer 2 switch, in full bidirectional data rate on each port
- "Plug-and-play" via auto-discovery and configuration
- Multiple subscriber/Multiple services support from single ONU
- Hardware efficiency: Multiple services from any Ethernet port
- IGMP Snooping, Multicast VLAN, Port isolation
- 8K MAC address table, 255 VLAN entries
- Support 802.1d STP, 802.1w RSTP
- Secure access via Access Control List (ACL) on L2-L7
- IEEE 802.3x flow control for full-duplex, back pressure for half-duplex
- Advanced QoS functions enable billing by Service Level Agreement
- Remote management with facilitates activation and diagnostics, advanced OAM functions
- Quick installation and turn-up via pre-provisioning of the ONU
- Flexible installation, long reach operating range, temperature hardened design
- Standards compliant

## Specification

### Physical

- Dimensions  
170 mm(W) x 98 mm (D) x 28 mm(H)
- Weight: <0.5kg

### Power and Environmental

- Power Consumption:<10W
- Power  
AC: 100~240VAC,47~63Hz
- Operating Requirement  
0°C to +55°C ambient air temperature  
10% to 85% operating humidity  
(non condensing)
- Storage Requirement  
-40°C to +85°C ambient air temperature  
5% to 95% humidity  
(non condensing)

### Architecture

- Compact chassis
- 1 fix ONU EPON interface
- 1 10/100/1000 Base-T interface

### Optical Characteristics

- IEEE 802.3ah compliant
- SFF optical module
- SC/PC optical PHY (single-mode fiber)
- Tx:1310nm Rx:1490nm
- Symmetric 1.25Gbps per PON port
- 20km distance
- Splits per OLT port Max: 1:64
- Tx Power:+0dbm ~ +4dbm
- Rx Sensitivity:-26dbm

### Layer 2 switching Functions

- STP/RSTP
- Port based Vlan,IEEE802.1Q with 4K VLANs handling
- VLAN Stacking(QinQ),selective QinQ
- IEEE 802.3ad link aggregation(LACP)
- IEEE802.3x in full duplex, back pressure in half duplex,Head of Line
- 8K MAC table support
- MAC management( Learning control, limit and aging) support
- EAPS loop circuit protection
- Ethernet – II, Ethernet-SNAP

### Multicast

- IGMPv1/v2/v3, IGMP Snooping
- Multicast Vlan,Fast Leave
- Multicast control support

### Network Security

- Access Control List (ACL)
- Port/MAC binding,MAC filtering and Limit
- Per VLAN User Isolation
- Packet mirroring per ingress/egress port
- Limiting the maximum number of users per port
- EPON Frame Encryption: AES128 bit downlink encryption
- Broadcast/Multicast/DLF storm control
- Dying-Gasp

### Quality of Service (QoS)

- 4 CoS queuing
- IEEE 802.1 p and DSCP PRI Mark/remark
- SP and WRR congestion management
- Classification based Traffic Metering, Shaping and Marking
- CAR

### Management

- Web-enabled GUI based local configuration
- FTP/TFTP,Telnet,Console interface with CLI
- RMONv1, group 1, group 2, group 3 and group 9
- SSHv1/v2
- ONU Remote Upgrade and Management
- Environmental monitoring
- Local or the server's syslog log

### Safety Compliance

- CE marking
- FCC Class A
- ROHS5,CCC
- VCCI Class B
- EN 60950-1
- UL 60950-1

## Order Information

### TSCOMTP1001-GE ONU

TP1001-GE

GEPON optical network unit provides 1 fix EPON interfaces, 1 10/100/1000BaseT ,single power supply ,AC220V power supply

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### About Telesail 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>