

# TSCOM GP1001-GE

## **COST-EFFECTIVE GPON CUSTOMER PREMISE DEVICE**

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



TSCOM GP1001-GE  
GPON ONU

- **ITU-T G.984/G.988**
- **COMPACT CHASSIS**
- **64 SPLITS, 30KM REACH**
- **SERVICE SUPPORTED:  
VOIP, IP VIDEO AND DATA**
- **MUTLPLE 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 GP1001-GE ONU supporting cost-effective GPON 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 GP1001-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 GP1001-GE provides an uplink to the central office through its GPON 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 GP1001-GE is a critical element in the successful delivery of multimedia video, voice and data over a single optical fiber.

### KEY BENEFITS

- Full ITU-T G.984/G.988 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 Agresment
- 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 operationg range,temerature hardened design
- Standards compliant

## Specification

### Physical

- Dimensions  
105 mm(W) x 75 mm (D) x 26 mm(H)
- Weight: <0.5kg

### Power and Environmental

- Power Consumption:<6W
- Power  
DC12V/0.5A (external adaptor power supply)
- Operating Requirement  
0°C to +45°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 GPON interface
- 1 10/100/1000 Base-T interface

### Optical Characteristics

- ITU-T G.984/G.988 compliant
- SFF optical module
- SC/PC optical PHY (single-mode fiber)
- Tx:1310nm Rx:1490nm
- Downlink 2.5Gbps / uplink 1.25Gbps
- 20km distance
- Splits per OLT port Max: 1:64
- Tx Power:+0dbm ~ +4dbm
- Rx Sensitivity:-27dbm

### 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
- GPON 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

### TSCOM GP1001-GE ONU

GP1001-GE

GPON optical network unit provides 1 fix GPON interfaces, 1 10/100/1000BaseT ,plastic hull, DC12V/0.5A, external adaptor

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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>