

TSCOM TP1004

COST-EFFECTIVE GEPON CUSTOMER PREMISE DEVICE

*Integrated With 4-Port 10/100 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 TP1004 ONU* supporting cost-effective GEPON customer premise solutions designed for for single indoor residential applications. The solutions provide 100Mbps broadband services to a connected subscriber's gateway and/or computers. The TP1004 provide 4 10/100 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 TP1004 provides an uplink to the central office through its GEPON port, and LAN connectivity to the individual residential user or business subscribers via its 10/100Mbps Ethernet port. A future-proof, Fiber To The Home (FTTH) solution, the ONU TP1004 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
- 4 10/100M 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

TSCOMTP1004 - ONU

TP1004

GEPON optical network unit provides 1 fix EPON interfaces, 4 10/100M BaseT ,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