GT1016 Series Smart Cassette GPON OLT
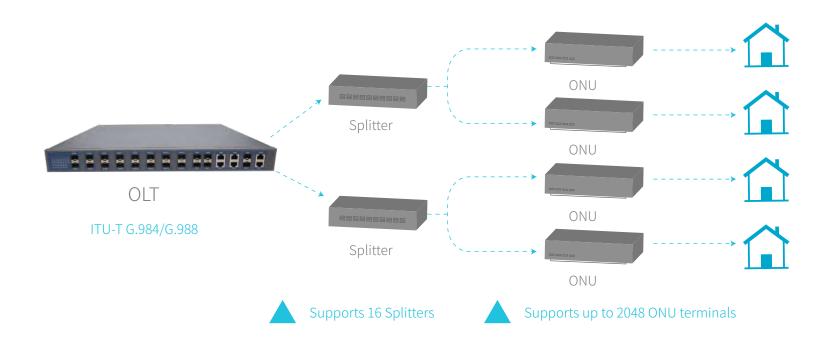
GT1016

2048 ONU terminals | OMCI OMCI | 1U rackmount

Meeting Mainstream Operator related Standards

The GT1016 complies with ITU-T G.984/G.988 and most of operator related standards.

OLT

ITU-T G.984/G.988

Splitter

Splitter

ONU

ONU

ONU

ONU

▲ Supports 16 Splitters   ▲ Supports up to 2048 ONU terminals
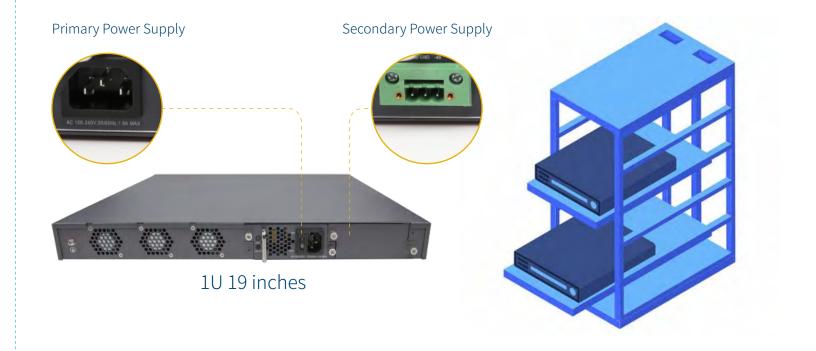
Support Up to 2048 ONU Terminals

One single PON port can support the access of 128 terminals, the overall unit (16 PON ports) can supports 2048 ONU terminals with physical links of up to 20 km in distance.

Space-saving 1U rackmount size

The GT1016 features 1U 19 inches in size and only occupies little space in the computer room. It consume less power and effectively reduces business operating cost.

Primary Power Supply   Secondary Power Supply

AC 100-240V,50/60Hz,1.5A MAX

1U 19 inches

Power Redundancy Ensures High Reliability

The OLT supports AC input, double DC input and AC+DC input. Redundant power design guarantees high reliability by minimizing the chance of a complete shutdown or failure.
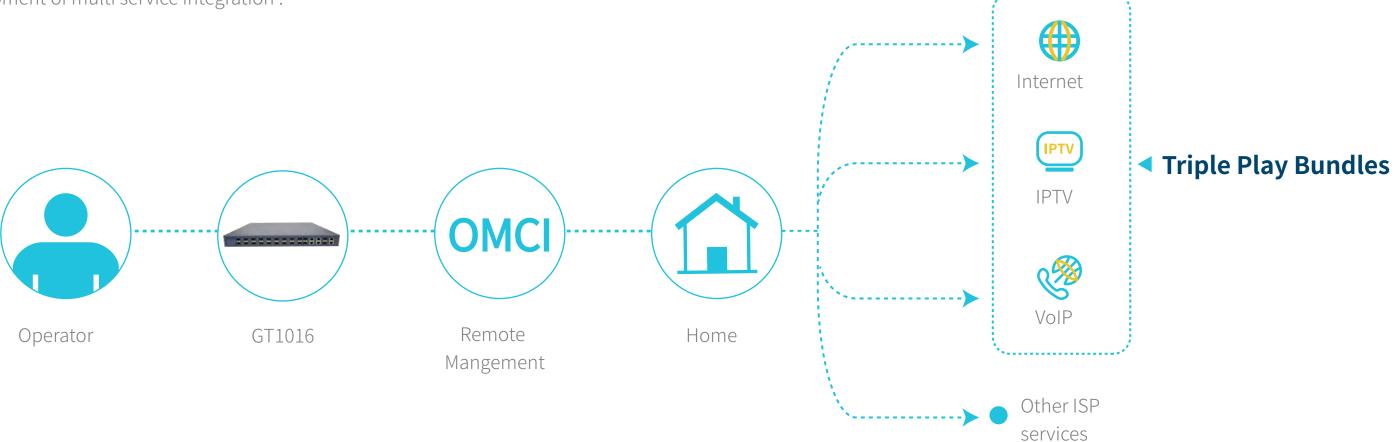
OMCI Management Function

OMCI allows service providers to manage a variety of applications and services, including voice, video and data (Triple Play Bundle) and other features remotely. This will help ISPs simplifies management and reduces operating costs.

Support ISP Multi Service Integration

Support Ethernet function, provide effective isolation guarantee mechanism, VLAN isolation, port protection, MAC address binding, IP address binding, port speed limit, queuing technique, flow control technology etc provide technical guarantee for the development of multi service integration .

Use Bandwidth More Efficiently with DBA

PON business capabilities support dynamic bandwidth allocation DBA algorithm, dynamic bandwidth allocation scheme (DBA) enables all users to share bandwidth more reasonably, achieving reliable quality of service.

Internet

IPTV

IPTV

VoIP

Triple Play Bundles

Other ISP services

Operator

GT1016

OMCI

Remote Mangement

Home

Product Specification

- **Switching Capacity:** 140Gbps
- **Forwarding Capacity(Ipv4/Ipv6):** 104MPPS
- **Service Port:** 16*PON port, 4*GE COMBO port, 2*10GE SFP+ port
- **Redundancy Design:**
  Dual power supply
  Support AC input, double DC input and AC+DC input
- **Power Supply:**
  AC: input 90～264V　47/63Hz;
  DC: input -36V～-72V;
- **Power Consumption:** ≤110W
- **Dimensions (Width x Height x Depth):** 440mm×44mm×380mm
- **Weight (Full-Loaded):** ≤3kg
- **Environmental Requirements:**
  Working temperature: -10℃～55℃
  Storage temperature: -40℃～70℃
  Relative humidity: 10%～90%, non-condensing

Product Features

- **PON Features:**
  ITU-TG.984.x standard
- Maximum 20 Km PON transmission distance
  Access 128 terminals for single fiber PON
  Uplink and downlink triple churning encrypted function with 128Bits
  ONU terminal legitimacy certification, report illegal ONU registration
  DBA algorithm, the particle is 1Kbit/s
  Standard OMCI management function
  ONU batch software upgrade, fixed time upgrade, real time upgrade
  PON port optical power detection
- **L2 Features:**
- **MAC:**
  MAC Black Hole
  Port MAC Limit
  64K MAC (packet exchange chip cache 2MB, external cache 720 MB)
- **VLAN:**
  4K VLAN entries
  Port-based/MAC-based/protocol/IP subnet-based
  QinQ and flexible QinQ (StackedVLAN)
  VLAN Swap and VLAN Remark
  PVLAN to realize port isolation and saving public-vlan resources
- **Spanning Tree:** STP/RSTP/MSTP, Remote loop detecting
- **Port:** Bi-directional bandwidth control
  Static link aggregation and LACP(Link Aggregation Control Protocol)
  Port mirroring

Product Features

- Security Features:
- User's Security:

  Anti-ARP-spoofing

  Anti-ARP-flooding

  IP Source Guard create IP+VLAN+MAC+Port binding

  Port Isolation

  MAC address binding to the port and MAC address filtering

  IEEE 802.1x and AAA/Radius authentication

- Device Security:

  Anti-DOS attack(such as ARP, Synflood, Smurf, ICMP attack), ARP

  detection, worm and Msblaster worm attack

  SSHv2 Secure Shell

  SNMP v3 encrypted management

  Security IP login through Telnet

  Hierarchical management and password protection of users

- Network Security:

  User-based MAC and ARP traffic examination

  Restrict ARP traffic of each user and force-out user with abnormal ARP traffic

  Dynamic ARP table-based binding

  IP+VLAN+MAC+Port binding

  L2 to L7 ACL flow filtration mechanism on the 80 bytes of the head of user-defined packet

  Port-based broadcast/multicast suppression and auto-shutdown risk port

  URPF to prevent IP address counterfeit and attack

  DHCP Option82 and PPPoE+ upload user's physical location Plaintext authentication of OSPF,

  RIPv2 and BGPv4 packets and MD5

  cryptograph authentication

- ACL:

  Standard and extended ACL

  Time Range ACL

  Flow classification and flow definition based on source/destination MAC address,

  VLAN, 802.1p, ToS, DiffServ, source/destination IP(IPv4/IPv6) address, TCP/UDP port

  number, protocol type, etc

  packet filtration of L2~L7 deep to 80 bytes of IP packet head

- QoS:

  Rate-limit to packet sending/receiving speed of port or self-defined flow and provide

  general flow monitor and two-speed tri-color monitor of self-defined flow

  Priority remark to port or self-defined flow and provide 802.1P, DSCP priority and Remark

  CAR(Committed Access Rate), Traffic Shaping and flow statistics

  Packet mirror and redirection of interface and self-defined flow

  Super queue scheduler based on port or self-defined flow. Each port/

  flow supports 8 priority queues and scheduler of SP, WRR and SP+WRR,

  Congestion avoid mechanism, including Tail-Drop and WRED.

- IPv4:

  ARP Proxy, DHCP Relay, DHCP Server, Static Routing, RIPv1/v2, OSPFv2, BGPv4

- IPv6:

  ICMPv6, ICMPv6 Redirection, DHCPv6, ACLv6, Dual stack of IPv6 and IPv4,

  OSPFv3, RIPng, BGP4

- Multicast:

  IGMPv1/v2/v3, IGMPv1/v2/v3 Snooping, IGMP Filter,

  MVR and cross VLAN multicast copy, IGMP Fast leave, IGMP Proxy,

  MLDv2/MLDv2 Snooping

Product Features

- Reliability:
- Loop Protection: ERRP or ERPS, Loopback-detection
- Link Protection:

  FlexLink (recover-time <50ms)

  RSTP/MSTP (recover-time <1s)

  LACP (recover-time <10ms)
- Device Protection:

  VRRP host backup

  1+1 power hot backup
- Maintenance:
- Network Maintenance:

  Port real-time, utilization and transmit/receive statistic based on Telnet

  RFC3176 sFlow analysis

  LLDP

  GPON OMCI

  RFC 3164 BSD syslog Protocol

  Ping and Traceroute
- Device Management:

  CLI, Console port, Telnet and WEB

  SNMPv1/v2/v3

  NTP

  network management

Purchase Information:

- GPON OLT 16PON:

  16*PON, 4*GE COMBO, 2*10GE SFP+, double AC/DC power supply
- AC Power Supply:

  AC power module for GPON OLT 16PON
- DC Power Supply:

  DC power module for GPON OLT 16PON

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