GigaPoint®
GP1100G

The GigaPoint® GP1100G is an indoor, 2.5 Gbps GPON small form-factor service delivery terminal that provides broadband connectivity to the subscriber. This high-performance terminal features one 2.5 Gigabit Ethernet (GE) interface delivering IPTV video and data services, and one voice line supporting carrier-grade VoIP (SIP). Connecting a GigaSpire system to the LAN port of the GP1100G allows for the delivery of a sensational Wi-Fi experience to your subscribers. Decoupling the broadband demarcation from the premises system provides more flexibility and reduces costs. The GigaPoint GP1100G is designed for the industry-leading Calix E-Series fiber access GPON optical line terminals (OLTs).

EASY TO INSTALL, ACTIVATE, AND MAINTAIN

With the GigaPoint GP1100G, Calix has redefined how to install and activate residential services at a subscriber's premises. Using the Calix Smart Activate feature and a phone or laptop, a field technician can install and apply the subscriber's service profile without special equipment or assistance from the central office. Calix also provides an innovative software portfolio, including management via SMx or CMS enabling the service provider to configure, activate and upgrade the GP1100G using in-band management. Extensive troubleshooting capabilities, remote software downloads, and easy-to-use service activation ensures that services are delivered and maintained without needless truck rolls and hardware upgrades. Employing the GP1100G GigaPoint allows service providers to reduce their operational expenseswhile effectively delivering the Gigabit experience to their subscribers.

KEY ATTRIBUTES

- Standards-based Full Service Access Network (FSAN), ITU-T GPON compliant
- One 2.5 Gigabit Ethernet (GE) interface:
    - Symmetrical 2.5 Gbps bandwidth for residential IPTV and data services
    - Multi-rate 10/100/1000/2500 BASE-T Ethernet, auto-negotiating
- One voice line
    - Carrier grade MetaSwitch SIP
    - MGCP
    - H.248
- Supports multiple data service profiles
- Traffic management and Quality of Service (QoS):
    - 802.1Q VLANs
    - 802.1p service prioritization
    - Q-in-Q tagging
    - Multiple VLANs
    - Rate limiting
    - DiffServ
    - Pre-defined QoS on service type

- Connectivity Fault Monitoring (CFM):
    - Connectivity Check Message (CCM)
    - Loopback (LBM)
    - Line Trace (LTM)
- IPTV, IGMPv2, IGMPv3:
    - IGMP Snooping and Proxy
    - IGMP Fast Leaves
- Complete OAM&P support via Calix Management System (SMx)
- Calix Support Cloud (CSC)
- Indoor mounting options:
    - Wall mount with key holes
    - Desktop mount: horizontal
- AC to 12 V DC power adapter available for non-lifeline services
- Optional uninterruptible power supply (UPS) for voice lifeline service power

SPECIFICATIONS

Dimensions
- Length: 4.13 in (10.5 cm)
- Width: 3.54 in (9.0 cm)
- Height: 1.22 in (3.1cm)
- Weight: 5.80 oz (166 g)

PON Characteristics
- Max. split: 64 GPON
- Max. reach: 58 km (36 miles) with Class+/FEC, 20km (12.4 miles) with Class B+/non-FEC
- Maximum Optical Distribution Network (ODN) Attenuation: GPON Class B+ 28 dB

  GPON Class C+ 32 dB
- Optical Receiver: 1490 nm:

  GPON Class B+ -27 dBm to -8 dBm

  GPON Class C+ -30 dBm to -8 dBm
- Optical Transmitter: 1310 nm:

  +0.5 dBm to +5 dBm

Interfaces
- Data/IPTV: One 10/100/1000/2500 BASE-T Ethernet port, RJ-45 connector
- Telephony: One RJ-11 connector
- PON: Single 9/125 µm (single mode) fiber, SC/APC connector, minimum 50 dB return loss
- Power: 2-pin connector, 8-pin connector

Telephony
- General: SIP
- Number of lines: 1
- RENs: 5 maximum
- Drop length: Maximum 500 feet (152.4 m)
- Ring Voltage: 55 VAC @ 4 REN Load

Data
- Drop length:

  2500BASE-TX with CAT5E cable, 262 feet (80 m) maximum

  328 feet (100 m) maximum with CAT5e cable 1000BASE-TX 328 feet (100 m)maximum
- Auto MDI/MDIX crossover for 2500BASE-TX, 1000BASE-TX, 100BASE-TX, and 10BASE-T ports
- Traffic Management and QoS: 802.1Q VLAN; 802.1p Video, Data and Management Priorities; Q-in-Q tagging; Per-Port Rate Shaping; Rate Limiting
- MTU 2000 Bytes

Environmental
- Operating temperature: Indoor ambient temperature, 0° to 40°C (32° to 104°F)
- Operating/storage relative humidity: 5 to 95% non-condensing

Certification and Compliance
- Emissions:
  FCC Part 15 Class B
  IC ICES-003 Class B
  CISPR24 and CISPR35
- Safety:
  UL62368 and UL1697 approved
- IEEE: 802.3, 802.3AB, 802.3U, 802.11p, 802.11Q, 802.3bz (2500BASE-T)

Powering and Alarms
- 2-pin connector for use with AC/DC adapter
- 8-pin connector for use with UPS
- Input voltage: 12 V DC (nominal), 10.5 V DC (min), 14.4 V DC (max)
- External Power Adapter: 12 V DC, 1.5 A (Sold Separately)
- Typical Power: 7 W
- Maximum Power: 9 W
- Battery backup time rated capacity: 8 hours based on Telcordia GR-909 calculation methods using recommended UPS. Contact Calix for recommended UPS.

ORDERING INFORMATION

Product Number	Description
Systems	
100-05969	**GP1100G** 2.5 GE, 1 POTS, AM Power Adapter
100-05806	**GP1100G** 2.5GE, 1 POTS, Universal Power Adapter
Power Adapters*	
100-05863	Power Adapter CPA2 12V 1.5Amp - AM Type A
100-05626	Power Adapter CPA3 12V 1.5Amp - Universal
Accessories	
100-05537	GigaPoint Wall Mount Fiber Mgmt. Bracket – Quantity 50
Uninterruptible Power Supply (UPS)	
100-04068	Indoor UPS, 12 V, 7.2 AH, 36 W, Black - AM Type B Grounded
100-03893	Indoor UPS Power Cord, 7 pin UPS to 8 pin ONT Male, 1M Black
100-03894	Indoor UPS Power Cord, 7 pin UPS to 8 pin ONT Male, 3M Black
100-03895	Indoor UPS Power Cord, Un-terminated to 8 pin ONT Male, 6M Black

- **The GP1100G is shipped with a power adapter. If replacement power adapters are needed, please use the order codes in this section to add the necessary quantity required.**

Note: Calix believes the information in this publication to be accurate as of publication date, and is not responsible for error. Product Specifications are subject to change without notice.