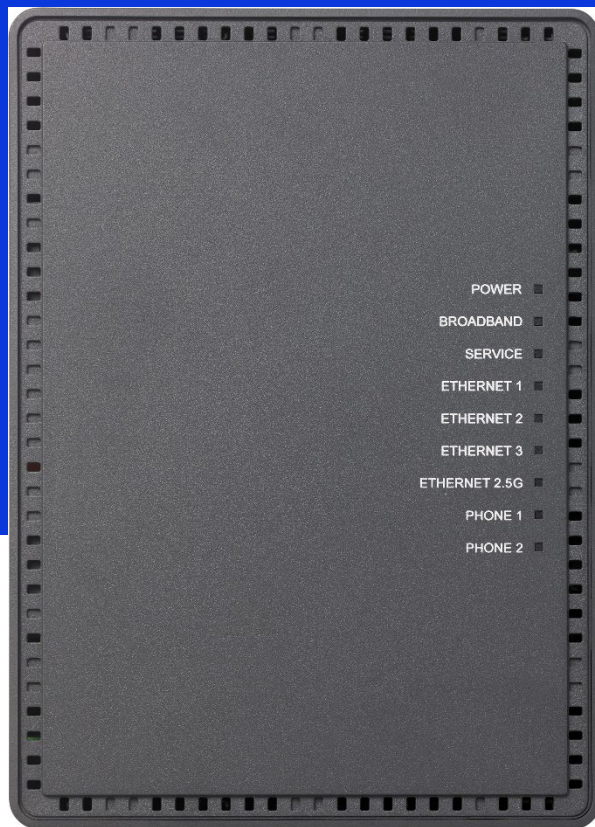


# GigaPoint®

## GP4200A



The Calix GP4200A GigaPoint® is an indoor, 2.5 Gbps GPON and 1.0 Gbps Active Ethernet (AE) small form-factor service delivery terminal that provides broadband connectivity to the subscriber. This high-performance terminal features one 2.5 Gigabit Ethernet (2.5 GE) interface and 3 Gigabit Ethernet (GE) interfaces delivering IPTV video and data services, and two voice lines supporting carrier-grade VoIP (SIP). Connecting a Calix GigaSpire to the LAN port of the GP4200A 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 GP4200A GigaPoint is designed for the industry-leading Calix E-Series fiber access GPON optical line terminals (OLTs).

## OVERVIEW

With the GP4200A GigaPoint, 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 enabling the service provider to configure, activate and upgrade the GigaPoint 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 GP4200A GigaPoint allows service providers to reduce their operational expenses while effectively delivering the Gigabit experience to their subscribers.

## KEY ATTRIBUTES

### **Standards-based Full Service Access Network (FSAN), ITU-T GPON and IEE AE compliant**

- 2.5 Gbps GPON
- 1 Gbps Active Ethernet
- Auto-detect options enables seamless transition between WAN interfaces

### **One 2.5 Gigabit Ethernet (2.5 GE) interface**

- Symmetrical 2.5 Gbps bandwidth for residential IPTV and data services
- Multi-rate 10/100/1000/2500 BASE-T Ethernet, auto-negotiating

### **Three 1 Gigabit Ethernet (GE) interfaces**

- Symmetrical 1 Gbps bandwidth for residential IPTV and data services
- Multi-rate 10/100/1000 BASE-T Ethernet, auto-negotiating

### **Two voice lines**

- Carrier grade SIP, H.248, MGCP VoIP Voice services

### **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

### **IPTV, IGMPv2, and IGMPv3**

- IGMP Snooping and Proxy
- IGMP Fast Leaves

### **Complete Operations, Administration, Maintenance, and Provisioning (OAM&P) support via SMx**

## SPECIFICATIONS

### Dimensions

- Length: 7.02 in (178.40 cm)
- Width: 5.05 in (128.20 cm)
- Height: 1.23 in (31.20 cm)

### 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

### Point to Point AE Characteristics

- Max reach: 50 km (31 miles)
- 1490 nm optical receiver: -22.0 to -3.0 dBm
- 1310 nm optical transmitter: -5.5 to 0.0 dBm

### Interfaces

- Telephony: Two RJ-11 connectors
- Data/IPTV:  
One 10/100/1000/2500 Base-T Ethernet ports, RJ-45 connectors  
3 10/100/1000 Base-T Ethernet ports, RJ-45 connectors
- PON: Single 9/125  $\mu$ m (single mode) fiber, SC/APC connector, minimum 50 dB return loss
- Power: 2-pin connector, 8-pin connector

### Telephony

- General: SIP, H.248, MGCP
- Number of lines: 2
- RENs per line: 5 maximum
- Drop length: Maximum 500 feet (305m)
- DSO Output: 23.5 to 25 mA
- Ring Voltage: 55 VAC

### Environmental

- Operating temperature: Indoor ambient temperature 32°F to 104°F (0°C to 40°C)
- Operating/storage relative humidity: 8 to 95 % non-condensing

### Data

- Drop length: 328 feet (100 m) maximum using CAT5 cable
- Auto MDI/MDIX crossover for 1000/2500/10G BASE-TX 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

### Certification and Compliance

- Emissions:
  - FCC Part 15 Class B
  - IC ICES-003 Class B
  - CISPR24 and CISPR35
- Safety:
  - UL 62368
  - UL 1697 approved
  - CE Mark
- IEEE: 802.3, 802.3AB, 802.3U, 802.1p, 802.1Q, 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), 10.5V DC (min), 14.4V DC (max)
- Battery backup time rated capacity: 8 hours based on Telcordia GR-909 calculation methods using recommended UPS. Contact Calix for recommended UPS.

## ORDERING INFORMATION

Order Code	Description
<b>System</b>	
100-05882	GP4200A GigaPoint, 2 POTS, 1 2.5GE, 3 GE - AM Power Adapter
100-05883	GP4200A GigaPoint, 2 POTS, 1 2.5GE, 3 GE - Universal Power Adapter

**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.