



# GigaPoint<sup>®</sup> (803G)

## DESCRIPTION

The Calix 803G GigaPoint<sup>®</sup> 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 Gigabit Ethernet (GE) interface delivering IPTV video and data services, and voice line supporting carrier grade VoIP and network-based TDM voice circuits. Connecting a Calix GigaCenter (844E) to the LAN port of the 803G 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 803G GigaPoint is designed for the industry-leading Calix E-Series fiber access GPON optical line terminals (OLTs).



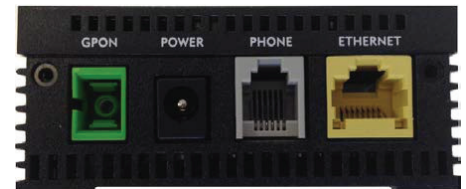
## EASY TO INSTALL, ACTIVATE, AND MAINTAIN

With the 803G 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 CMS and Calix Support Cloud (CSC) 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 803G 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 compliant
- One Gigabit Ethernet (GE) interface:
  - Symmetrical 1 Gbps bandwidth for residential IPTV and data services
  - Multi-rate 10/100/1000 BASE-T Ethernet, auto-negotiating
- One voice line
  - FXS ports, ANSI or ETSI
  - Carrier grade SIP, H.248, MGCP VoIP
  - TDM GR-303/TR-08 Mode II/GR-57, GR-08 (TR-08 Mode I) 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, IGMPv3:
  - IGMP Snooping and Proxy
  - IGMP Fast Leaves
- Complete OAM&P support via Calix Management System (CMS)
- Calix Support Cloud (CSC)
- Indoor mounting options:
  - Wall Mount or Structured Wiring Enclosure (SWE) mount with fiber management
  - Desktop mount: horizontal or vertical
- AC to 12 V DC power adapter available for non-lifeline services
- Optional uninterruptible power supply (UPS) for voice lifeline service power



## SPECIFICATIONS

### DIMENSIONS

Width: 3.0 in (7.6 cm)  
Height: 4.0 in (10.2 cm)  
Depth: 1.25 in (3.2 cm)  
Weight: 4 oz (0.1 kg)

### PON CHARACTERISTICS

Max. split: 64 GPON  
Max. reach: 58 km (36 miles) with  
C+/FEC

Maximum Optical Distribution

Network (ODN) Attenuation:

GPON Class B+, 28 dB

GPON Class C+, 32 dB

1490 ± 10 nm optical receiver:

-27.0 to -8.0 dBm (Class B+); -30.0 to -8.0  
dBm (Class C+ with FEC)

1310 ± 20 nm optical transmitter:

0.5 to 5.0 dBm

### INTERFACES

Data/IPTV: One 10/100/1000 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

### TELEPHONY

General: SIP, H.248, MGCP or TDM

Gateway (GR-303, GR-57, TR-08  
Mode I, TR-08 Mode II)

Number of lines: 1

RENs: 5 maximum

Drop length: Maximum 500 feet (152.4 m)

DS0 Output: 23.5 mA

Ring Voltage: 56–84 V AC

### DATA

Drop length: 328 feet (100 m)

maximum, using CAT5 cable

Auto MDI/MDIX crossover for

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

### ENVIRONMENTAL

Operating temperature: Indoor

ambient temperature, 0° to 40°C

(32° to 104°F)

Operating/storage relative humidity:

8 to 95% non-condensing

### CERTIFICATION AND COMPLIANCE

Emissions:

FCC Part 15 Class B

IC ICES-003 Class B

CISPR-22

Safety:

UL 60950 and UL 1697 approved

IEEE: 802.3, 802.3AB, 802.3U,

802.11p, 802.11Q

### POWERING AND ALARMS

2-pin connector

Input voltage: 12 V DC (nominal),

10 V DC (min), 15 V DC (max)

External Power Adapter: 12 V DC,

1.5 A

Typical Power: 3.5 W, Peak Power:

7 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

### Calix 803G GigaPoint

**100-04255**.....803G GigaPoint, 1 GE, 1 POTS

### Calix 803G Power Adapters

**100-04323**.....Power Adapter CPA3 12V 1.5Amp – AM Type A

**100-04324**.....Power Adapter CPA3 12V 1.5Amp – EU Type C

**100-04037**.....Power Adapter CPA5 12V 2.5Amp – UK Type G

**100-04038**.....Power Adapter CPA5 12V 2.5Amp – AU/NZ Type I

**100-04039**.....Power Adapter CPA5 12V 2.5Amp – AR Type I

### Calix 803G Packages with Power Adapter

**000-00951**.....803G GigaPoint, 1 POTS, 1 GE – AM Type A Power Adapter

**000-00952**.....803G GigaPoint, 1 POTS, 1 GE – EU Type C Power Adapter

**000-00953**.....803G GigaPoint, 1 POTS, 1 GE – UK Type G Power Adapter

**000-00954**.....803G GigaPoint, 1 POTS, 1 GE – AU/NZ Type I Power Adapter

**000-00955**.....803G GigaPoint, 1 POTS, 1 GE – AR Type I 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.