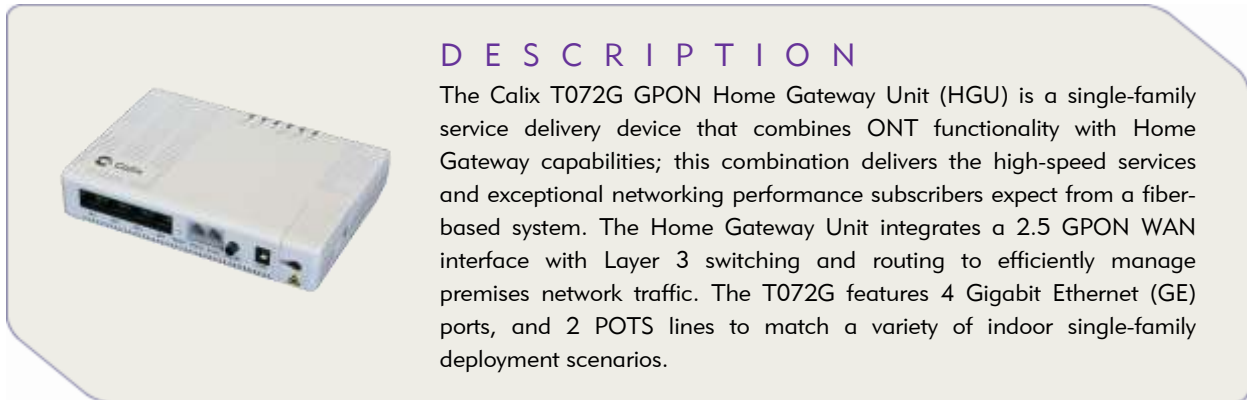


T072G Home Gateway Unit



DESCRIPTION

The Calix T072G GPON Home Gateway Unit (HGU) is a single-family service delivery device that combines ONT functionality with Home Gateway capabilities; this combination delivers the high-speed services and exceptional networking performance subscribers expect from a fiber-based system. The Home Gateway Unit integrates a 2.5 GPON WAN interface with Layer 3 switching and routing to efficiently manage premises network traffic. The T072G features 4 Gigabit Ethernet (GE) ports, and 2 POTS lines to match a variety of indoor single-family deployment scenarios.

GIGABIT HOME NETWORKING: The T072G HGU ONT is designed for the industry-leading Calix E7 and BLM 1500 OLT platforms. The T072G terminates a GPON fiber link at the subscriber's location and provides industry-standard interfaces for the customer premises equipment. The ONT enables subscribers to receive broadband data, IP video, and VOIP voice on a single fiber. At the ONT, the optical signal is converted to the appropriate electrical signals for transmission over the residence's existing twisted pair, and CAT5 cables.

EASY TO INSTALL, ACTIVATE, AND MAINTAIN: Featuring innovative software management tools, the T072G HGU ONT can be configured, activated and upgraded quickly from a remote location. Extensive troubleshooting capabilities, remote software downloads, and easy-to-use service profile menus ensure that services are delivered and the ONT is maintained without needless truck rolls and hardware upgrades. Employing a T072G HGU ONT allows service providers to install the ONT once and support network upgrades with a simple, remote software download.

NEW STANDARD FOR PERFORMANCE AND RELIABILITY: The T072G HGU ONT is a network-managed, intelligent service gateway that supports both Layer 2 bridged operations and Layer 3 routed services. This sophisticated software allows the ONT to support multiple high-bandwidth applications such as: high-speed data, HDTV-based IPTV video, and routing with bridging features for Whole-Home DVR.

CONFIGURATION, PROVISIONING AND MANAGEMENT CHOICES: The T072G HGU ONT can be fully provisioned and managed using OMCI and TR-069. The Home Gateway functions are also configurable with a configuration file downloadable from the OLT via OMCI. The T072G can be partially or fully provisioned as a Layer 2 bridged ONT. Additionally each LAN port can be individually configured and managed for bridged operation rather than for routed operation.

T072G Home Gateway Unit

KEY ATTRIBUTES

- Standards-based Full Service Access Network (FSAN), ITU-T GPON
- Home Gateway:
 - Layer 2 and 3 switching and routing
 - DHCP server options
 - DHCP (IPoE) and PPPoE network connections
 - Network Access Translation (NAT), public to private IP addressing
 - Configurable IP address schemes, subnets, static-IP addresses
 - DNS server
 - Bridge port assignment and data traffic mappings
 - Port forwarding
 - Firewall and security
 - Application and website filtering
 - Selectable forwarding and blocking policies
 - DMZ hosting
 - Denial of service
 - MAC filtering
 - Universal Plug-and-Play (UPnP)
- Layer 2 Features:
 - MAC address learning with 8 K MAC table
 - Transparent LAN service (TLS)
- Two voice lines:
 - FXS ports, ETSI
 - Carrier grade SIP VOIP
 - RFC 2833
 - T.38 fax
- Four Gigabit Ethernet (GE) interfaces:
 - Symmetrical 1 Gbps bandwidth for IPTV and data services
 - Multi-rate 10/100/1000 BaseT Ethernet, auto-negotiating
- 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:
 - Layer 2 or routed mode IPTV
 - IGMP Snooping and Proxy
 - IGMP Fast Leaves
 - Unicast Video-on-Demand (VOD)
- Complete OAM&P
- Gateway Management:
 - TR-069
 - Local subscriber GUI, access provisionable
 - Remote WAN side GUI access
- Management Features:
 - OMCI for GPON, Layer 2 bridge port functions, VoIP, and software download
 - TR-069 for Home Gateway (HGW) functions and HGW profile download
 - Web GUI for local and remote HGW management
 - Config file for Home Gateway functions and country specific VOIP configuration, downloadable via OMCI or TR-069
- Powering:
 - Power Adapter: Wall mount EU plug, Power Adapter
 - Dying gasp

SPECIFICATIONS

T072G Home Gateway Unit

DIMENSIONS

Height: 39 mm
Width: 170 mm
Depth: 127 mm
Weight: 280 g

GPON CHARACTERISTICS

Maximum Attenuation:
GPON Class B+, 28 dB
1490 ± 10 nm optical receiver:
-28.0 to -8.0 dBm
1310 ± 20 nm optical transmitter:
0.5 to 5.0 dBm

INTERFACES

GPON: SC/APC connector
Telephony: RJ-11
Data/IPTV: 10/100/1000 BaseT
Ethernet ports, RJ-45 connectors
Power: DC barrel connector

TELEPHONY

General: ETSI POTS via SIP
Number of lines: 2
5 REN, balanced ring at 55V RMS
Gain adjustment: -14dB to -6dB
±1dB
CODEC: G.711 (A-law)
RFC 2833
Fax: T.38

DATA

Drop length: 328 feet (100 m)
maximum using CAT5 cable
Number of ports: 4
10/100/1000 BaseT auto-
negotiation or manual
configuration
Traffic Management and QOS:
802.11Q VLAN; 802.11p voice,
video, data and management
priorities; Q-in-Q tagging; Rate
limiting

MANAGEMENT

OAM&P
TR-069 remote management
TR-064 local management
TR-98 Internet gateway device data
model
Web GUI: Local and remote HGW
management
Config file: HGW profile and country
specific voice FXS configuration

ENVIRONMENTAL

Operating temperature: Indoor
ambient temperature, 0° to 40°C
Storage temperature: -20° to 70°C
Operating/storage relative humidity:
5 to 95 % non-condensing
Altitude: -61 to 3,048 m above sea
level

REGULATORY

Safety: EN 60950-1:2006, EN
60825-2:2004, CE Mark
EMC: DIRECTIVE 2004/108/CE,
DIRECTIVE 1999/5/EC,
EN 300 386 V1.5.1:2011 Class B,
EN 55022, Class B
EN 55024:1998+A1/A2
Waste Directives: 2002/95/EC,
2002/96/EC

STANDARDS

ITU-T: G.984.1, .2, .3, .4, .5
Broadband Forum: TR-069 Issue 1
Amt 1/2/3
IEEE: 802.3, 802.3AB, 802.3U

POWER

Power Adapter: Wall mount EU plug,
Power Adapter
AC input: 100~240 V±10%, 0.6 A,
50~60 Hz±5%



ORDERING INFORMATION

T072G Home Gateway Unit

Calix T072G Home Gateway Unit

T072G HGU (100-03563) HGU, 2 POTS, 4 Gigabit Ethernet, EU Power



1035 N. McDowell Blvd., Petaluma CA 94954
TEL: 877.766.3500 WWW.CALIX.COM

250-00256, Rev. 12