

EdgeGate® 483D

**Triple play all-in-one future-proof outdoor CPE
for Active Ethernet (P2P) FTTH**



**EdgeGate 483D
with dual 1G uplinks**

The EdgeGate 483D provides a triple play, all-in-one, future-proof outdoor CPE designed to deliver voice, video, and data services to homes, small office/home office (SOHO), and small enterprises.

EdgeGate 483 is based on Telco Systems' field-proven, highly reliable EdgeGate technology, which is deployed at thousands of homes and businesses worldwide. The 483D provides a second 1G uplink that allows for multiple EdgeGates and subsequently multiple houses to be daisy-chained or connected in a ring using one fiber strand to serve multiple houses. It offers ILECs, utilities, municipalities and Greenfield developers a cost-effective means to offer high reliability and availability triple play services.

Together with Telco Systems' carrier class L2/L3 switches, the EdgeGate 483 provides an end-to-end Active Ethernet Fiber-to-the-X (home/curb/business) solution.

The EdgeGate 483 supports both 100M and 1G uplinks, with dual uplinks in the same product, future-proofing the network. Upgrade to 1G is simply done in the field by replacing the SFP. No change in the electronics or installation is required. The optical uplink supports 100M or 1G Ethernet over traditional fiber pair or single-strand, bi-directional fiber which cuts costs in half. (CWDM option is also available).

This EdgeGate model supports two analog voice lines (VoIP FXS ports) and eight 10/100BaseT Ethernet ports that connects to PC and TVs. The Ethernet ports provide both data (Internet) and video services. It has full wire-speed Layer 2 switching allowing for better QoS, service

type differentiation and improved services for video streaming and VoIP. Subscribers can enjoy broadband bandwidth-hungry applications such as video-on-demand while maintaining very high-quality voice.

The EdgeGate 483D provides high-quality voice, video and data experience, utilizing ingress and egress rate limiting, ring resiliency using RSTP for recover in case of failure as well as 802.1p for voice priority and 802.1q VLAN tagging. It fully interoperates and is certified by most major soft switch vendors.

Many advanced telephony features like 3-way calling, call forward and hold, distinctive ring for different callers, and T.38 support for fax over IP are supported.

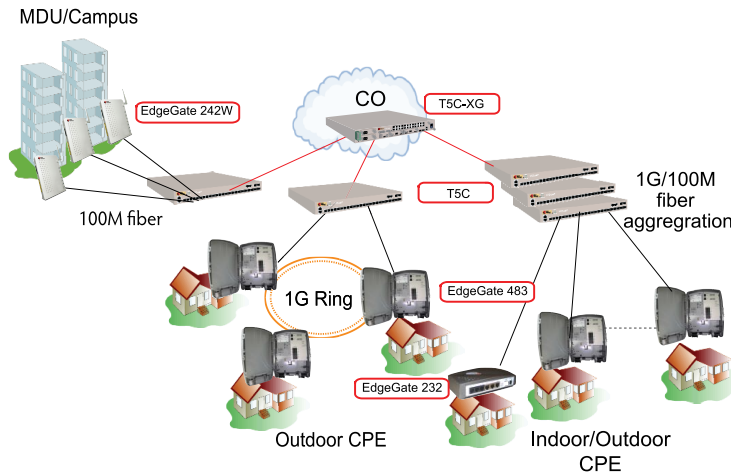
The EdgeGate 483 supports IGMPv2 (including snooping for video streaming) to enable efficient use existing bandwidth for delivery of high quality IPTV service.

Analog video is supported using optional RF splitter. This enables service providers to use their existing analog head ends for video service instead of delivering IPTV. This feature provides a converged service of high speed data and voice in parallel to traditional TV service.

This unit can be mounted outdoors with several powering options to provide both installation flexibility and support high quality service even during a power failure. There is a separation of technician access and customer access as well as enhanced cable management to ensure fast and very reliable installation.

- FTTH/B active Ethernet outdoor CPE
- Voice (VoIP) video, data and home networking all in one box
- Dual 1G uplink to support chain or ring
- 2 analog voice ports with superior voice quality plus 802.1p Voice priority
- Future-proof – supports both 100M and 1G Wire speed performance with many SFP uplink options
- IGMP Snooping for IPTV and video services
- Part of complete end-to-end solution
- Full SIP and MGCP support
- 8x10/100BaseT LAN ports
- Enhanced Layer 2 switching with QoS
- Layer 3 TOS marking
- Unmatched QoS using standard based tools like 802.1q, TOS marking and voice priority
- Egress and ingress rate limiting
- Zero-touch mass auto-configuration and auto provisioning using TFTP or HTTP
- Enhanced mechanics and cable management
- Supports tiered installation process fiber first and electronics later

EdgeGate 483 CPE



Key Applications

- End-to-end fiber to the home/business
- Triple play for campuses and apartment complexes
- Greenfield solution eliminating the need for coax or copper wiring
- Flexible solution for both indoor and outdoor installation
- Option for fiber to the pole/curb

Specifications

Interfaces

Uplinks

Combo 100M and 1G ports

- 100BaseFX SFP
- 1000BaseX SFP
- Variety of SM, MM and bi-directional LX, SX, ZX SFPs

Secondary 1G uplink

- 1000BaseX SFP
- Variety of SM, MM and bi-directional LX, SX, ZX SFPs

LAN Ports

- 8x10/100BaseTx LAN Interface
- 10/100BaseT RJ-45
- Full/half duplex
- IEEE 802.3
- IEEE 802.3u Auto negotiation

Telephony Interface

- 2x FXS
- Analog Connector RJ-11 (POTS)
- 5 REN
- 600 feet cable

Dry contact for battery indications)

Enclosure

Plastic enclosure

Separation between customer and technician access

Variety of options for cable termination and cable management

Compatibility

Voice protocols

- SIP (RFC 2543, RFC 3261)
- MGCP (RFC 2705, RFC3435, NCS)

CODECS (concurrently on both ports)

- ITU G.723.1
- ITU G.711 (μ-law, A-law)
- ITU G.726
- ITU G.729
- ITU T.38
- ITU FXS

Voice features

- Automatic fax/modem detection
- Voice Activity Detection (VAD)
- Comfort Noise Generation (CNG)
- RTP voice packet encapsulation
- DTMF detection and generation
- Enhanced call features: Caller ID, call hold, attended/unattended call forward, 3 way conferencing, redial
- Automatic tone generation: dial, busy, fast busy, ring back, stutter tone, distinctive ring
- Interop with most softswitches in the market

QoS

- IEEE 802.1p
- IEEE 802.1q
- TOS L3 marking on VoIP frames of internal FXS
- Internal priority for VoIP traffic
- Egress and ingress rate limit
- Spanning Tree running RSTP
- IEEE 802.1x flow control

Video

- IGMPv2 Snooping with fast leave
- RFC 2236 IGMPv2
- RFC 2068 HTTP

Switching Characteristics

Technology

- Advance chip set based
- Store and forward, full wire speed

8K MAC addresses

Management

SNMP Client MIBs, MIB II, private MIB

Web-based management

TELNET, SNMP, web

Remote auto configuration: HTTP

Mass SW download and auto-configuration using TFTP or HTTP

Dry contact for battery indications

General Specifications

Dimensions (H x W x D)

12.7 x 9.9 x 3.8 in
(32.3 x 25.1 x 9.7 cm)

Power

12VDC external power supply
Indoor integrated power supply and UPS

Outdoor collar meter with outdoor UPS

Operating Temp.

-40C to +60C (-40F to 140F)

including solar load

Operating Humidity

10% – 90%, non-condensing

Emission and Safety Regulations

FCC Class A (outdoor), UL, CUL, CE
(EMI, EMS, LVD)

Ordering Information

Ordering P/N ¹	Model	Customer Interfaces	Uplinks (SFP ²)	RF Module	Dry Contacts
GW-483D-z	GW483D	2 - analog voice (FXS); 8 - 10/100BaseT	1 - 100BaseFX / 1000BaseX combo; 1 - 1000BaseX	no	yes
GW-483DI-z	GW483DI	2 - analog voice (FXS); 8 - 10/100BaseT Internal plastic envelope and electronics only	1 - 100BaseFX / 1000BaseX combo; 1 - 1000BaseX	yes	no

z = S for SIP, M for MGCP

Notes:

(1) Power option is not included

(2) Unpopulated SFP ports. For full list of optical modules, contact our sales department, any of our branches or authorized distributors



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