



# GPON ONT GIGABIT VOIP GATEWAY

## GIGABIT-SPEED BROADBAND

Up to 2.4 Gbps broadband service for home users



#### RELIABLE OPTICAL FIBER CONNECTION

Optical fiber connection allows a connection to remote homes not reachable by DSL services



# TRIPLE PLAY APPLICATIONS

High-speed broadband access ideal for data, voice, streaming video/high-definition TV to a home over the Internet



# **NEW GPON TECHNOLOGY**

The DPN-5402 GPON (Gigabit Passive Optical Network) ONT (Optical Network Terminal) Gigabit VoIP Gateway provides an optical line connection to a GPON OLT on the CO side, and 4 10/100/1000 Mbps Gigabit Ethernet connections to the end-user's LAN side. It leverages the extraordinary bandwidth of GPON technology, the next step in the delivery of new high-speed Internet applications to home and office users. Designed for deployment inside a home or an apartment building, this ONT device provides a reliable, long-reach last-mile connection by extending the public high-bandwidth network to people living and working in remote multi-unit, multi-tenant buildings.

# HIGH-SPEED INTERNET ACCESS

The DPN-5402 offers optical fiber technology for telecom carriers to address increasing service demands, delivering much higher speeds over fiber optic lines. It supports symmetric applications and covers various deployment scenarios in apartments, school dormitories, and other multi-tenant buildings.

## APPLICATIONS SUPPORT

Applications include IPTV, VOD (Video-On-Demand), VoIP (Voice over IP), VPN (Virtual Private Networks), web browsing, instant messaging, and e-mail.

#### **VOICE SUPPORT**

The DPN-5402 features 2 FXS voice ports, enabling service providers to deliver voice services to customers.

## CATV PASSTHROUGH (OPTIONAL)

DPN-5402 can support an optional RF passthrough for CATV connection.

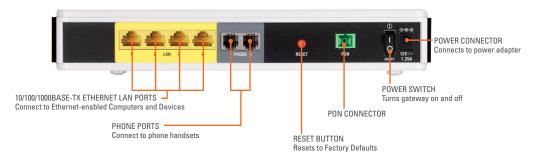


## WHAT THIS PRODUCT DOES

The DPN-5402 is a GPON ONT device that provides a Gigabit connection and voice features for indoor environments such as small offices and multi-unit buildings. GPON technology delivers up to 2.4 Gbps speed over optical fiber wiring, and enables next-generation simultaneous voice, video, and data services including high-speed Internet access, video streaming, and instant messaging. The DPN-5402 is a cost-effective, easy-to-deploy technology that can be used as a high-performance Internet solution.

# **FEATURES**

- Gigabit Ethernet Speed
- 1 GPON Port (SC Connector)
- 4 10/100/1000 BASE-TX Gigabit Ethernet Ports (RJ-45 Connector)
- 2 VoIP FXS Ports (RJ-11 Connector)



# **TECHNICAL SPECIFICATIONS**

#### LAN FEATURES

- Supports 10BASE-T (IEEE802.3)
- Supports 100BASE-TX (IEEE802.3u)
- Supports 1000BASE-TX (IEEE802.3ab)
- Supports IEEE802.3x flow control. (PAUSE frame)
- Supports 802.10 VLAN (up to 8 VLANs, VID1 4094)
- VLAN trunk, VLAN based on user port and service type
- Supports auto negotiation
- Supports auto MDI/MDIX
- Supports 1522 byte Ethernet packet size (Tag Packet)
- Cable: UTP (Category 5e)

#### **GPON FEATURES**

- Complies with ITU-T 984.x standard
- Provides 1 SC connector that can be connected to the fiber cable from CO site
- Cable: Single Mode Fiber cable
- Supports OMCI (ONT Management Control Interface) for remote management
- Maximum ONT splits: 32
- Maximum upstream (ONT->OLT) bandwidth: 1.25 Gbps
- Maximum downstream (OLT->ONT) bandwidth: 2.4 Gbps
- Transmitter optical launch power: 0.5 to 5 dBm
- Receive sensitivity: -27 dBm
- Upstream (ONT->OLT) wavelength: 1310 nm
- Downstream (OLT->ONT) wavelength: 1490 nm
- AES encryption
- Supports IGMP v1/v2/v3 Snooping, 128 entries, can be enabled/ disabled
- Supports UNI port config (Speed, duplex, pause flow control, disable/enable, auto mode)
- Supports Max frame length up to 1522 bytes
- MAC learning
- ONT Authentication

#### **VOIP FEATURES**

- Two FXS Voice Ports
- Call Control SIP RFC3261

- Echo Cancellation
- Supports Tone Detection and Tone Generation
- Call features: Call Transfer, Caller ID
- FAX relav
- Voice Codecs: G.711 a-law, G.711 u-law, G.723.1 (optional), G.729 A/B (optional)

#### CATV FEATURES (OPTIONAL)

- Shares 1 SC connector on GPON for CATV optical input
- Provides 1 CATV F-type connector (female) for RF output
- Input Optical Power: -8 to 2 dB
- CATV broadcast Wavelength: 1550 nm
- RF Output Frequency Range: 46 to 870 MHz
- RF Output Level: >= 18 dBmV/CH

#### **LEDS**

- PWR
- Link (PON)
- ACT (PON)
- LAN (1-4)
- WAN (optional, for Customized to Router mode only)
- Phone (1-2)

#### OUTPUT POWER

- 12VAC, 1.25A
- External full range power adapter

### OPERATION TEMPERATURE

• 0 to 40 °C (32 to 104 °F)

## STORAGE TEMPERATURE

- -20 to 70 °C (-4 to 158 °F)

#### **HUMIDITY**

■ 5% to 95% non-condensing

# CERTIFICATIONS

- FCC Class B
- CE



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