

G4021i GPON ONT

The G4021i is a next-generation Gigabit Passive Optical Network (GPON) Optical Network Terminal (ONT) with built-in VoIP, Residential Gateway, and Ethernet Switch Functions. It is a cost effective solution for TRIDENT7 and MAGNM point-to-multipoint; fiber-to-the premises networks in which passive optical splitters are used to allow a single optical fiber to serve multiple premises. Compliant with the ITU-T G.984 GPON standards, the device supports maximum downstream rates up to 2.5Gbps and upstream rates up to 1.25Gbps, and supports RF video overlay for CATV applications.



FEATURES

- Universal ONT supported in both TRIDENT7 and MAGNM platforms
- Aesthetically-pleasing enclosure, designed for indoor residential or business deployment
- ITU-T G.984 GPON compliant
- Full Residential Gateway Feature Set
- Robust IGMP support for IPTV applications
- 1Ghz RF video support for RF Overlay
- Supports transmission distance up to 20km
- Standards based OMCI (ONT Management and Control Interface) remote management
- Flexible service modes to support open access deployments for use with multiple video and voice providers over one network
- Four 10/100/1000 Ethernet ports
- Two analog POTS ports supporting SIP, H.248, and MGCP protocols

APPLICATIONS

- Residential Voice and Data Services
- Small Business Voice Data Services
- Open Access Network Architectures

SPECIFICATIONS

GPON ITU Compliance

- G.984.1 General characteristics
- G.984.2 Physical Media Dependent (PMD) layer specifications
- G.984.3 Transmission convergence layer specifications
- G.984.4 Management and control interface

Residential Gateway Features*

- Integrated NAT and Firewall
- Packet inspection and filtering
- DOS attack prevention
- URL content filtering

VoIP

- Compliant with SIP, H.248, and MGCP standards
- SIP extensions
- G.711 A/μ law, and G.729 Audio CODEC standards
- FAX Transmission: T.38 fax relay, G.711 passthrough
- Telephony Features: silence suppression, Voice Activity Detection (VAD), Comfort Noise Generation (CNG), G.168 echo cancellation, packet loss concealment
- Call Waiting, Call Transfer, Call Hold, Call Forward, Speed Dial, Direct Inward Dialing (DID), Do Not Disturb (DND), Caller ID, Call Detail Record, Call blocking*3, 3-way conference*3, Meeting Room*

Management

- Full Provisioning and Management with Enablence EMS
- SNMP
- OMCI
- TR-069
- Telnet

Interfaces

- WAN: SC/APC GPON port (TX-1310nm, RX 1490nm, RX 1550nm (RF overlay))
- LAN: 4 x10/100/1000Mb Ethernet port with auto-crossover (MDI/MDI-X) Switch
- Telephone: 2-port FXS via RJ-11
- RF Output: "F" Connector female
 - RF Video Output Bandwidth 54-1000Mhz
 - RF Output Level (@870MHz, 3.5% OMI) +17 □ 3dBmV
 - RF Output Tilt (Nominal, 54-870 MHz) +3dB
- Factory default reset button
- Power jack
- Power switch

Physical Specifications

- Dimensions: 9.04" x 6.10" x 1.69" (229.5 x 155 x 43mm)
- Power Requirements: Input: 12V DC, 1.2A

Operating Environment

- Operating temperature: 0 to 40 °C
- Storage temperature: -20 to 70 °C
- Humidity: 20 to 95% non-condensing

Notes:

Specifications on this datasheet are subject to change without prior notice.

**Residential Gateway features available in a future software release.*

For more information
visit www.enablence.com

Rev.ENA-DS-0511

©2011 Enablence Technologies Inc. The information presented is subject to change without notice. Enablence Technologies Inc. assumes no responsibility for changes or inaccuracies contained herein. Copyright © 2011 Enablence Technologies Inc. All rights reserved.