

## G4020i GPON GATEWAY

Enablence delivers world class, deployment-proven Fiber-To-The-Premises (FTTP) optical access solutions, enabling our customers to deploy next generation triple and quad-play networks immediately. Whether our customers are deploying a new network or evolving their legacy networks to next-generation industry standard GPON technologies, our comprehensive architecture allows service providers to compete more effectively and ensure a scalable next-generation network that will support emerging, bandwidth intensive services and applications for decades to come.



The G4020i is a next-generation Passive Optical Network (GPON) Optical Network Terminal (ONT) with built-in VoIP and Residential Gateway Functions. It is a cost effective solution for point-to-multipoint; fiber-to-the premises network architecture 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.

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### FEATURES

- ITU-T G.984 GPON compliant
- Supports transmission distance up to 20km
- Dual wavelength: Tx at 1310nm and Rx at 1490nm
- Standards based OMCI (ONT Management and Control Interface) remote management
- Quality of Service for traffic prioritization and bandwidth management
- IGMP support for IPTV applications
- Four 10/100/1000 Ethernet ports
- Flexible VLAN tagging support
- Full Residential Gateway Feature Set
- 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\*

- NAT, static routing and RIP-1 / 2
- Universal Plug and Play (UPnP) compliant
- Dynamic Domain Name System (DDNS)
- Virtual Server and DMZ
- SNTP, DNS relay and IGMP proxy
- Built-in NAT Firewall
- Stateful Packet Inspection (SPI)
- DoS attack prevention including IP Spoofing, Land Attack, Smurf Attack, Ping of Death, TCP SYN Flooding, etc.
- Packet Filtering - port, source IP address, destination IP address, MAC address
- URL Content Filtering - string or domain name detection in URL string

### 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\*<sup>3</sup>, 3-way conference\*<sup>3</sup>, Meeting Room\*
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### Management

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

## HARDWARE SPECIFICATIONS

### Interfaces

- WAN: SC/APC GPON port
- LAN: 4 x10/100/1000Mb Ethernet port with auto-crossover (MDI/MDI-X) Switch
- Telephone: 2-port FXS via RJ-11
- 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  
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