

ALCATEL-LUCENT 7368 ISAM G-010G-A RESIDENTIAL ONT

The Alcatel-Lucent G-010G-A Optical Network Terminal (ONT) with 1 Gigabit Ethernet (GigE) port is part of the industry-leading Alcatel-Lucent 7368 Intelligent Services Access Manager (ISAM) ONT product family and is compatible with the Alcatel-Lucent 7342/7360 ISAM FTTx product line. The Alcatel-Lucent G-010G-A ONT is designed to deliver triple play services in a fiber to the home (FTTH) environment to single family units where an Ethernet port is required. The Alcatel-Lucent ONTs terminate a Full Service Access Network (FSAN)-compliant GPON fiber interface.



OVERVIEW

The G-010G-A ONT is designed to cater to residential customer requirements. This ONT offers data service to the subscriber through FTTH or fiber to the premises (FTTP) applications. G-010G-A is a temperature non-hardened ONT suitable for indoor deployments. The ONT is compliant with ITU-T G.984 supporting a 1 Gb/s upstream and 1 Gb/s downstream line rate. Compliant with the standard OpenManage Control Interface (OMCI) definition, the G-010G-A ONT can be managed from a remote site using an Access Management System (AMS) and can support the full range of fault, configuration, accounting performance security (FCAPS) functions.

FEATURES

- Interface: One 10/100/1000Base-T RJ-45
- Compliant with OMCI standard (ONT Management Control Interface)
- Remotely managed by the Alcatel-Lucent 5520 AMS Network Management System
- Wire speed data transfer for all packet sizes

- Per-subscriber, per-service bandwidth control
- IP video with IGMPv2 and IGMPv3
- Support of Received Signal Strength Indication (RSSI) for lean operations and remote troubleshooting
- G.984 compliant
- Wall and desktop mounting

BENEFITS

- Eco-sustainability in line with “green” tendencies - low power consumption
- Internet Group Management Protocol (IGMP) snooping for monitoring the member joining and leaving activities at the Ethernet port, and then selectively delivers the multicast streams
- Power supply with dying gasp functionality
- Advanced dynamic bandwidth management allows prioritization per service and per user with the ability to burst up to the full line rate. This guarantees very high quality of service (QoS) and future security, and makes optimal use of electronics, fiber optics and distribution facilities.

TECHNICAL SPECIFICATIONS

Dimensions

- 36.5 mm x 105 mm x 82 mm (1.44 in. x 4.13 in. x 3.22 in. (h x w x d))
- Weight: 109 g (0.24 lb), power adapter not included

Power supply

- +12 V (feed through an external AC/DC adapter)
- Dying gasp support
- Power consumption: Less than 8 W

Operating environment

- Temperature: -5°C to 55°C (23°F to 131°F)
- Humidity: 5% to 90% relative humidity

Safety and electromagnetic interference (EMI)

- UL 60950-1
- CSA C22.2 No. 60950-1
- FCC Part 15b, Class B, IC-003
- ITU-T K.21

GPON TC layer

- G.984.3-compliant GPON Encapsulation Method (GEM) framing
- Multiple T-CONTs per device
- Multiple GEM ports per device
- Flexible mapping between GEM ports and T-CONTs
- G.984.3-compliant activation with automatically discovered SN and password
- G.984.3-compliant Advanced Encryption System (AES-128)
- G.984.3-compliant Forward Error Correction (FEC)
- G.984.3-compliant database administrator (DBA) reporting 802.1p to GEM mapper service profile in upstream direction
- G.984.5-compliant: GPON/XGPON coexistence

Buttons

- Power
- Reset

Installation

- Desktop
- Wall mounted

GPON network interface

- Compliant to G.984.x GPON standards
- Bidirectional Optical Sub Assembly (BOSA) type laser, subscription connector/angled physical contact SC/APC connector
- 1.244 G burst mode upstream transmitter
- 2.488 G downstream receiver compliant
- Avalanche photodiode (APD) receiver and distributed feedback (DFB) transmitter
- 0.5 dBm to 5.0 dBm launch power
- -28 dBm to -8 dBm for receiving
- Wavelengths: 1310 nm upstream, 1490 nm downstream
- Laser compliant to FCC 21 CFR Part 15, Class B

Ethernet

- 10/100/1000Base-T interface with RJ-45 connectors
- Ethernet port auto negotiation or manual configuration
- Medium dependent interface/medium dependent interface crossover (MDI/MDIX) automatic sense
- Supports port-based downstream priority queues and strict priority scheduling for traffic Class of Service (CoS) differentiation
- Virtual switch based on 802.1Q VLAN
- VLAN tagging/detagging per Ethernet port and marking/remarking of 802.1p
- VLAN stacking (Q-in-Q) and VLAN translation
- CoS based on VLAN ID, 802.1p bit

- IPv4 Type of Service/Differentiated Service Code Point (ToS/DSCP) to 802.1p mapping for untagged frames
- IGMPv2/v3 snooping
- Supports RFC 2236 (v2), RFC 3376 (v3)
- Supports any source multicast/source-specific multicast (ASM/SSM)

Operations, administration and maintenance (OAM)

- Standard-compliant OMCI (the embedded operations channel) interface as defined by G.984.4 and G.988
- Supports local WebGUI for the optical network unit (ONU) authentication password configuration from the LAN side
- MIB manipulation over OMCI using the create, delete, set, get, and get next commands
- Provisioning of Ethernet service
- Alarm reporting and performance monitoring
- Remote software image download over OMCI, as well as activation and rebooting
- Supports SLID (using WebGUI)

LEDs

- POWER
- PON
- ALARM
- DATA