The Alcatel-Lucent residential indoor 7342 Intelligent Services Access Manager (ISAM) Optical Network Terminal (ONT) I-040G-R provides four Gigabit Ethernet interfaces. It terminates a Full Service Access Network (FSAN)-compliant, Gigabit Passive Optical Network (GPON) fiber interface and is designed to connect individual users to the network for ultra-broadband services with gigabit speed. The I-040G-R paves the way to deliver premium triple play services in a fiber to the home (FTTH) environment.

**FEATURES**

- Four RJ-45 10/100/1000 auto-negotiating Ethernet ports
- Wire-speed data transfer for all packet sizes
- Per-subscriber, per-service bandwidth control
- Remotely managed by the Alcatel-Lucent 5520 Access Management System (AMS)
- IP video with multistage Internet Group Management Protocol (IGMP)v3 or IGMPv2 for channel change
- Support of received signal strength indication (RSSI) for lean operations and remote troubleshooting
- Wall and desktop mounting

**BENEFITS**

- Eco-sustainability in line with “green” tendencies – low power consumption
- IGMP snooping for monitoring the member joining and leaving activities at the Ethernet port and then selectively delivering 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 and future safety, and makes optimal use of electronics, fiber optics and distribution facilities.
TECHNICAL SPECIFICATIONS

**Physical**
- Length: 172 mm (6.8 in)
- Width: 125 mm (4.9 in)
- Depth: 34 mm (1.3 in)
- Wall or desk mount

**Operating environment**
- Temperature: 0°C to 40°C (32°F to 104°F)
- Relative humidity: 5% to 95%

**Power requirement**
- Local powering with 12 V input (feed using external AC/DC adapter)
- Dying gasp support
- Maximum power 9.2 W

**Regulatory compliance**
- CE
- FCC/UL

**GPON interface**
- 2.488 Gb/s line rate downstream, 1.244 Gb/s line rate upstream
- Subscription connector/angled physical contact (SC/APC) optical connector
- ITU-T G.984.2-compliant with Class B+ optical line terminal (OLT)
- 1490 nm wavelength downstream, 1310 nm wavelength upstream
- ITU-T G.984.3-compliant dynamic bandwidth reporting
- ITU-T G.984.3-compliant Advanced Encryption System (AES) in downstream
- ITU-T G.984.3-compliant Forward Error Correction (FEC)
- ITU-T G.988 Appendix 1 and 2
- Remote software image download, activation and reboot

**Ethernet**
- IEEE 802.3-compliant
  - 10/100/1000Base-T ports
- Media dependent interface/media dependent interface crossover (MDI/MDIX) automatic sense
- Broadcast/Multicast rate limiting
- Virtual LAN (VLAN) tagging/detagging
- VLAN stacking and VLAN translation
- Class of service (CoS) based on IEEE 802.1p, 802.1q, type of service/differentiated services code point (ToS/DSCP)
- IP ToS/DSCP to IEEE 802.1p mapping

**Voice**
- External integrated access device (IAD) is needed to deliver voice service on FTTH

**IP video service**
- Supports IGMPv2 and IGMPv3 snooping
- ITU-T G.984.3-compliant multicast
- Uses a single GPON Encapsulation Method (GEM) Port ID for all video traffic (as mandated by G.984.3)

**LED**
- Power
- Optical
- LAN
- Update
- Alarm