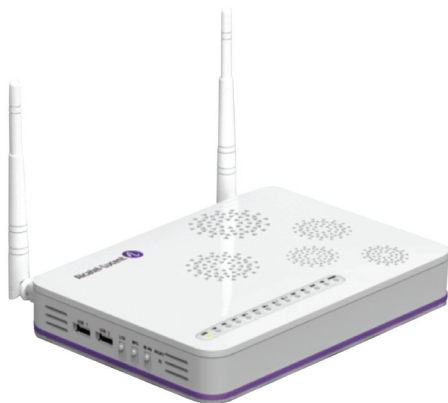# ALCATEL-LUCENT 7342 ISAM I-240W-A RESIDENTIAL INDOOR ONT

The Alcatel-Lucent 7342 Intelligent Service Access Manager (ISAM) I-240W-A Residential Indoor Optical Network Terminal (ONT) provides 4 Gigabit Ethernet (GigE), two plain old telephone service (POTS), and IEEE 802.11b/g/n wireless interfaces. It terminates a full service access network (FSAN)-compliant gigabit passive optical network (GPON) fiber interface and is designed to deliver triple play services with high bandwidth capacity. The combination of the ONT termination and the residential gateway functionality reduces the number of devices needed in the home.

FEATURES

- Four RJ-45 10/100/1000 Ethernet ports with auto negotiation and Media Dependant Interface/Media Dependant Interface Crossover (MDI/MDIX) auto sensing
- Built-in Layer 2 switch
- Advanced data features such as virtual LAN (VLAN) tag manipulation, classification and filtering
- Wireless 802.11b/g/n
- Two POTS ports for carrier grade voice services
- 5 ringer equivalence numbers (RENs) per line, balanced ring at 55 V root mean square (RMS), and dual-tone multi-frequency (DTMF) dialing
- Multiple voice codec
- Echo cancellation, voice activity detector (VAD), and comfort noise generator (CNG)
- Session Initiation Protocol (SIP) (RFC 3261)
- Two USB 2.0 ports
- G.984 compliant
- Forward Error Correction (FEC)

BENEFITS

- Integrates the ONT and wireless access point functions to allow for one less device in the home
- Delivers connectivity to Ethernet and wireless devices within the home
- Supports full triple play services including voice, video, and high-speed Internet access
- Supports IP video distribution
- Delivers voice services using voice over IP (VoIP). Supports voice services using SIP with G.711, G.729 (A and B), and G.723.1 codecs
- Supports fax services
- Supports connection to USB disk drives for home network-attached storage (NAS) service
- Delivers video services efficiently with multicasting or unicasting
- Internet Group Management Protocol (IGMP) proxy

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TECHNICAL SPECIFICATIONS

Physical

- Height: 39 mm (1.5 in.)
- Width: 205 mm (8.1 in.)
- Depth: 150 mm (5.9 in.)
- Weight: 0.36 kg (0.79 lb)
- Wall or desk mount

Operating environment

- Temperature: -5°C to 45°C (23°F to 113°F)
- Humidity: 5% to 90% relative humidity

Power requirement

- Local powering with 12 V input (feed uses external AC/DC adapter)
- Dying gasp support
- Power consumption: less than 18 W

Safety and electromagnetic interface (EMI)

- Protection of over voltage/current

GPON interface

- 1490 nm wavelength downstream, 1310 nm wavelength upstream
- 2.488 Gb/s line rate downstream, 1.244 Gb/s line rate upstream
- Compliant with G.984.2 Amd1, Class B+
- Full G.984.3-compliant framing
- Supports single T-CONT mode and multiple T-CONT modes
- Small form factor (SFF) type laser, SC/APC connector
- AES-128 decryption with key generation and switching

Ethernet

- 10/100/1000 Base-T interface with RJ-45 connectors
- Ethernet port auto negotiation or manual configuration
- MDI/MDIX automatic sensing
- Hardware priority queues on the downstream direction in support of class of service (CoS)
- VLAN tagging/detagging per Ethernet port and by piggyback reports in the dynamic bandwidth assignment report (upstream) (DBRu)
- IGMP snooping/proxy
- Broadcast/Multicast rate limiting
- Media access control (MAC) address limiting
- Priority and rate controlled scheduling

WLAN interface

- 802.11n, compliant with 802.11b/g
- Radio on/off switch
- 64/128 wired equivalent privacy (WEP) encryption
- Wi-Fi® Protected Access (WPA), WPA-PSK/TKIP
- WPA2, WPA2-PSK/AES

USB interface

- Two USB 2.0 host interfaces

POTS interface

- RJ-11 connectors
- Balanced ring, 55 V RMS
- 5 REN per line
- DTMF dialing
- Echo cancellation
- VAD and CNG
- SIP (RFC 3261)
- Real-time Transfer Protocol (RTP) (RFC 3550 and RFC 3551)

Residential gateway

- Point-to-Point Protocol over Ethernet (PPPoE)
- Network address translation (NAT)
- Network address port translation (NAPT)
- Application Layer Gateway (ALG), universal plug and play (UPnP)
- Port forwarding
- Demilitarized zone (DMZ)
- IP/MAC filter
- Multi-level firewall
- Domain name system (DNS) server
- Dynamic Host Configuration Protocol (DHCP) client/server

LED

- Power
- Optical
- Network GPON
- LAN (1~4)
- POTS (1~2)
- Wi-Fi Protected Setup (WPS)
- Wireless LAN (WLAN) status
- USB
- Internet

Regulatory compliance

- CE Mark

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1 FCC Regulations:

- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

  —Reorient or relocate the receiving antenna.

  —Increase the separation between the equipment and receiver.

  —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

  —Consult the dealer or an experienced radio/ TV technician for help.

Caution ：

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

The devise cannot be used within 20cm of any persons and must not be co-located within 20cm of other transmitter antennas.