

7368 ISAM ONT G-120G-E

Residential ONT

The Nokia 7368 Intelligent Services Access Manager (ISAM) Optical Network Terminal (ONT) G-120G-E is the solution for home networking delivered by Gigabit Passive Optical Network (GPON). The device provides high-speed networking with triple play capability that simplifies the home equipment experience. It can provide triple play services with voice, video and data. The Nokia 7368 ISAM ONT G-120G-E is designed to take advantage of Nokia award-winning management platforms. These platforms include a customized Motive™ Home Device Manager, which is integrated with the Nokia 5520 Access Management System (AMS) platform to deliver a uniform end-to-end operations, administration, and maintenance (OA&M) solution that carriers need to provide subscriber satisfaction.

Features

- One RJ-45 10/100/1000 Ethernet port and one RJ-45 10/100 Ethernet port with auto negotiation and MDI/MDIX auto sensing
- One POTS port for carrier grade voice services
- Built-in Layer 2 (L2) switch
- Forward error correction (FEC)
- Port forwarding
- Dynamic domain name system (DDNS)
- Network Address Translation/ Network Address Port Translation (NAT/NAPT)
- Internet Group Management Protocol (IGMP) snooping and proxy



Benefits

- Delivers connectivity to Ethernet and voice over IP (VoIP) devices within the home
- Supports triple play services including voice, video and high-speed internet access
- Supports IP video distribution
- Supports voice services using Session Initiation Protocol (SIP) with G.711, G.729
- Supports fax services
- Delivers video services efficiently with multicasting or unicasting
- IPSec/Layer 2 Tunneling Protocol (L2TP)

Technical specifications

Physical

- Interfaces: 1 GigE + 1 FE + 1 POTS
- Wall or desk mount

Operating environment

- Temperature: -5°C to 45°C (23°F to 113°F)
- Relative humidity: 5% to 95%, non-condensing

Power

- Local powering with 12 V DC input using an external AC/DC adapter
- Input: 100-240 V AC, 50/60 Hz
- Output: 12 V DC, 1.0 A max.
- Dying gasp
- Power consumption: <12 W

Safety and electromagnetic interference (EMI)

- Protection of over voltage/current
- K.21 compliance

GPON interface

- Compliant with G.984.2 Amd1, Class B+
- Receive sensitivity: -28 dBm

- Wavelength: 1490 nm downstream, 1310 nm upstream
- Line rate: 2.488 Gb/s downstream, 1.244 Gb/s upstream
- Wavelength blocking filter (WBF)
- GPON Encapsulation Method (GEM) mode support for IP/Ethernet service
- G.984.3 compliant FEC
- GEM port and T-CONT flexible mapping
- G.984.3 compliant dynamic bandwidth reporting (DBR)
- Serial number (SN)/password/logical ONU ID (LOID) authorization
- G.984.3 compliant Advanced Encryption Standard (AES) in downstream
- Rogue ONT pattern (interoperability with Nokia OLT)
- SC/APC connector

Ethernet

- One 10/100/1000 Base-T interface with RJ-45 connector
- One 10/100 Base-T interface with RJ-45 connector
- Ethernet port auto negotiation or manual configuration
- MDI/MDIX automatically sense
- Virtual LAN (VLAN) tagging/detagging and marking/remarking of IEEE 802.1p per Ethernet port
- 1:1 VLAN/N:1 VLAN/VLAN transparent/QinQ VLAN
- Media access control (MAC) learning
- IGMP v2/v3 snooping, v2/v3 proxy

POTS interface

- One FXS port for VoIP service with RJ-11 connectors
- Multiple codecs: ITU-T G.711, ITU-T G.729 (A and B)

- SIP (RFC 3261)
- T.30/T.38 fax modes configurable
- G.168 echo cancellation
- Services: caller ID, call waiting, call hold, 3-way call, call transfer, message waiting indication
- Dual-tone multi-frequency (DTMF) dialing
- Balanced sinusoidal ring signal, 55 V root mean square (RMS)

Residential gateway

- Supports router/bridge hybrid mode for ONT
- Supports router or bridge mode on each UNI port
- Point-to-Point Protocol over Ethernet/Dynamic Host Configuration Protocol (PPPoE/DHCP) (server and client), static IP
- NAT/NAPT
- Application layer gateway (ALG) and UPnP
- Port forwarding
- Demilitarized zone (DMZ)
- DNS server/client and DDNS
- IPv4/IPv6 dual stack and DS Lite

Regulatory compliance

- CE Mark

Quality of service (QoS)

- Ethernet port rate control
- IEEE 802.1p priority scheduling
- Strict priority/weighted round robin (SP/WRR)/SP + WRR
- Broadcast/Multicast rate limiting

OA&M

- Supports OMCI/TR-069/WebGUI configuration
- Alarm report, performance monitoring
- Remote software image download/activation/reboot over OMCI or TR-069
- Two software images backup and automatic rollback

Security

- Prevents denial of service (DoS), port scanning, ping of death
- MAC/IP/URL filter
- Firewall and access control list (ACL)

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Nokia Oyj
Karaportti 3
FI-02610 Espoo
Finland
Tel. +358 (0) 10 44 88 000

Product code: SR1706013034EN (September)