

Nokia 7368 ISAM ONT G-140W-G

The Nokia 7368 Intelligent Services Access Manager (ISAM) Optical Network Terminal (ONT) G-140W-G is the solution for home networking delivered by Gigabit Passive Optical Network (GPON). The device has built-in Wi-Fi® 802.11b/g/n 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-140W-G is designed to take advantage of Nokia award-winning management platforms. These platforms include a customized Motive™ Home Device Manager that is integrated with the Nokia 5520 Access Management System (AMS) to deliver a uniform end-to-end operations, administration, and maintenance (OA&M) solution that carriers need to provide subscriber satisfaction.

Features

- Single GPON interface with data rates of 2.488 Gb/s downstream, 1.244 Gb/s upstream
- 4 Ethernet LAN connections (1 GigE and 3 Fast Ethernet [FE])
- 1 plain old telephone service (POTS) connection
- Reset button
- LED indicators on/off button
- Wireless LAN (WLAN) and Wi-Fi Protected Setup (WPS) enable/disable buttons
- UPnP Internet Gateway Device (IGD) 2.0 support
- 2.4 GHz wireless interface
- Two 3 dBI indoor multi-directional internal Wi-Fi antennas (not detachable)
- Multiple input, multiple output (MIMO)
- Support for up to 20 concurrent wireless connections
- 802.11b/g/n compliant
- Medium dependent interface/medium dependent interface crossover (MDI/MDIX) auto sensing
- Auto-negotiation for speed and duplex
- Multiple voice codec



- Echo cancellation
- Analog telephone adapter (ATA) function integrated based on Session Initiation Protocol (SIP) (RFC 3261)
- Network address translation (NAT)

Benefits

- Integrates the ONT and wireless access point functions
- Delivers
 - Connectivity to the Ethernet and wireless devices within the home
 - Video services efficiently with multicasting or unicasting
- Supports
 - Triple play services with voice, video and high-speed internet access
 - IP video distribution
 - Voice services using SIP with G.711, G.729
 - Fax services
 - Fiber management
- IPSec and Layer 2 Tunneling Protocol (L2TP)

Technical specifications

Physical

- Height: 118 mm (4.6 in)
- Width: 147 mm (5.8 in)
- Length: 40 mm (1.6 in)
- Weight: 0.19 kg (0.42 lb)

Installation

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

Power requirements

- Local powering with 12 V DC input using an external AC/DC adapter

- Input: 100-240 V AC, 50/60 Hz
- Dying gasp
- Power consumption: <10 W

GPON interfaces

- 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 forward error correction (FEC)
- GEM port and T-CONT flexible mapping
- G.984.3 compliant dynamic bandwidth reporting (DBR)
- Serial number (SN), password and logical ONU ID (LOID) authorization
- G.984.3 compliant Advanced Encryption Standard (AES) in downstream
- SC/APC connector

Ethernet

- 1* 10/100/1000Base-T + 3* 10/100Base-T interfaces with RJ-45 connectors
- Ethernet port auto-negotiation or manual configuration
- MDI/MDIX automatically sense
- Virtual LAN (VLAN) tagging/de-tagging 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
- Internet Group Management Protocol (IGMP) v2/v3 snooping, v2/v3 proxy

WLAN interfaces

- 802.11b/g/n



- WLAN on/off button
- 64/128 bits Wired Equivalent Privacy (WEP)
- Wi-Fi Protected Access (WPA) including WPA/WPA2, WPA-Pre-Shared Key (PSK)/WPA2-PSK
- WPS
- Wi-Fi Multimedia (WMM)
- 2 x 2 MIMO for 802.11b/g/n
- Multiple service set identifiers (SSIDs)

USB interface

- One USB 2.0 host interface
- External USB device data sharing using File Transfer Protocol (FTP)

Residential gateways

- 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/network address and port translation (NAPT)
- Application layer gateway (ALG) and UPnP
- Port forwarding
- Demilitarized zone (DMZ)
- Domain name system (DNS) server/client and dynamic domain name system (DDNS)
- IPv4/IPv6 dual stack and DS Lite

Quality of service (QoS)

- Ethernet port rate control
- 802.1p priority scheduling
- Strict priority (SP)/weighted round robin (WRR)/SP

+ WRR

- Broadcast/Multicast rate limiting

OA&M

- Supports ONU management control interface (OMCI)/TR-069/WebGUI configuration
- Supports easy setup and smart alarm using WebGUI
- Alarm report and performance monitoring
- Remote software image download/activation/reboot over OMCI or TR-069
- Two software images backup and automatic rollback

POTS interfaces

- One FXS port for voice over IP (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

Security

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

Regulatory compliances

- EMI/EMC
- EN 60950
- CE (EMEA variant)

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