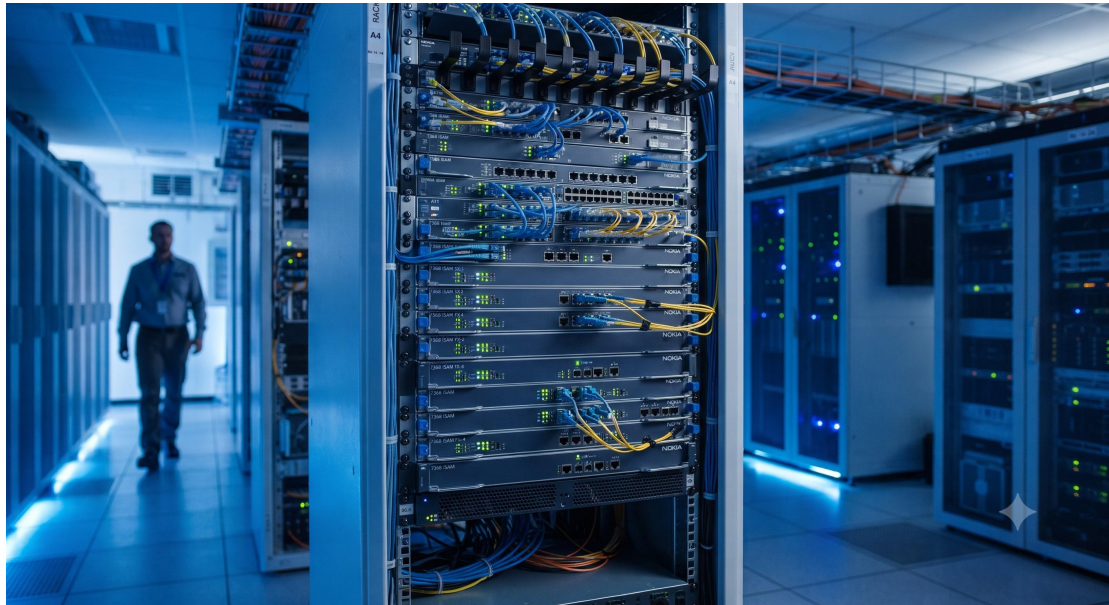


Nokia 7368 ISAM ONT - Official Technical Overview & Hardware Datasheet

EXECUTIVE SUMMARY

The Nokia 7368 Intelligent Services Access Manager (ISAM) Optical Network Terminal (ONT) portfolio represents the pinnacle of fiber access technology, engineered to deliver superior triple-play services with unprecedented bandwidth capacity to residential and business subscribers. As a cornerstone of the Nokia ISAM product family, the 7368 series demonstrates an unwavering commitment to carrier-grade performance, seamless interoperability with existing 7360 ISAM Optical Line Terminals (OLTs), and a forward-looking architecture that supports both GPON and XGS-PON technologies. This datasheet provides a comprehensive technical overview and hardware specification for the flagship models within the 7368 ISAM ONT collection, detailing their robust design, advanced features, and industry-leading compliance standards.



ARCHITECTURE & CHASSIS DESIGN

The Nokia 7368 ISAM ONT series is architected around a modular and scalable design philosophy, accommodating a wide range of deployment scenarios from dense urban high-rises to distributed campus environments . The portfolio is differentiated into two primary architectural classes: high-density enterprise models, such as the U-00160CP-P, and compact residential gateways, such as the XS-250WX-A and G-240G-C. Enterprise-grade units feature a 1RU rack-mountable chassis with a 16-port base configuration, expandable to 24 ports via pluggable interface modules, providing a non-blocking Layer 2 switching fabric . The chassis is engineered for passive cooling with smart fans that activate only under thermal load, ensuring silent operation and high reliability .

In contrast, residential models prioritize spatial efficiency and aesthetic integration, utilizing compact, fanless desktop or wall-mountable enclosures . The XS-250WX-A, for instance, integrates a complete residential gateway within a form factor measuring just 290.3mm x 190.3mm x 76.6mm, embedding advanced dual-band Wi-Fi and voice functions into a single, cohesive unit . All chassis variants are constructed with high-grade materials to meet IP30 protection ratings for indoor deployments, with temperature-hardened options (e.g., G-241G-A) available for extended environmental tolerances when housed in outdoor enclosures .

HARDWARE FEATURES

The 7368 ISAM ONT series integrates a rich set of hardware features designed to future-proof the access network. Key features include:

- ****High-Density Port Configurations****: The U-00160CP-P offers sixteen 10/100/1000M Base-T Ethernet interfaces with IEEE 802.3af/at Power over Ethernet (PoE/PoE+), delivering up to 30W per port and a total budget of 370W . Expandable slots allow for an additional eight 1G/2.5G Ethernet interfaces .
- ****Converged Connectivity****: Residential gateways like the XS-250WX-A combine four GigE ports, one 1/10 GigE port, and two POTS ports with

integrated Analog Telephone Adapter (ATA) and 4x4 802.11ac Wi-Fi .

- ****Advanced Optical Interfaces****: The ONTs feature pluggable SFP/SFP+ PON modules supporting both GPON and XGS-PON on a single device, facilitating a seamless upgrade path to 10G symmetrical services .
- ****Comprehensive Management****: Full support for remote management via OMCI (ITU-T G.988) and Simple Network Management Protocol (SNMP), ensuring FCAPS functionality .
- ****Enhanced Security****: Physical tamper-resistance features, AES-128 encryption for downstream traffic, and advanced firewall capabilities for routed modes, ensuring network integrity .

COMPLIANCE & STANDARDS

The 7368 ISAM ONT portfolio complies with a comprehensive suite of international and industry-specific standards, underscoring Nokia's commitment to global interoperability and regulatory adherence:

- ****ITU-T Standards****: Full compliance with G.984.x (GPON), G.987.x (XGPON1), G.9807.1 (XGS-PON), G.988 (OMCI), and G.984.3 (TC layer) .
- ****IEEE Standards****: Compliance with 802.3ah (Ethernet OAM), 802.1Q (VLAN), and 802.1p (CoS) .
- ****Safety & EMI****: CE Mark, UL 60950-1, FCC Part 15 (Class A/B), VCCI, RCM,

and CB Scheme certifications .

- ****Environmental****: RoHS compliant, with operational temperature ranges from -5°C to 45°C for standard indoor units and extended ranges for outdoor enclosures .

TECHNICAL SPECIFICATIONS

Parameter	Specification
Form Factor	1RU Rack-mountable (U-00160CP-P); Desktop/Wall-mount (XS-250WX-A, G-240G-C)
Switching Capacity	Up to 10 Gbps symmetrical (XGS-PON models); 2.488 Gbps downstream / 1.244 Gbps upstream (GPON)
Ethernet Ports	Up to 24x GigE (U-00160CP-P); 1x 10G + 4x GigE (XS-250WX-A); 4x GigE (G-240G-C)
Power Supply	100-240 VAC, 50/60 Hz (U-00160CP-P); +12 VDC external adapter (XS-250WX-A, G-240G-C)
PoE/PoE+	IEEE 802.3af/at, 370W total budget (U-00160CP-P)

Wi-Fi	Concurrent dual-band 802.11b/g/n and 802.11ac, 4x4 MIMO (XS-250WX-A)
POTS/Voice	Up to 2x FXS ports, SIP protocol, G.711/G.729 codecs, 5 REN per line
Operating Temperature	-5°C to 45°C (23°F to 113°F) indoor; -40°C to 60°C in outdoor enclosure (G-241G-A)

ORDERING OPTIONS

Nokia offers a comprehensive portfolio of 7368 ISAM ONT models to address diverse subscriber needs and network strategies:

- ****U-00160CP-P****: High-capacity enterprise ONT with 16+8 GigE ports, PoE/PoE+, GPON/XGS-PON uplink .
- ****XS-020X-A****: Residential ONT with 1x 1/10G and 1x 1G Ethernet port, designed for high-speed FTTH .
- ****XS-250WX-A****: Residential Gateway ONT with 1x 1/10G, 4x 1G Ethernet, 2x POTS, Wi-Fi, and USB 3.0 .
- ****G-240G-C****: POL (Passive Optical LAN) ONT with 4x 1G Ethernet, 2x POTS,

bridge/routed mode support .

- **G-241G-A**: Temperature-hardened ONT for indoor/outdoor use, with 4x 1G Ethernet, 2x POTS, and 1x RF video port .
- **G-240W-B/G**: Residential Gateway ONT with integrated Wi-Fi (802.11b/g/n/ac), 4x GigE ports, and voice support .
- **BGW320-505**: Business/residential ONT with 5G Ethernet port, 3x GigE ports, POTS, and USB 2.0 .

