

XGS-PON FTTH ONT

i7400-series

Residential ONT for wholesales network operators



The Icotera i7400 residential ONT integrates optical Ethernet-based gigabit data transmission with Layer 2 functionality and optional CATV.

- Ease of use & installation
- OLT vendor independent
- Designed for Open Access / Wholesales deployment
- Award-winning industrial design
- 10G LAN port
- BBF.247 certification



Future Proof Solution

The i7400 series is an XGS-PON L2 termination with full port flexibility and multi-10G + multi-1G ports. This solution allows operators to implement wholesale solutions in a flexible way without compromising on performance and develop a future-proof home setup. The ONT supports secure encrypted and signed FW, environmentally friendly materials, and is certified with the BBF.247 certification, fulfilling the latest test plans developed by the Broadband Forum.

Ease of Assembly

The i7400 series comes with the universal Fiber Termination Unit from Icotera that supports all types of fiber installation methodologies and facilitates the use of single or dual-fiber in both cable and tube. The FTU set consists of only 2 parts. The top cover simply locks on the FTU base and stays firmly secured. There is no need to use screws, pins, or other separate elements to join both FTU parts. SCA caps are integrated with the cover - no risk of losing separate caps. Pre-cut kerfs simplify making openings for fiber - no need to drill holes in sides of the FTU cover.



FTU installation



Patch installation

i7400 Residential ONT

FEATURES

- Vendor-independent XGS-PON ONT
- Hardware forwarding
- Long-lifetime standard interfaces
- Protocol transparent forwarding

NETWORK COMMUNICATION PON INTERFACE

- WDM filter included (support for CATV and GPON signal coexistence)
- ITU-T G.9807.1 compliant
- Wavelength: US 1260nm - 1280nm, DS 1575nm - 1580nm
- 10Gbit/s symmetric line rate
- G.988 compliant
- Forward Error Correction (FEC)
- AES encryption
- Dying gasp
- Class N1 optics

LAN INTERFACES

- 1 x 10/5/2.5G LAN
- 4 x 1G LAN
- Auto-negotiation for speed and duplex

LAYER 2

- 64 byte forwarding at line rate
- Jumbo 9k packets
- Forwarding up to 256 MAC addresses
- VLAN QinQ support
- VLAN 802.1ad support
- Transparent IPv6 forwarding
- Multicast support

QoS

- Support DBA in SR and NSR modes
- Support for Strict Priority and Weighted Fair Queuing
- Support for TCONTs 1 - 5
- Support up to 32 T-CONTs
- 8 Upstream/Downstream Queues configurable via OMCI
- Class of Service Based on VLAN-ID, 802.1p
- Marking/Remarking of 802.1p
- Marking/Remarking of DSCP/ToS

CATV (OPTIONAL)

Optical parameters

- Input wavelength: 1550nm - 1560nm
- Input level range: -9dBm - 2dBm
- Optical connector: SC/APC
- WDM filter: present

RF parameters

- RF output impedance 75Ω
- Frequency range pass-band: 45MHz - 890MHz
- Frequency range Filter1: 430MHz - 890MHz
- Frequency range Filter2: 590MHz - 890MHz
- Slope (maximum): 5dB
- RF output level (4% OMI, -8dBm - 0dBm): $80 \pm 2\text{dB}\mu\text{V}$
- CNR $\geq 45\text{dB}$
- CSO $\geq 60\text{dB}$
- CTB $\geq 60\text{dB}$
- Management: via OMCI

MANAGEMENT & MONITORING

- Zero-touch configuration with OMCI provisioning
- Dual bank firmware w/ fail-safe upgrading
- Hardware watchdog

OPERATIONAL SPECIFICATIONS

- DC 12V input
- Power consumption maximum: 5.5W
- Power consumption in idle state: 3.6W
- Operating temperature: 5°C - 45°C
- Storage temperature: 5°C - 85°C
- Humidity: 5% - 95% (non-condensing)

PHYSICAL SPECIFICATIONS CASING

- Size: 190 x 150 x 48 mm (W x H x D)
- Area for visible PON label right side - 16 x 30 mm for optional PON SN label
- Product SN, PON SN, FW version and MAC address label - ONT bottom
- PON LED - connection status
- LAN LED - link status

FIBER TERMINATIONS

- Slide-on mechanism for easy installation

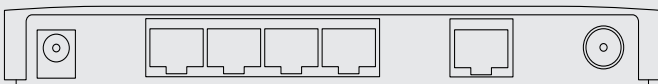
INCLUDED IN THE BOX

- ONT
- 12V PSU adapter
- FTU
- 2 x label with PON SN

SUPPORTED PLATFORMS

- Nokia ISAM 7330/7360
- Huawei MA5600/5800
- Other specific platforms supported on a per integrational basis, contact sales for more information.

i7400 Residential ONT Configuration possibilities



Gateway Interface Configurations:

Model	Uplink	1G LAN port	10G LAN port	CATV output	Installation
i7404-00	XGS-PON	4	1	High output	FTU
i7408-00	XGS-PON	4	1	-	FTU

NOTE: Please contact Sales for further details on information listed and feature requests.