

XGS-PON FTTH ONT

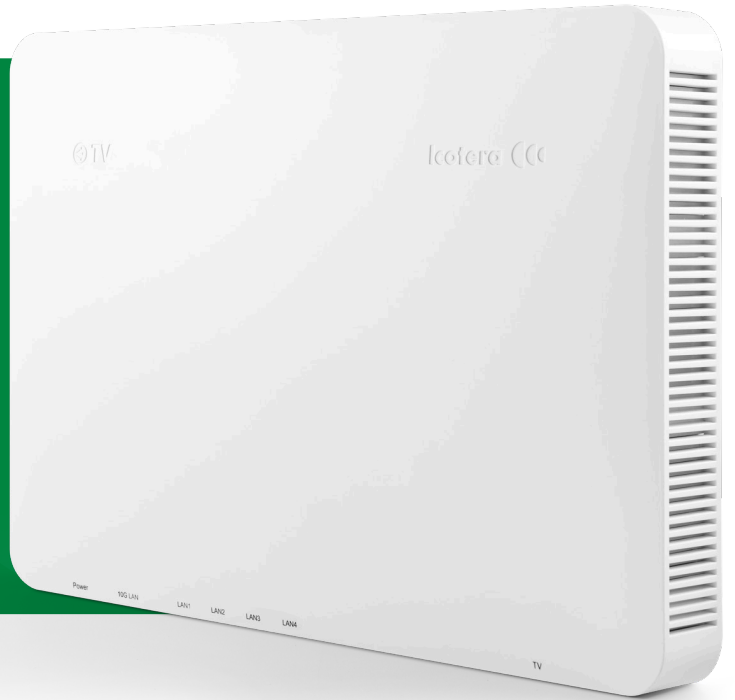
i7400-series

Residential ONT for wholesale network operators



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

- Ease of use and installation
- OLT vendor-independent
- Designed for Open Access or wholesale deployment
- Award-winning industrial design
- 10 Gbps 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 securely 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 the 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 that supports CATV and XGS-PON signal coexistence
- ITU-T G.9807.1 compliant
- Wavelength: US 1260 nm – 1280 nm, DS 1575 nm – 1580 nm
- 10 Gbps symmetric line rate
- G.988 compliant
- Forward Error Correction (FEC)
- AES encryption
- Dying gasp
- Class N1 optics

LAN INTERFACES

- 1 x 10/5/2.5 Gbps LAN
- 4 x 1 Gbps 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 or downstream queues configurable via OMCI
- Class of service based on VLAN-ID, 802.1p
- Marking and remarking of 802.1p
- Marking and remarking of DSCP/ToS

CATV (OPTIONAL)

Optical parameters

- Input wavelength: 1550 nm – 1560 nm
- Input level range: -9 dBm to 2 dBm
- Optical connector: SC/APC

RF parameters

- RF output impedance 75Ω
- Frequency range pass-band: 45 MHz – 890 MHz
- Frequency range Filter1: 430 MHz – 890 MHz
- Frequency range Filter2: 590 MHz – 890 MHz
- Slope (maximum): 5 dB
- RF output level (4% OMI, -8 dBm to 0 dBm): $80 \pm 2 \text{ dB}\mu\text{V}$
- 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 flash memory with fail-safe firmware upgrading
- Hardware watchdog

OPERATIONAL SPECIFICATIONS

- DC 12 V input
- Power consumption maximum: 5.5 W
- Power consumption in idle state: 3.6 W
- 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 33 mm (W x H x D)
- Weight: 400 g
- Area for an optional PON label with the serial number - 16 x 30 mm on the right side
- Product SN, PON SN, FW version and MAC address label on the bottom side
- PON LED indicator for the connection status
- LAN LED indicator for the link status

FIBER TERMINATIONS

- Slide-on mechanism for easy installation

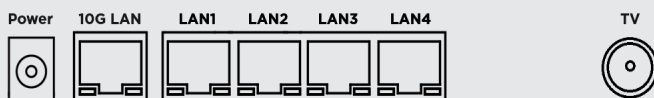
INCLUDED IN THE BOX

- Icotera i7400 ONT
- 12 V power supply unit
- Fiber termination unit (FTU)
- 2 labels with the PON serial number

SUPPORTED PLATFORMS

- Nokia ISAM 7330/7360
- Huawei MA5600/5800
- The ONT supports other specific platforms. For more information, contact our Sales department at sales@icotera.com.

i7400 residential ONT configuration possibilities



Gateway interface configurations

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

For more information and feature requests, contact our Sales department at sales@icotera.com.