

- Up to 16 XGS-PON/GPON Combo ports, 1U case
- Hot-swappable redundant power units
- Remote management via CLI, SNMP
- Compliance with G.988, G.984.x and TR-156 standards
- Ability to provide cable TV together with data transmission
- Optimal solution for a small village or an apartment building



LTX-8C



LTX-16C

LTX series OLTs are designed to provide broadband access over Passive Optical Networks (PON).

Combo XGS-PON interfaces are used to connect an optical distribution network. Up to 128 optical subscriber terminals can be connected to each interface via a single fiber by the GPON standard and up to 256 subscriber terminals by the XGS-PON standard. Access to the carrier's transport network is provided via 100 Gigabit and 25 Gigabit uplink interfaces.

OLT LTX allows carriers to build scalable, last mile fault-tolerant networks to ensure the highest safety standards. OLT manages subscriber devices, traffic switching and connection to the transport network.

Broadband subscriber access using the FTTH technology is the highest quality Triple Play service delivery option, as it provides high data transmission rates over long distances.

The main advantage of PON technology is the absence of electrically powered active nodes within the section from OLT to ONT, which significantly reduces the network operating cost. In addition, PON technology saves on cabling infrastructure by reducing the total length of the optical fiber, as a single fiber is used from the central node to the splitter for a group of subscribers.

OLTs support two hot-swappable power modules with the ability to automatically switch to a redundant power unit.

### Interfaces configuration

	LTX-8C	LTP-16C
100/40GE (QSFP28/QSFP+)		2
25/10/1GE (SFP28/SFP+/SFP)		2
Combo port (10/10 Gbps XGS-PON and 2.5/1.25 Gbps GPON)	8	16
10/100/1000BASE-T (OOB)		1
Console port RS-232 (RJ-45)		1
USB 2.0		1
Maximum number of ONTs	2048 XGS-PON and 1024 GPON	4096 XGS-PON and 2048 GPON

## Features and capabilities

### Interfaces

#### LTX-8C

##### Uplink

- 2 × 100/40GE (QSFP28/QSFP+) ports
- 2 × 25/10/1GE (SFP28/SFP+/SFP) ports

##### Downlink

- 8 × XGS-PON/GPON Combo ports

#### LTX-16C

##### Uplink

- 2 × 100/40GE (QSFP28/QSFP+) ports
- 2 × 25/10/1GE (SFP28/SFP+/SFP) ports

##### Downlink

- 16 × XGS-PON/GPON Combo ports

### Port modes

- 100/40 Gbps duplex mode for QSFP28/QSFP+ optical ports
- 25/10/1 Gbps duplex mode for SFP28/SFP+/SFP optical ports

### SFP PON parameters<sup>1</sup>

- Transmission medium: SMF-9/125, G.652 fiber optic cable
- Splitting ratio: 1:256 XGS-PON or up to 1:128 GPON
- RSSI (Received Signal Strength Indication)
- Compliance with ITU-T G.9807.1
- Maximum transmission distance: 20 km
- Transmitter: 1,577 nm (XGS-PON)
  - Data rate: 9.953 Gbps
  - Average output power: +2.. +5 dBm
- Transmitter: 1,490 nm (GPON)
  - Data rate: 2.488 Gbps
  - Average output power: +2.. +5 dBm
- Receiver: 1,270 nm (XGS-PON)
  - Data rate: 9.953 Gbps
  - Receiver sensitivity: -26 dBm
- Receiver: 1,310 nm (GPON)
  - Data rate: 1.244 Gbps
  - Receiver sensitivity: -28 dBm

### Switch

- Bandwidth: 300 Gbps
- MAC table: 64K entries
- VLAN table: 4K (in compliance with 802.1Q)

### Physical parameters

- Power supply<sup>1</sup>:
  - 176–264 V AC, 50–60 Hz
  - 36–72 V DC
- Power consumption:
  - LTX-8C: no more than 120 W
  - LTX-16: no more than 170 W
- Operating temperature range: from -5 to 40 °C
- Relative humidity: up to 80 %
- Dimensions with installed power unit  
(W × H × D): 430 × 43.6 × 447 mm, 19", 1U case
- Weight:
  - LTX-8C: 6.3 kg
  - LTX-16C: 6.4 kg

### Standards

- ITU-T G.988 PON
- ITU-T G.984x GPON
- ITU-T G.8032/Y.1344 Ethernet ring protection switching<sup>2</sup>
- TR-156
- IEEE 802.3i 10BASE-T Ethernet
- IEEE 802.3u 100BASE-T Fast Ethernet
- IEEE 802.3ab 1000BASE-T Gigabit Ethernet
- IEEE 802.3z Fiber Gigabit Ethernet
- ANSI/IEEE 802.3 NWay auto-negotiation
- IEEE 802.3x Full Duplex and flow control<sup>2</sup>
- IEEE 802.3ad Link aggregation
- IEEE 802.1p Protocol for Traffic Prioritization
- IEEE 802.1Q Virtual LANs
- IEEE 802.1ad Provider Bridges (QinQ)
- IEEE 802.3ac VLAN tagging
- IEEE 802.1d MAC bridges
- IEEE 802.1w Rapid Reconfiguration of Spanning Tree<sup>2</sup>
- IEEE 802.1s Multiple Spanning Trees<sup>2</sup>

### Additional features

- VLAN mirroring, port mirroring
- MAC table: 64K per switch, 8K per port
- MAC address limiting<sup>2</sup>
- STP, RSTP, MSTP<sup>2</sup>
- ERPSv2<sup>2</sup>
- QoS: 802.1p, WFQ, DSCP<sup>2</sup>
- Port isolation, port isolation within a single VLAN
- Unicast/multicast/broadcast traffic shaping
- ACL IPv4
- QinQ in compliance with IEEE 802.1ad
- Up to 1,024 multicast groups
- IGMP Fast Leave
- IGMP Proxy
- IGMP Snooping
- IGMP Querier
- DHCPv4 Snooping
- IP Source Guard
- DHCPv4 Relay Agent (Option 82)
- PPPoE Intermediate Agent
- LLDP (802.1ab)
- Storm Control<sup>2</sup>
- Policy<sup>2</sup>
- Utilization by ONT services
- OMCI Bridge
- OMCI RG

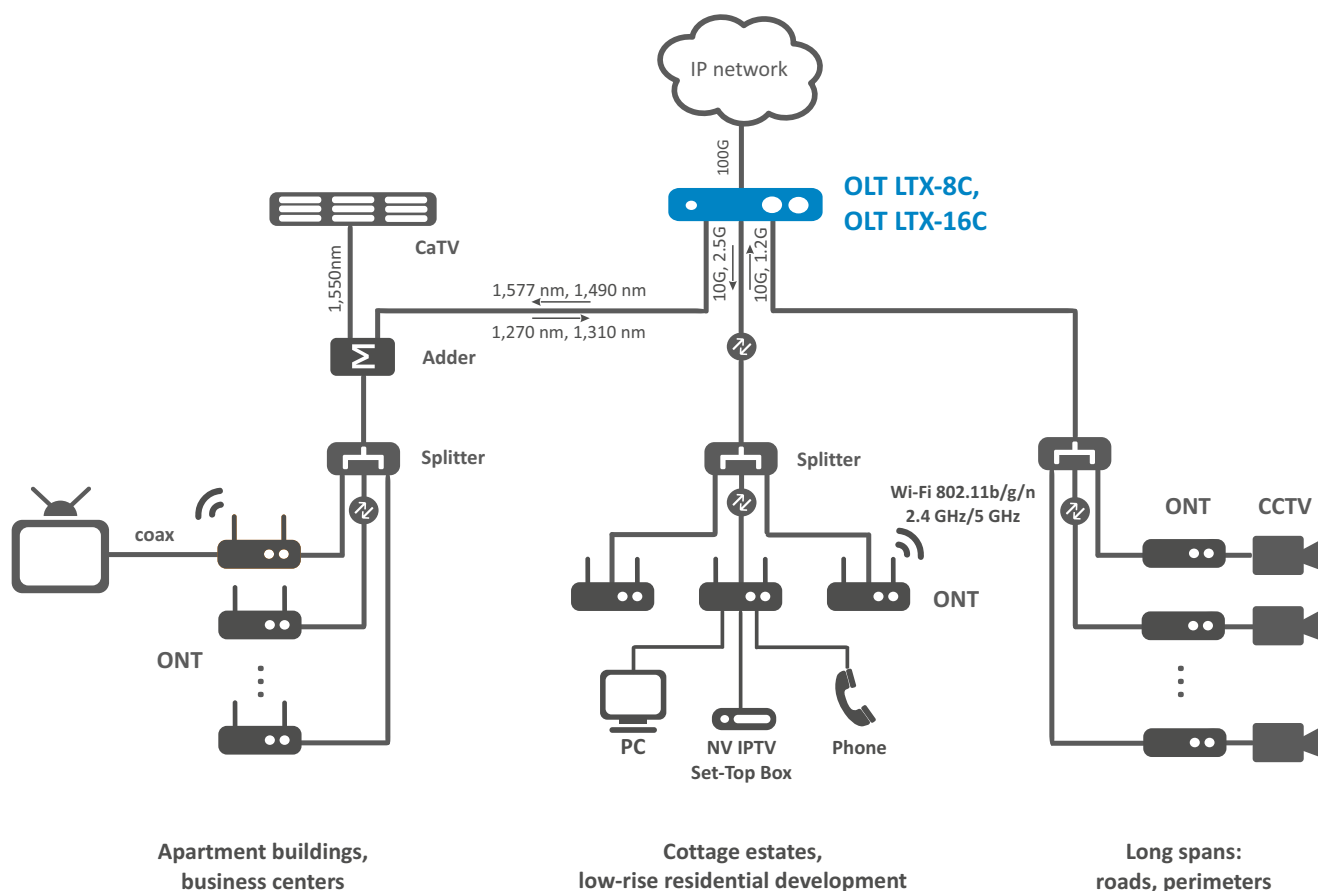
### Management and monitoring

- RADIUS, TACACS+
- Management and monitoring: CLI (SSH2, Telnet), SNMP, web
- Access restriction: by password, by IP address, by privilege level
- Multiple management interfaces

<sup>1</sup> The parameter is defined when ordering.

<sup>2</sup> Not implemented in current version.

## Use case



1,577 nm (XGS-PON), 1,490 nm (GPON) — data transmission wavelength;  
1,270 nm (XGS-PON), 1,310 nm (GPON) — data reception wavelength;  
10G (XGS-PON), 2.5G (GPON) — data transmission rate;  
10G (XGS-PON), 1.25G (GPON) — data reception rate.

## Ordering information

Name	Description
<b>OLT LTX-8C</b>	OLT LTX-8C, 8 × XGS-PON/GPON Combo ports, 2 × 100/40GE (QSFP28/QSFP+) ports, 2 × 25/10/1GE (SFP28/SFP+/SFP) ports
<b>OLT LTX-16C</b>	OLT LTX-16, 16 × XGS-PON/GPON Combo ports, 2 × 100/40GE (QSFP28/QSFP+) ports, 2 × 25/10/1GE (SFP28/SFP+/SFP) ports

## Related products

<b>PM350-220/12</b>	PM350-220/12 power module, 176–264 V AC, 350 W
<b>PM350-48/12</b>	PM350-48/12 power module, 36–72 V DC, 350 W

## Contact us

## About Eltex

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**Eltex** Enterprise is a leading Russian developer and manufacturer of communication equipment with 30 years of history. Complete solutions and their seamless integrability into the Customer's infrastructure are the priority growth areas of the company.