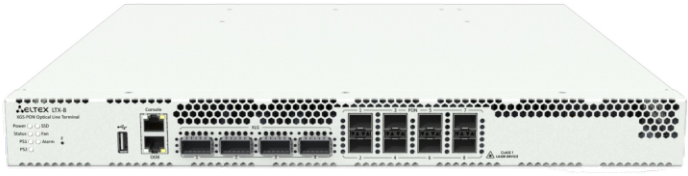
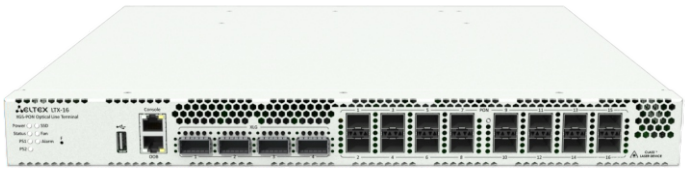
- **Up to 16 XGS-PON ports, 1U case**
- **Hot-swappable redundant power modules**
- **Remote management via CLI, SNMP**
- **Compliance with G.988, G.984.x and TR-156 standards**
- **Ability to provide CaTV together with data transmission**
- **Optimal solution for a small village or an apartment building**



**LTX-8**



**LTX-16**

LTX series station equipment (OLT) is designed to provide broadband access over passive optical networks (PON).

XGS-PON interfaces are used to connect an optical distribution network. Up to 128 optical subscriber terminals can be connected to each interface via one 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 through 100 Gigabit uplink interfaces.

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

Broadband subscriber access via 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 in the section from OLT to ONT, which significantly reduces the network operating cost. Furthermore, PON technology saves on cabling infrastructure by reducing the total length of the optical fiber, since one fiber for a group of up to 128 subscribers (GPON standard) and up to 256 subscribers (XGS-PON standard) is used in the section from the central node to the splitter.

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

### OLT interface configuration

| OLT name | Number of PON ports | Number of Uplink ports | Maximum number of ONTs |
|---|---|---|---|
| **OLT LTX-8** | 8 | 4 x 100GBASE-SR-4/LR4 (QSFP28) | 1024/2048 |
| **OLT LTX-16** | 16 | 4 x 100GBASE-SR-4/LR4 (QSFP28) | 2048/4096 |

## Features and capabilities

### Interfaces

**LTX-8**

*Uplink*

— 4 x 100GBASE-SR-4/LR4 (QSFP28) ports

*Downlink*

— 8 x XGS-PON ports

**LTX-16**

*Uplink*

— 4 x 100GBASE-SR-4/LR4 (QSFP28) ports

*Downlink*

— 16 x XGS-PON ports

### Port modes

— 100 Gbps duplex mode for optical ports

### SFP PON parameters[1]

— Transmission medium — SMF-9/125, G.652 fiber optic cable
— Splitting ratio — up to 1:128 GPON and 1:256 XGS-PON
— RSSI (Received Signal Strength Indication) support
— Compliance with ITU-T G.9807.1
— Maximum distance: 20 km
— 1577 nm transmitter:
  — Data transfer rate — 9.953 Gbps
  — Average output power — 2~5 dBm
— 1270 nm receiver:
  — Data transfer rate — 9.953 Gbps
  — Receiver sensitivity — -26 dBm

### Switch

— Switch performance — 120 Gbps
— MAC address table — 64K entries
— VLAN table — 4K (in compliance with 802.1Q)

### Physical parameters

— Power supply voltage[1]:
  — 100–240 V AC, 50–60 Hz
  — 36–72 V DC
— Maximum power consumption — 108 W
— Operating temperature range: from -5° to 40 °C
— Relative humidity: up to 80%
— Dimensions with the power module installed (WxHxD): 430 x 44 x 317 mm, 19" rack mount, 1U form factor

### Standards

— ITU-T G.988 GPON
— ITU-T G.984x GPON
— ITU-T G.8032/Y.1344 Ethernet ring protection switching[2]
— 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[2]
— IEEE 802.3ad Link aggregation
— IEEE 802.1p Protocol for Traffic Prioritization
— IEEE 802.1Q Virtual LANs
— IEEE 802.1ad Provider Bridges (QinQ)
— IEEE 802.1v VLAN Classification by Protocol and Port
— IEEE 802.3ac VLAN tagging
— IEEE 802.1d MAC bridges
— IEEE 802.1w Rapid Reconfiguration of Spanning Tree[2]
— IEEE 802.1s Multiple Spanning Trees[2]

### Additional features

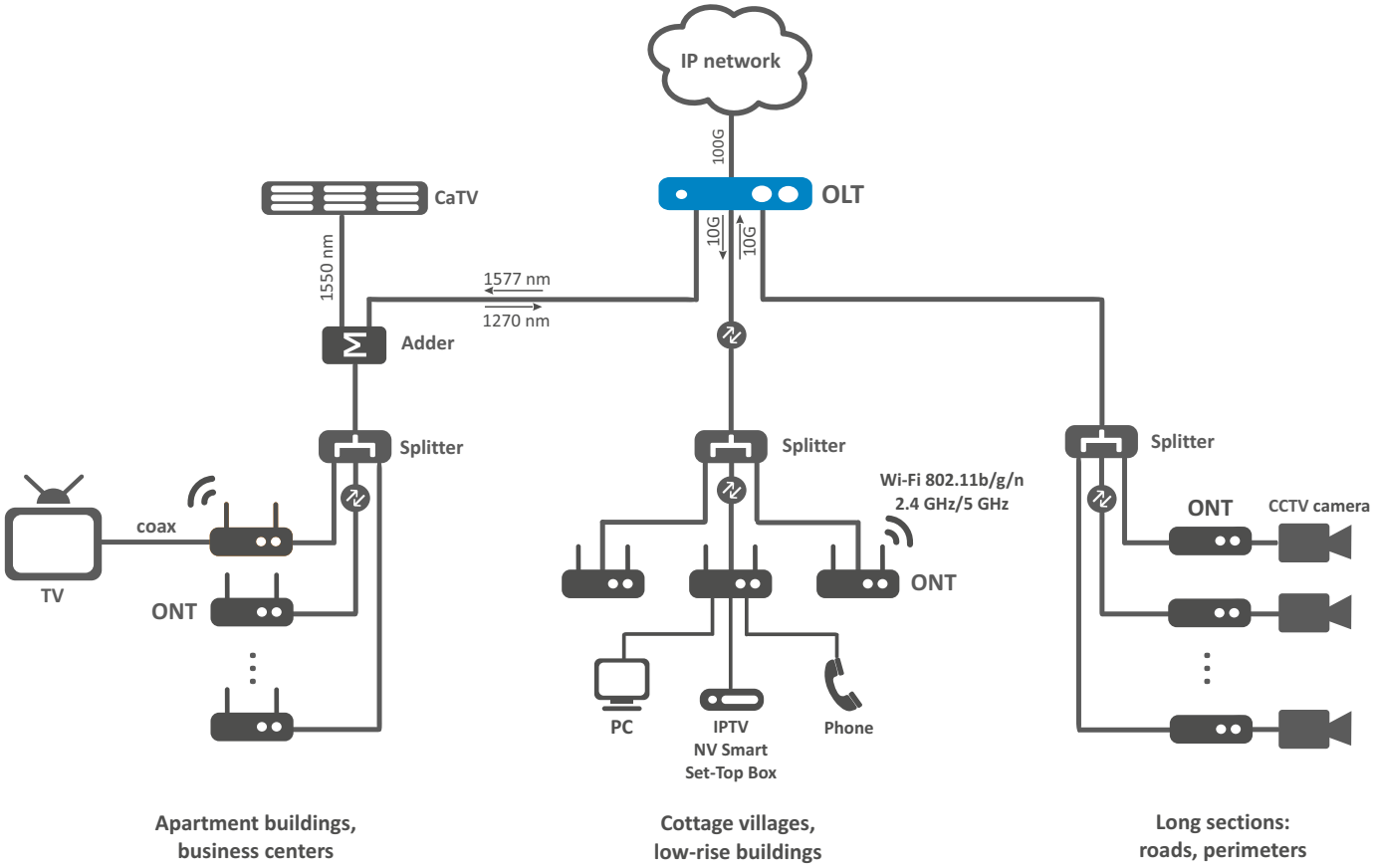
— Port mirroring, VLAN mirroring
— MAC address table: 64K per switch, 8K per port
— Number of MAC addresses limiting[2]
— STP, RSTP, MSTP support[2]
— ERPSv2 support[2]
— QoS support: 802.1p, WFQ, DSCP[2]
— Port isolation, port isolation within a single VLAN
— Unicast/multicast/broadcast traffic limiting
— ACL Ipv4 support[2]
— QinQ support in compliance with IEEE 802.1ad
— Up to 1024 multicast groups
— IGMP Fast Leave support
— IGMP Proxy support
— IGMP Snooping support
— IGMP Querier support
— DHCPv4 Snooping support
— IP Source guard support[2]
— DHCPv4 Relay Agent (Option 82) support
— PPPoE Intermediate agent support
— LLDP (802.1ab) support
— Storm Control support[2]
— Policy support[2]
— Utilization by ONT services[2]
— OMCI Bridge support
— OMCI RG support

### Management and monitoring

— RADIUS, TACACS+ support[2]
— Management and monitoring: CLI, SNMP
— Access restriction: by password, by IP address[2], by privilege level
— Several management interfaces support

[1] Parameter is defined when ordering
[2] Not implemented in the current firmware version

## Use case




## Ordering information

| Name | Description |
|---|---|
| **OLT LTX-8** | OLT LTX-8, 8 x XGS-PON ports, 4 x 100GBASE-SR-4/LR4 (QSFP28) ports |
| **OLT LTX-16** | OLT LTX-16, 16 x XGS-PON ports, 4 x 100GBASE-SR4/LR4 (QSFP28) ports |
| **Related products** | |
| **PM350-220/12** | PM350-220/12 power module, 176–264 V AC, 350 W |
| **PM350-48/12** | PM350-48/12 power module, 36–72 V DC, 350 W |

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**About ELTEX**

**ELTEX** company is a leading Russian developer and manufacturer of telecommunication 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.