- **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	LTX-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

Port modes

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

Combo SFP PON parameters[1]

– 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

Class N1/B+

— 1490 nm ROS laser (DFB laser) transmitter:
  — Data rate: 2.488 Gbps
  — Average output power: +2.. +5 dBm
  — Spectral line width: -20 dB, 1.0 nm
— 1310 nm APD/TIA receiver:
  — Data rate: 1.244 Gbps
  — Receiver sensitivity: -28 dBm
  — Optical receiver overload: -8 dBm
— 1577 nm ROS laser (DFB laser) transmitter:
  — Data rate: 9.953 Gbps
  — Average output power: +2.. +5 dBm
  — Spectral line width: -20 dB, 1.0 nm
— 1270 nm APD/TIA receiver:
  — Data rate: 9.953 Gbp
  — Receiver sensitivity: -26 dBm
  — Optical receiver overload: -8 dBm

Switch

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

Standards

– ITU-T G.988 PON
– 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 802.3ac 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

– VLAN mirroring, port mirroring
– MAC table: 64K per switch, 8K per port
– MAC address limiting[2]
– STP, RSTP, MSTP[2]
– ERPSv2[2]
– QoS: 802.1p, WFQ, DSCP[2]
– 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[2]
– Policy[2]
– Utilization by ONT services
– OMCI Bridge
– OMCI RG
– Hardware support for Dying Gasp[3]

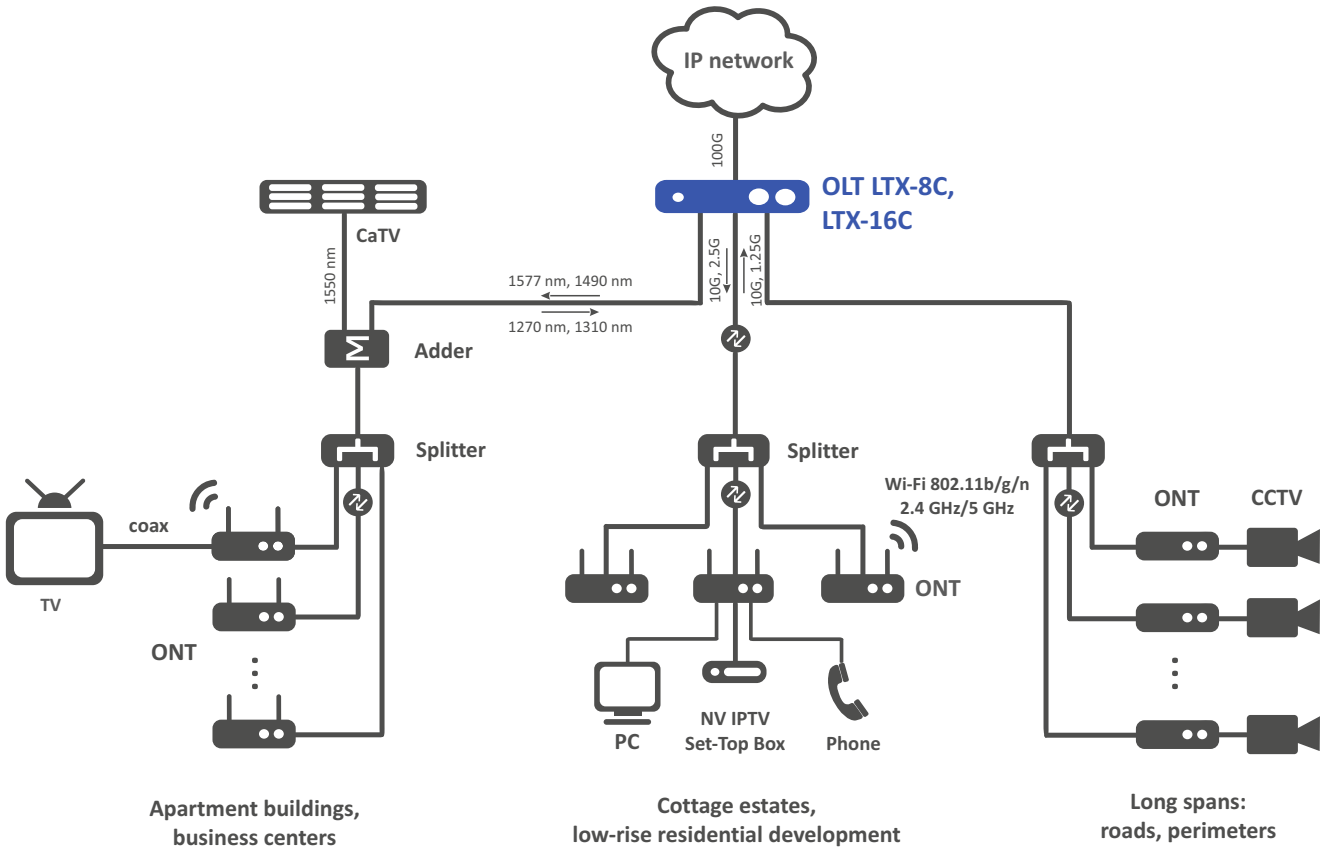
Management and monitoring

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

[1] The parameter is defined when ordering.
[2] Not implemented in current version.
[3] In conjunction with PM350-220/12 rev.C 1v0 power supply modules and higher.

Physical specifications and ambient parameters		
	LTX-8C	LTX-16C
Power supply[1]	176–264 V AC, 50 Hz; 36–72 V DC	
Average power consumption	100 W	125 W
Operating temperature	from -10 to +55 °C	
Operating storage temperature	from -50 to +70 °C	
Relative humidity	up to 80 %	
Dimensions with power supply unit installed (W × H × D)	430 × 43.6 × 447 mm, 19'', 1U	
Weight	6.3 kg	6.4 kg

Use case



1,577 nm (XGS-PON), 1,490 nm (GPON) — data transmission wavelengths;
1,270 nm (XGS-PON), 1,310 nm (GPON) — data receiving wavelengths;
10G (XGS-PON), 2.5G (GPON) — data transmission speed;
10G (XGS-PON), 1.25G (GPON) — data receiving speed.

[1] Parameter is defined when ordering.

Ordering information

Name	Description
OLT LTX-8C	OLT LTX-8C, 8 Combo ports of XGS-PON/GPON, 2 ports of 100/40GE (QSFP28/QSFP+), 2 ports of 25/10/1GE (SFP28/SFP+/SFP)
OLT LTX-16C	OLT LTX-16C, 16 Combo ports of XGS-PON/GPON, 2 ports of 100/40GE (QSFP28/QSFP+), 2 ports of 25/10/1GE (SFP28/SFP+/SFP)
Power modules	
PM350-220/12	Power module PM350-220/12, 176–264 V AC, 350 W
PM350-48/12	Power module PM350-48/12, 36–72 V DC, 350 W

Contact us

+7 (383) 274 10 01
+7 (383) 274 48 48

eltex@eltex-co.ru

eltex-co.com

About Eltex

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.