NOORANO

نوران ارتباطات نوین

ELTEX

June` 2024

ELTEX PRODUCTS & SOLUTIONS

Eltex Company

The leading Russian manufacturer and developer of network and telecommunication equipment
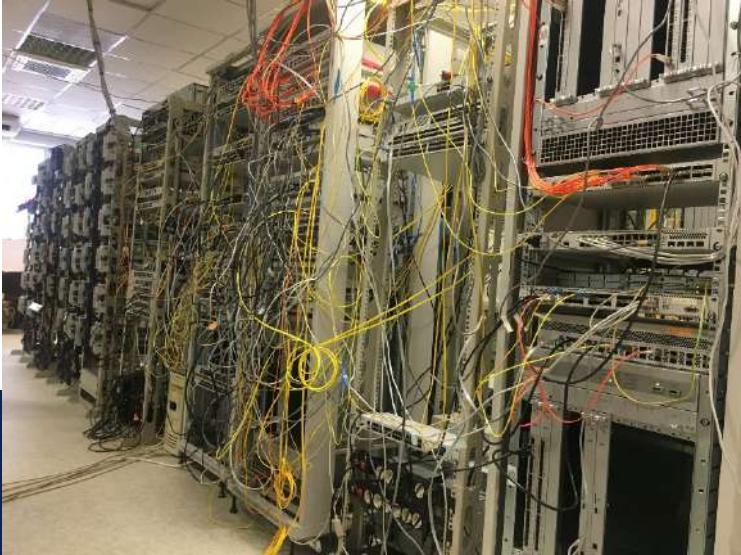
Manufacturing complex in Novosibirsk

Experience

- **32 years experience in developing and manufacturing**
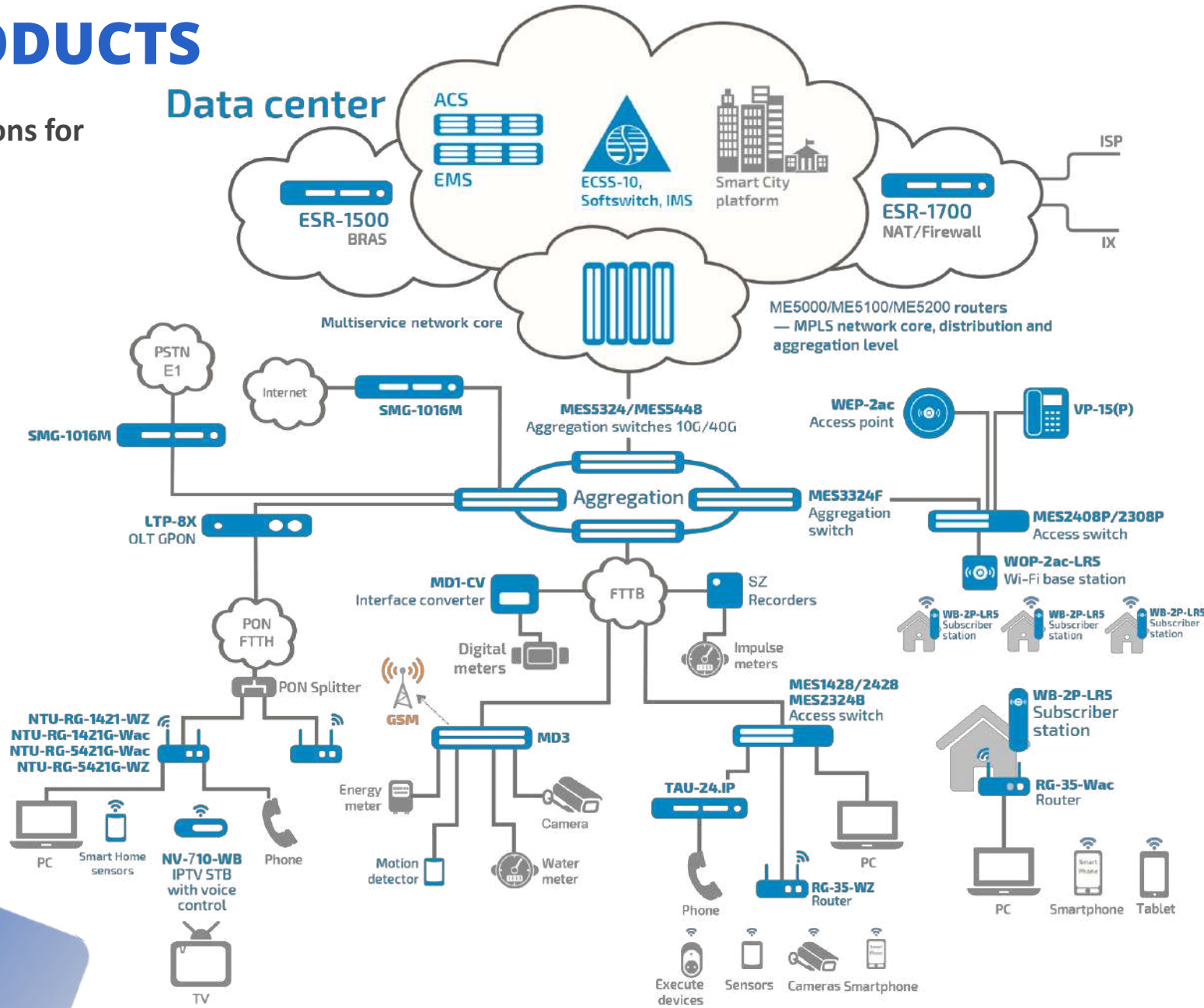- **More than 1500 employees**

Partners

- **More than 100 partner companies in Russia, CIS, Asia, Middle East**
- **More than 20 000 client companies**
- **2 manufacturing plants – Novosibirsk and Kazakhstan**

Eltex Company

ELTEX PRODUCTS

Wide range of solutions for complex projects

Data center

ACS

EMS

ECSS-10, Softswitch, IMS

Smart City platform

ESR-1500 BRAS

ESR-1700 NAT/Firewall

ISP

IX

ME5000/ME5100/ME5200 routers
— MPLS network core, distribution and aggregation level

Multiservice network core

PSTN E1

Internet

SMG-1016M

SMG-1016M

MES5324/MES5448
Aggregation switches 10G/40G

WEP-2ac Access point

VP-15(P)

LTP-8X OLT GPON

Aggregation

MES3324F Aggregation switch

MES2408P/2308P Access switch

WOP-2ac-LR5 Wi-Fi base station

PON FTTH

MD1-CV Interface converter

FTTB

SZ Recorders

WB-2P-LR5 Subscriber station

WB-2P-LR5 Subscriber station

WB-2P-LR5 Subscriber station

PON Splitter

Digital meters

Impulse meters

GSM

NTU-RG-1421-WZ
NTU-RG-1421G-Wac
NTU-RG-5421G-Wac
NTU-RG-5421G-WZ

MD3

MES1428/2428
MES2324B
Access switch

WB-2P-LR5 Subscriber station

Energy meter

Camera

TAU-24.IP

RG-35-Wac Router

PC

Smart Home sensors

NV-710-WB
IPTV STB with voice control

Phone

Motion detector

Water meter

Phone

RG-35-WZ Router

PC

PC

Smartphone

Tablet

TV

Execute devices

Sensors

Cameras Smartphone

Geography of projects

Key clients

- **Enterprise**
- **ISPs**
- **Oil and Gas**
- **Government**
- **SMB**
- **MNOs**

- 16M PON OLT ports
- 4,5M Ethernet ports
- 6,1M VoIP ports

Broadband equipment

GPON / XGSPON
Broadband multiservice access via optical fiber

Ethernet Switches
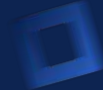A wide range of managed switches

Service Gateways

Router and firewall in one device

Core Routers

Routers of the IP/MPLS transport network boundary

Ethernet Switches

- Access/Aggregation/Data center
- L2-L3
- 8-48 ports
- FE-GE-10G-40G-100G ports
- PoE/PoE+/UPoE
- AC/DC PSU
- Industrial range
- EVPN/VXLAN
- Stacking
- More than 70 models
- CE certified

Access Switches MES24xx

The MES24xx series of access Ethernet switches provide customers connection to networks of large enterprises, small and mid-sized businesses and service providers via 1G/10G interfaces.

MES2408C

- 8 x 1G
- 2 x 1G Combo
- AC

MES2424B
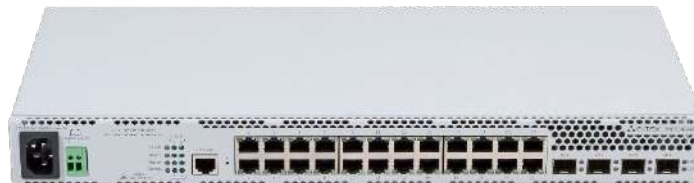
- 24 x 1G
- 4 x 10G SFP+
- AC
- Battery connection

MES2408P

- 8 x 1G PoE/PoE+
- 2 x 1G SFP
- AC

- 8 – 48 ports (copper/fiber)
- AC/DC options
- Models with 12V external battery
- Models with different PoE budget
- 1/10G uplinks

Roadmap for 2024:

- RIPv2, OSPFv2/v3 – 2Q 2024
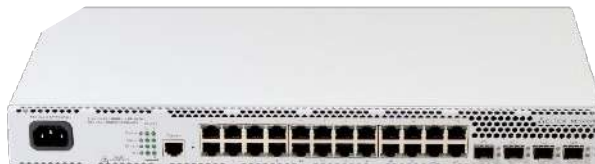- PIM-SM, BGP - 3Q 2024
- Stacking – 2Q 2024

Access switches PoE

MES2428P

370 W

- **24 x 1G PoE/PoE+**
- **4 x 1G Combo**
- **L2**
- **AC/DC**

MES2424P

370 W

- **24 x 1G PoE/PoE+**
- **4 x 1G SFP+**
- **L2**
- **AC/DC**

MES2448P

740 W

- **48 x 1G PoE/PoE+**
- **4 x 10G SFP+**
- **L2**
- **AC/DC**

Optimal for video surveillance networks

Technical features	MES2428P	MES2424P	MES2448P
Bandwidth	56 Gbps	128 Gbps	176 Gbps
Throughput for 64-byte packets	41.7 MPPS	95.2 MPPS	130.9 MPPS
VLAN table	4094	4094	4094
MAC table	8192	16384	32768
L2 Multicast groups	509	1023	4094
Power supply	230 V AC, 50 Hz / 48 V DC	230 V AC, 50 Hz	230 V AC, 50 Hz

Access switches 2.5G
PoE
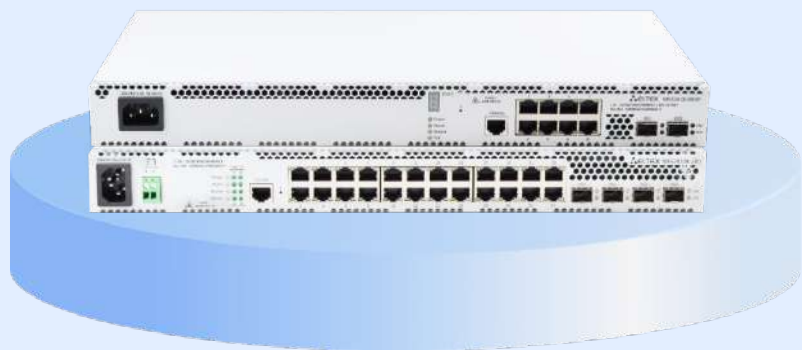
MES2410-08DP

Performance
80 Gbps

Interfaces
8 × 2.5G PoE/PoE+
2 × 10G SFP+

PoE Budget
240 W

MES2410-08DU

Performance
80 Gbps

Interfaces
8 × 2.5G PoE/PoE+/PoE++
2 × 10G SFP+

PoE Budget
720 W

MES2310-48DP

Performance
440 Gbps

Interfaces
48 × 2.5G PoE/PoE+
4 × 25G SFP28

PoE Budget
1450 W

Power
1+1 – replaceable
power supplies

MES2420-24DP

Performance
200 Gbps

Interfaces
24 × 2.5G PoE/PoE+
4 × 10G SFP+

PoE Budget
370 W

Access switches MES23xx

The MES23xx series of access Ethernet switches provides end users connection to a large-scale corporate network, small and medium business networks and to a service provider networks using 1G/10G interfaces.

The switches support physical stacking, VLANs, multicast groups and advanced security functions

MES2324F

MES2308P

240 W

- 20 x 1G SFP
- 4 x 1G Combo

- 4 x 10F SFP+
- DC

- 8 x 1G PoE/PoE+
- 2 x 1G SFP

- 2 x 1G
- AC/DC

- L3
- 8 – 48 ports (copper/fiber)
- AC/DC options
- Models with 12V external battery
- 1/10G uplinks
- Stacking up to 8 devices

Access switches
Best sellers of MES23xx series

MES2324FB

- 20 x 1G SFP
- 4 x 1G Combo
- 4 x 10G SFP+
- L3
- AC
- Battery connection

Model with battery is available
MES2324

- 24 x 1G
- 4 x 10G SFP+
- L3
- AC

380 W

MES2324P

- 24 x 1G PoE/PoE+
- 4 x 10G SFP+
- L3
- AC

Technical features	MES2324FB AC	MES2324	MES2324P AC
Bandwidth	128 Gbps	128 Gbps	128 Gbps
Throughput for 64-byte packets	92.1 MPPS	92.1 MPPS	92.1 MPPS
VLAN table	4094		
MAC table	16384		
L2 Multicast groups	2046		
ARP tables	820		
Stacking	up to 8 devices		
Power supply	230 V AC, 50 Hz / 12 V DC	230 V AC, 50 Hz / 48 V DC	230 V AC, 50 Hz / 48 V DC

Access switches

New line of access switches MES2300-XX

MES2300-24

- 24 x 1G
- 4 x 10G SFP+
- L3
- AC

new

- MES2300B-24F
- MES2300-24F
- MES2300-24
- MES2300B-24

Access industrial switches

MES3508

- 8 x 1G
- 2 x 1G Combo
- L3
- Industrial
- DC

MES3508P **240 W**

- 8 x 1G PoE/PoE+
- 2 x 1G Combo
- L3
- Industrial
- DC

MES3510P **240 W**

- 8 x 1G PoE/PoE+
- 4 x 1G SFP
- L3
- Industrial
- DC

Protection class IP30

Technical features	MES3508	MES3508P	MES3510P
Bandwidth	20 Gbps		24 Gbps
Throughput for 64-byte packets	14 MPPS	14.88 MPPS	17.8 MPPS
VLAN table	4094		
MAC table	16384		
L2 Multicast groups	4088		
ARP tables	4023		
Stacking	not supported		
Power supply	48 V DC		

Access industrial switches

New

MES3710P **240 W**

- 8 x 1G PoE/PoE+
- 4 x 1G Base-X/Base-FX
- L2
- Industrial
- DC

Protection class IP30

Technical features	MES3710P
Bandwidth	24 Gbps
Throughput for 64-byte packets	17.8 MPPS
VLAN table	4094
MAC table	32768
L2 Multicast groups	4088
ARP tables	4023
Stacking	not supported
Power supply	48 V DC

Access industrial switches

Under development

For installation in a rack

MES2328I

Under development
MES2300DI-28

Performance
56 Gbps

Interfaces
24 × 1G
4 × 1G Combo

Under development

MES3400I-24

Performance
128 Gbps

Interfaces
24 × 1G
4 × 10G SFP+

Under development

MES3400I-24F

Performance
128 Gbps

Interfaces
24 × 1G SFP
4 × 10G SFP+

L3
Level of switch

-40 °C
Lower operating temperature

+60 °C
Upper operating temperature

IP30
Protection class

1+1
Replaceable power supplies

Access industrial switches

- **Advanced L2 features**

- **Multicast support (IGMP Snooping, MVR)**

- **Advanced security features (L2-L4 ACL, IP Source Guard, Dynamic ARP Inspection, etc.)**

120 W

MES3708P

Solution for the "Smart Poles" project

Protection class IP55

Technical features	MES3708P
Bandwidth	20 Gbps
Throughput for 64-byte packets	14.88 MPPS
VLAN	4094
MAC table	8192
L2 Multicast groups	509
Buffer memory	512 KB
RAM (DDR3)	256 MB
ROM (SPI Flash)	32 MB
Power supply	230 V AC / 50 Hz

Aggregation switches

The MES33xx series of aggregation Ethernet access switches can be used in service provider network as the aggregation or transport switches, as well as in data centers as Top-of-Rack switches.

They have a high performance with interfaces operating at speeds of 10 Gbps or 1 Gbps.

MES3348F

MES3324

240 W

- 48 x 1G SFP
- 4 x 10G SFP+
- 176 Gbps bandwidth

- 20 x 1G
- 4 x 1G Combo
- 4 x 10G SFP+

- 1 x 10/100/1000BASE-T (OOB)
- 128 Gbps bandwidth

- L3
- 8 – 48 ports (copper/fiber)
- Stacking up to 8 devices
- Front-to-Back cooling
- AC/DC external PSU
- Power redundancy (hot-swappable mode)

Aggregation switches
New generations – MES3300-XX, MES3400-XX
1G → 10G

new
MES3300-24
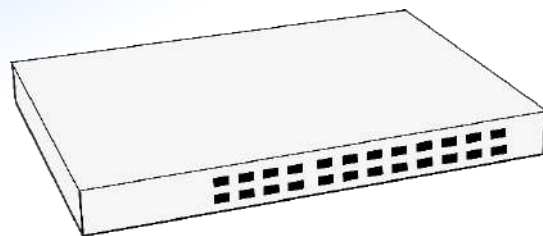
- 24 x 1G
- 4 x 10G SFP+
- 1 x 10/100/1000BASE-T (OOB)
- L3
- AC/ DC
- Up to 2 power modules

new
MES3300-24F
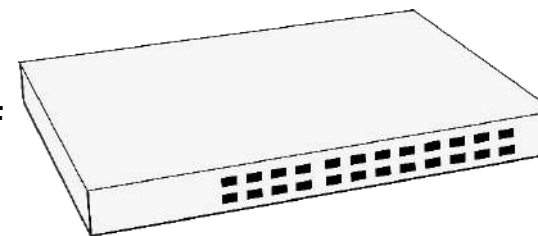
- 20 x 1G SFP
- 4 x 10G SFP+
- 1 x 10/100/1000BASE-T (OOB)
- L3
- AC/ DC
- Up to 2 power modules

Technical features	MES3300-24	MES3300-24F
Bandwidth	128 Gbps	
Throughput for 64-byte packets	95 MPPS	
VLAN table	4094	
MAC table	16384	
L2 Multicast groups	4088	
ARP tables	4023	
Stacking	up to 8 devices	
Power supply	230 V AC, 50 Hz / 48 V DC	

Aggregation switches
New generations – MES3300-XX, MES3400-XX
1G ⟶ 10G

new
MES3400-24

- 24 x 1G
- 4 x 10G SFP+
- 1 x 10/100/1000BASE-T (OOB)
- L3
- AC/DC
- Up to 2 power modules

new
MES3400-48

- 48 x 1G SFP
- 4 x 10G SFP+
- 1 x 10/100/1000BASE-T (OOB)
- L3
- AC/ DC
- Up to 2 power modules

Technical features	MES3400-24	MES3400-48
Bandwidth	128 Gbps	176 Gbps
Throughput for 64-byte packets	95,2 MPPS	130,95 MPPS
VLAN table	4094	4094
MAC table	32786	32786
L2 Multicast groups	4094	4094
ARP tables	1000	1000
Power supply	230 V AC, 50 Hz / 48 V DC	230 V AC, 50 Hz / 48 V DC

Aggregation/Datacenter Switches
10G

MES5316A

- 16 x 10G SFP+
- 1 x 10/100/1000BASE-T (OOB)
- L3
- Up to 2 power modules
- AC/DC

MES5324A

- 24 x 10G SFP+
- 1 x 10/100/1000BASE-T (OOB)
- L3
- Up to 2 power modules
- AC/DC

MES5332A

- 32 x 10G SFP+
- 1 x 10/100/1000BASE-T (OOB)
- L3
- Up to 2 power modules
- AC/DC

Technical features	MES5316A	MES5324A	MES5332A
Bandwidth	320 Gbps	480 Gbps	640 Gbps
VLAN table	4094		
MAC table	32768		
L2 Multicast groups	4096		
ARP tables	8151		
Stacking	up to 8 devices		
Power supply	230 V AC, 50 Hz / 48 V DC		

VxLAN New feature

MPLS in ROADMAP 2024

Aggregation Switches

10G → 40/100G

MES5448

MES7048

- **48 x 10G SFP+**
- **4 x 40G QSFP+**
- **L3**

- **Up to 2 power modules**
- **AC/DC**
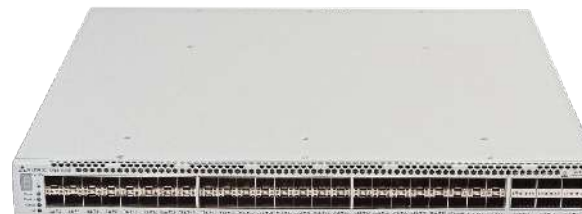
- **48 x 10G SFP+**
- **6 x 100G QSFP28**
- **L3**

- **Up to 2 power modules**
- **AC/DC**

Technical features	MES5448	MES7048
Bandwidth	1,28 Tbps	1,92 Tbps
Throughput for 64-byte packets	943.5 MPPS	1607 MPPS
VLAN table	4094	
MAC table	131072	294912
L2 Multicast groups	2048	2048
ARP tables	6144	
Stacking	up to 8 devices	
Power supply	230 V AC, 50 Hz / 48 V DC	

Aggregation/Datacenter Switches

10/25G → 40/100G

new
MES5400-24

new
MES5400-48

new
MES5410-48

new
MES5500-32

- 24 x 10G SFP+
- 6 x 100G QSFP28

- 48 x 10G SFP+
- 6 x 100G QSFP28

- 48 x 10/25 (SFP+)
- 6 x 100G QSFP28

- 2 x 10G SFP
- 32 x 100G QSFP28

VxLAN
New feature

Technical features	MES5400-24	MES5400-48	MES5410-48	MES5500-32
Bandwidth	1.68 Tbps	2.16 Tbps	3.6 Tbps	6.4 Tbps
Throughput for 64-byte packets	1050 MPPS		2380 MPPS	
Buffer memory	12 MB		24 MB	
Stacking	up to 8 devices			
Power supply	230 V AC, 50 Hz / 48 V DC			

MPLS
in ROADMAP
2024

Building an IP factory using the architecture Spine-Leaf

- **High reliability**
- Excellent port capacity and performance scalability
- Load balancing between Leaf switches
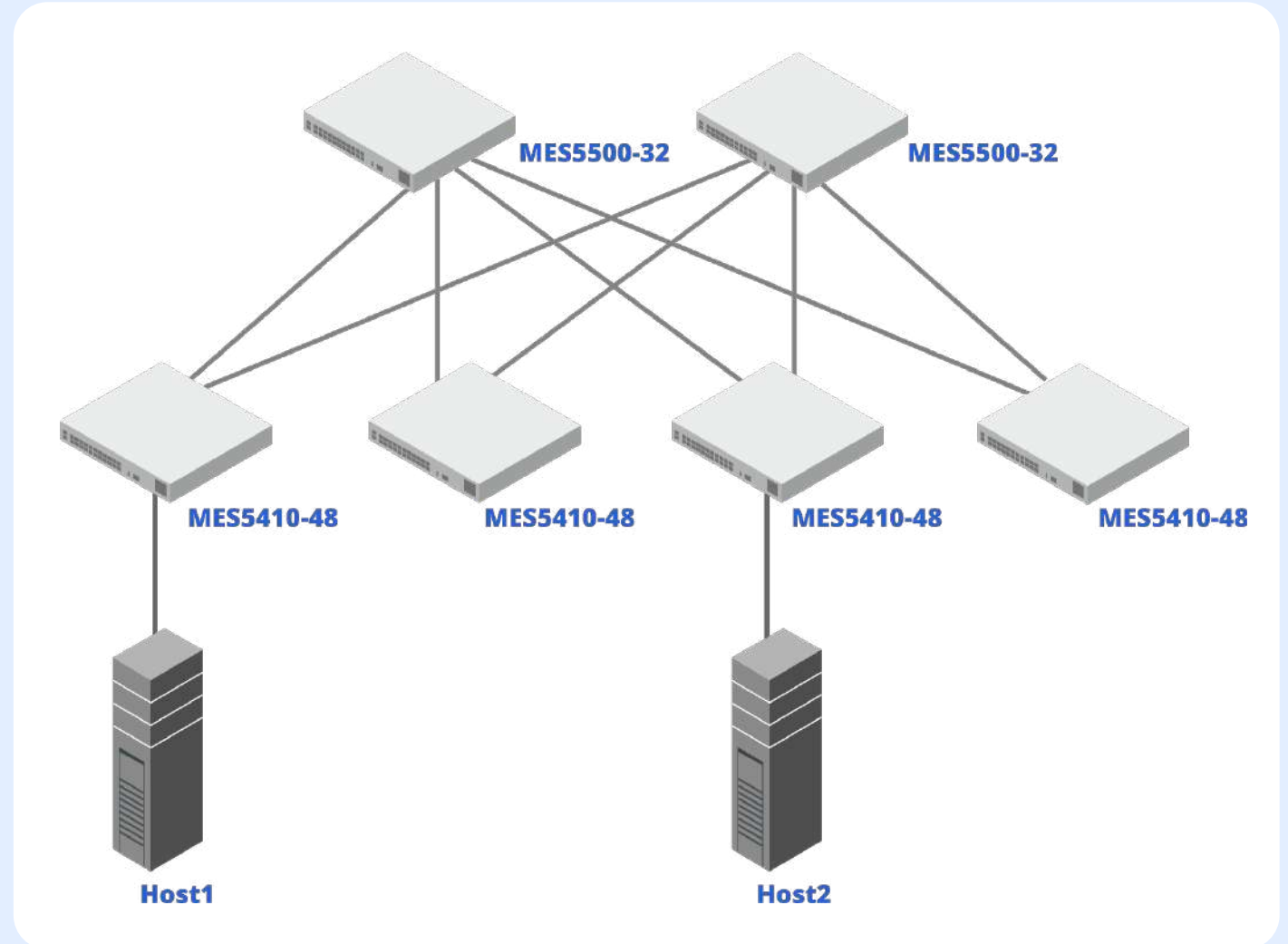
Ethernet switches.
L2-L3 layer switches with FE/GE/10G/40G/100G ports (8-48), PoE support, AC/DC PSU

Success stories among Russia

Rostelecom, Russia
Constructing FTTH network for B2C users

- **Over 20K of aggregation switches**
- **Over 200K of access switches**

ER-TELECOM, Russia
Constructing FTTH network for B2C users

- **Over 100K of access switches**

State Duma of Russian Federation
Organization of video surveillance
at the elections in 2021

- **Over 30K of PoE access switches**

Project «socially significant objects»
Digitalization of hospitals, etc.

- **Over 50K of access switches**

Project «digital educational environment»
Digitalization of schools.

- **Over 10K of PoE access switches**

Gazprom, Russia
Construction and modernization of data
transmission networks

- **Over 5K of access, aggregation, industrial switches**

Ethernet switches.
L2-L3 layer switches with FE/GE/10G/40G/100G ports (8-48), PoE support, AC/DC PSU

Success stories around the world

VNPT, telecommunications company, Vietnam

The main areas of interest of VNPT Group are mobile and landline communications, providing access to the Internet.

- Over 2K of access and aggregation switches

Uztelecom, Uzbekistan

Constructing FTTH/FTTB network for B2C users

- Over 5K of access switches

Viettel Group, telecommunications company, Vietnam

The main areas of interest are mobile communications, Internet services and electronics manufacturing.

- Over 2K of access and aggregation switches (+ VoIP equipment)

KYRGYZTELECOM, Kyrgyz Republic

Expansion of the existing Ethernet network infrastructure in Bishkek

- Over 1K of aggregation switches (+ VoIP equipment)

Service routers and core routers

ESR service routers

- **For small, mid-sized, large corporate networks**
- **Firewall, NAT**
- **VPN**
- **Routing, MPLS**
- **Security (IPS/IDS, Anti-spam)**
- **From 1 to 46 Gbps**

ME core routers

- **High performance routers, can be used as a corporate or an operator's core or border**
- **Up to 19,2 Tbps performance**
- **Carrier grade routing and MPLS**
- **L2VPN/L3VPN**
- **Multicast routing**
- **HQoS**

Service routers and core routers
Best sellers and new models of ESR series

ESR-15R

ESR-30

ESR-3200

- 4 x 10/100/1000BASE-T (LAN/WAN)
- 2 x SFP 1000BASE-X
- 2 x USB 2.0

- 4 x 10/100/1000BASE-T (LAN/WAN)
- 2 x 10GBASE-R SFP+/1000BASE-X
- 1 x USB 2.0
- 1 x USB 3.0
- 1 slot for micro SD cards, Console
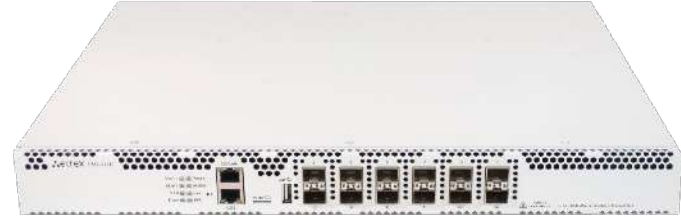
- 12 x 1000BASE-X/10GBASE-R/25GBASE-R (LAN/WAN)
- 1 x USB 3.0
- OOB port
- 1 slot for SD cards, Console
- Hot-swappable AC/DC PSU

Technical features	ESR-15R	ESR-30	ESR-3200
Performance, Gbps	1,25	8	46,25
VPN tunnels	10	250	500
Concurrent sessions	4K	256K	512K
FIB size	1.0M	1.4M	1,7 M
Power supply	230 V AC, 50 Hz		230 V AC, 50 Hz / 48 V DC

vESR

Service gateway ESR in a virtual version

Available for testing

Option	Capacity	RIB BGP	RIB OSPF	RIB IS-IS	RIB RIP	VPN
FREE	1 Mbps	1024	1000	1000	1000	2
BASIC	100 Mbps	512k	500k	500k	10k	6
BASIC+	500 Mbps	512k	500k	500k	10k	12
STANDARD	1 Gbps	768k	500k	500k	10k	24
STANDARD +	5 Gbps	1024k	500k	500k	10k	64
ADVANCED	10 Gbps	2048k	500k	500k	10k	64
ADVANCED +	25 Gbps	4096k	500k	500k	10k	64
PREMIUM	50 Gbps	5000k	500k	500k	10k	256
PREMIUM +	100 Gbps	5000k	500k	500k	10k	256

Service routers and core routers
ME series

ME series devices support a full range of features — IPv4/IPv6 routing, hierarchical QoS, IP Multicast routing and L2/L3 MPLS services.

ME5000

- 3.0 Tbps, up to 250 Gbps /slot
- 15U
- Up to 12 Line Cards /chassis
- LC18XGE: 18x10GBASE-R (SFP+)
- LC20XGE: 20x10GBASE-R (SFP+)
- LC8XLGE: 4x40GBASE-R (QSFP28), 4x100/40GBASE-R (QSFP28)
- Up to 12K MPLS PW

ME5000M

- 3.6Tbps, up to 600 Gbps /slot
- 15U
- Up to 12 Line Cards /chassis
- LC20XGE: 20x10GBASE-R (SFP+)
- LC8XLGE: 4x40GBASE-R (QSFP28), 4x100/40GBASE-R (QSFP28)
- Up to 16K MPLS PW

under development: Q4 2024

ME6008

- 19,2Tbps
- 15U
- Up to 8 Line Cards /chassis
- ME6K-LC48XGE: 48x25Gbps (SFP28)
- ME6K-LC48XGE: 24x100Gbps (QSFP28)
- Up to 16K MPLS PW

Service routers and core routers
ME series

ME series devices support a full range of features — IPv4/IPv6 routing, hierarchical QoS, IP Multicast routing and L2/L3 MPLS services.

ME5200/S

- **32x10GBASE-R (SFP+),**
  4x 100/40GBASE-R (QSFP28)
- **800 Gbps, 720 Mpps**
- **FDB 750K MAC, FIB 4M**
- **Up to 12K MPLS PW /slot**
- **SyncE for S models**

ME5100/S

- 20x10GBASE-R (SFP+)
- CPU Broadcom XLP308, 1200 MHz, 8 GB RAM
- 200 Gbps, 300 Mpps
- Up to 250K MAC, FIB 1M
- Up to 12K MPLS PW /slot
- SyncE for S models

under development
ME5210

- **32x10GBASE-R (SFP+),**
  6x 100/40GBASE-R (QSFP28)
- **Better performance**
- **1RU**
- **SyncE and PTP**

under development
ME2001

- **Mobile backhaul router,**
  cell site router (CSR)
- **300Gbps**
- **1RU**

Service routers

Success stories

Project «Digital educational environment»

- Over 20K of ESR routers

Kazakhstan post

Corporate data network

- Over 1000 of high performance ESR routers

Russian post

Corporate data network

- Up to 50K of ESR routers

Project «Communication service provision control system»

Government SLA for operators

- Up to 80K of RR-10 SLA

xPON

- **GPON OLTs and ONTs for FTTx access network**
- **Management systems**
- **Great experience in GPON development and maintenance**
- **Wide range of devices**
- **Solution from the scratch created by Eltex (HW+SW+MS)**
- **XGS-PON in development**

xPON development evolution

2007 ⋯⋯▶ **2008** ⋯⋯▶ **2010** ⋯⋯▶ **2014** ⋯⋯▶ **2016** ⋯⋯▶ **2020**

EPON development start

GPON development start

The first GPON project For Rostelecom Siberia

Global Rostelecom project for 5 regions

The first international GPON project in Serbia

XGS-PON development start

Rostelecom
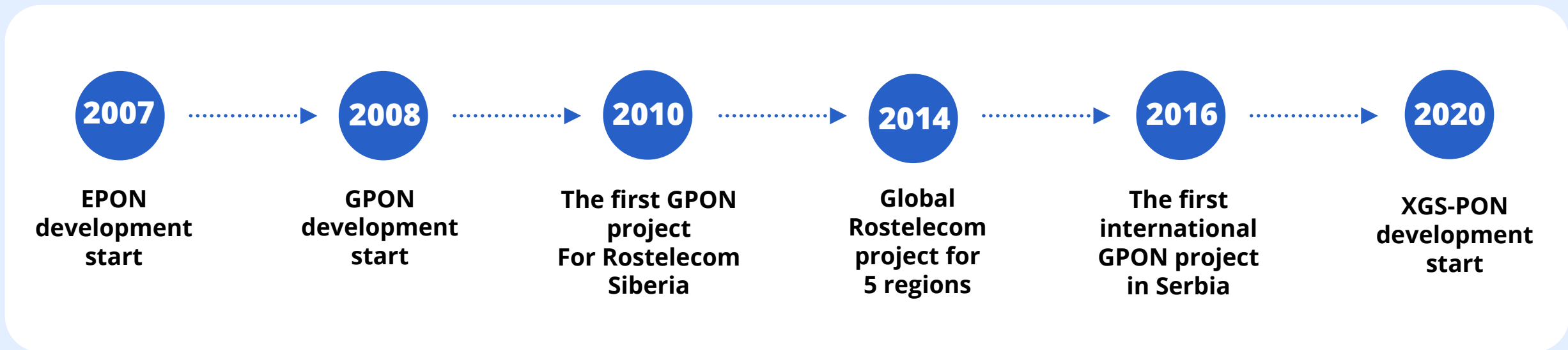
The largest xPON project based on Eltex solution

- **Started in 2010**
- **More than 15 millions of installed ports**
- **2 major OLT vendors**
- **Eltex supplied >45% of installed OLTs among Russia**
- **Eltex supplied >85% of installed OLTs in Siberian branch**

GPON

Success stories

White label
project for
US company

SAT-TRAKT,
Orion Telecom,
Serbia
MTEL, Montenegro

Belarus

Rostelecom and other ISPs,
Russia

Kazakhtelecom,
Beeline
Kazakhstan

Irancell
TCI

DGtek,
Australia
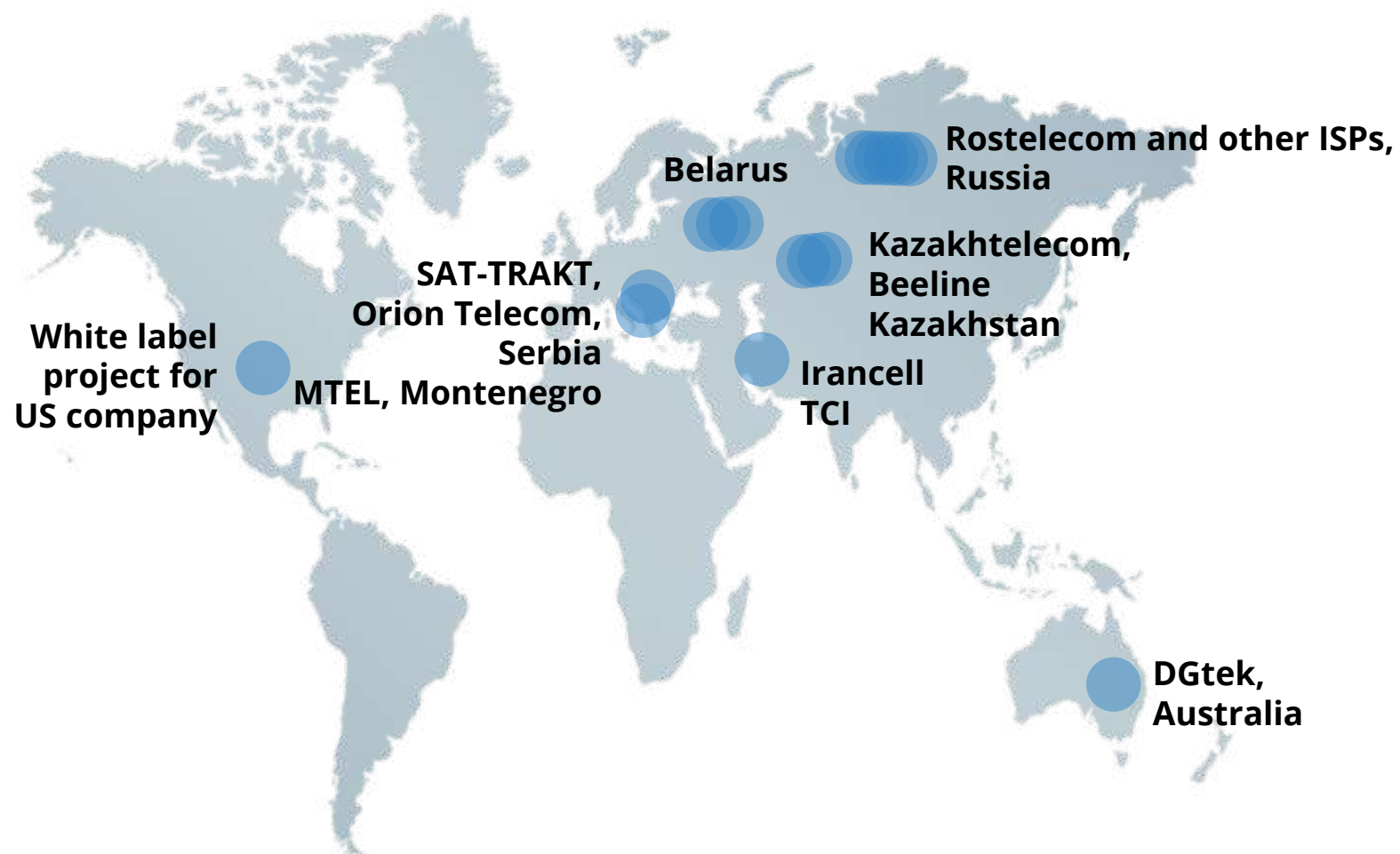
GPON equipment.
OLT Station equipment

MA4000-PX

LTP-4X

- GPON (2.5/1.25 Gbps)
- 4 GPON ports
- 2 x 10G SFP+, 4 x 1G combo
- 1U

LTP-8X

- GPON (2.5/1.25 Gbps)
- 8 GPON ports
- 2 x 10G SFP+, 4x1G, 4 x 1G combo
- 1U

LTP-16N

- GPON (2.5/1.25 Gbps)
- 16 GPON ports
- 8 x 10G SFP+ /1G SFP
- 1U

MA4000-PX

- GPON (2.5/1.25 Gbps)
- 8 x 10G SFP+, 4 x 1G
- 9U

Technical features	LTP-4X	LTP-8X	LTP-16N
Maximum number of ONT	512	1024	2048
PON ports	4	8	16
VLAN table	4000		
MAC table	16000		64000
Splitting ratio	1:128		

Technical features	MA4000-PX
Maximum number of modules	16 (up to 128 GPON ports)
Maximum number of ONT/node	8912
Node bus performance	680 Gbps
PLC8 performance	128 Gbps
PP4X performance	480 Gbps
PLC8 Splitting ratio	1:64

GPON equipment.
ONT Subscriber terminals

NTU-1
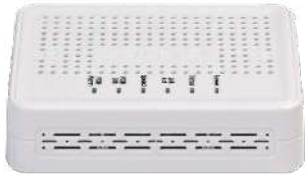
NTU-52V

NTU-52W

NTU-SFP-200
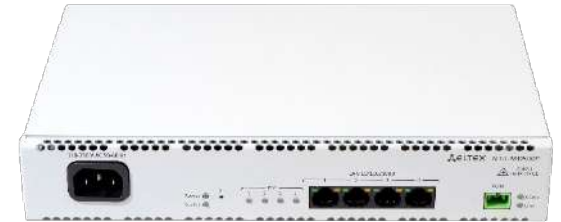
NTU-MD500P

Technical features	NTU-1 rev.C	NTU-52V	NTU-52W	NTU-SFP-200	NTU-MD500P
WAN	1xGPON				
LAN	1x1G	1x100M + 1x1G	1x100M + 1x1G	1x1G	4x1G PoE+
FXS	-	1	-	-	-
Wi-Fi	-	-	+	-	-
USB	-	1	-	-	-

GPON equipment.
ONT Subscriber terminals

NTU-MD500P

Interfaces	PoE budget
1 × GPON	65 W
4 × 1G PoE+	

Access Point   IP-camera   IP-phone

PoE   PoE   PoE

Splitter

OLT

IP-network

MES

OLT

IP-network
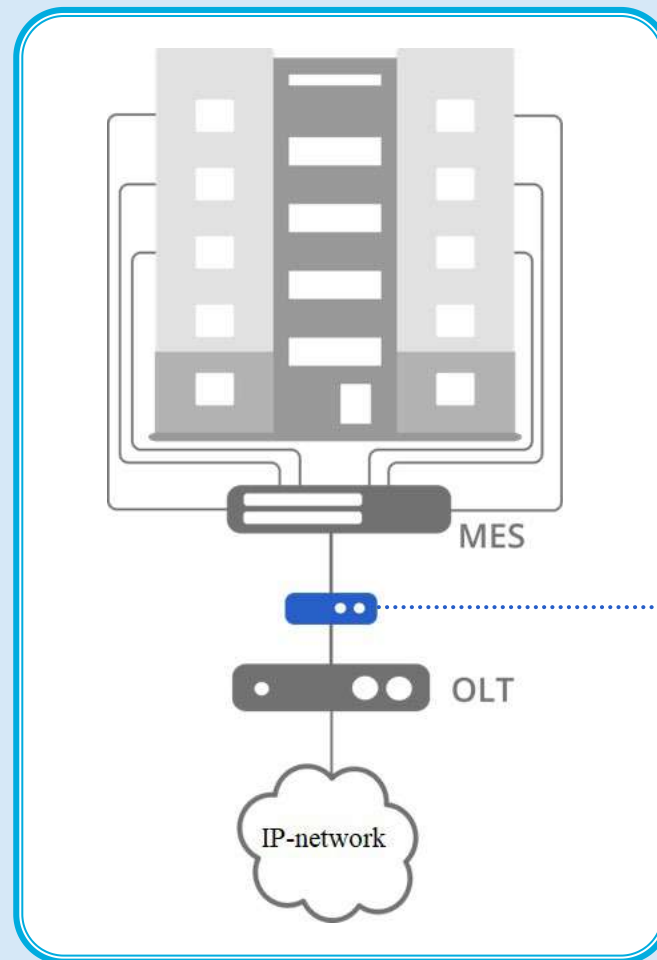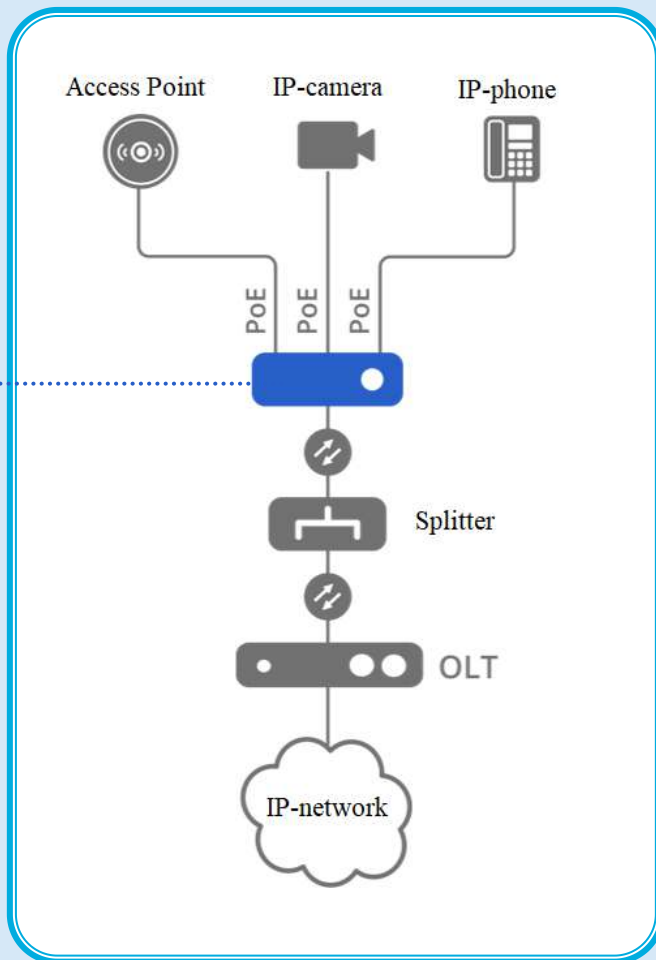
NTU-SFP-200

Interfaces
1 × GPON SC/APC
1 × 1G SFP

GPON equipment.
Subscriber terminals CaTV

NTU-1C

NTU-52VC

NTU-RG-5421GC-Wac

Technical features	NTU-1C	NTU-52VC	NTU-RG-5421GC-Wac
WAN	1xGPON		
LAN	1x1G	1x100M + 1x1G	4x1G
FXS	-	1	
USB	-		1
RF	1		
Wi-Fi	-		802.11n, 2*2 – 300 Mbps, 2.4 GHz 802.11ac, 2*2 – 866 Mbps, 5 GHz

GPON equipment.
Universal subscriber terminals

NTU-RG-5421G-Wac

NTU-RG-5440G-Wac

NTU-RG-5402G-W

NTU-RG-5420G-Wac

Technical features	NTU-RG-5421G-Wac	NTU-RG-5440G-Wac	NTU-RG-5402G-W	NTU-RG-5420G-Wac
WAN	1xGPON			
LAN	4x1G			
FXS	1	-	2	-
USB	1		1	
Wi-Fi	802.11n, 2*2 – 300 Mbps, 2.4 GHz 802.11ac, 2*2 – 866 Mbps, 5 GHz	802.11n, 2*2 – 300 Mbps, 2.4 GHz 802.11ac, 4*4 – 1733 Mbps, 5 GHz	802.11n, 2*2 – 300 Mbps, 2.4 GHz 802.11ac, 2*2 – 866 Mbps, 5 GHz	802.11n, 2*2 – 300 Mbps, 2.4 GHz 802.11ac, 2*2 – 866 Mbps, 5 GHz

GPON equipment.
Universal subscriber terminals – 802.11ax support

available in 3Q 2024
NTU-RG-5520(1)G-Wax

Technical features	NTU-RG-5521G-Wax	NTU-RG-5520G-Wax
WAN	1xGPON	
LAN	4x1G	
FXS	1	-
USB	1	1
Wi-Fi	802.11ax, 2*2 – 576 Mbps, 2.4 Ghz 802.11ax, 2*2 – 1201 Mbps, 5 Ghz	802.11ax, 2*2 – 576 Mbps, 2.4 Ghz 802.11ax, 2*2 – 1201 Mbps, 5 Ghz

XGS-PON equipment.
New generation of PON

New
NTX-1

- 1x XGS-PON
- 1x10Gbps LAN

New
LTX-8/16

- 8/16 XGS-PON ports
- 2x100G QSFP28, 2x40G QSFP+
- 1U

available in 3Q 2024
NTX-RG-5521G-Wax

- 1x XGS-PON
- 1x10Gbps LAN
- 4x1Gbps LAN
- 1 FXS port
- Wi-Fi ax

available in 4Q 2024
MA5160

- GPON / XGS-PON
- 16 line cards
- 16 xPON ports on one LC
- 2 uplink boards with 6x100G, 4x10G

Voice over IP equipment

VOIP products and solutions

VP

IP-phones

TAU

Line of analog subscriber gateways

SMG

Trunk gateways with redundancy support

SBC

Session border controller for protection against unauthorized access

SOFTSWITCH

Software package

Elph

Unified Communications Applications

B2B VoIP gateways

- **Efficient port cost**
- **Auto configuration**
- **TR-069, DHCP**
- **IPSec**

new
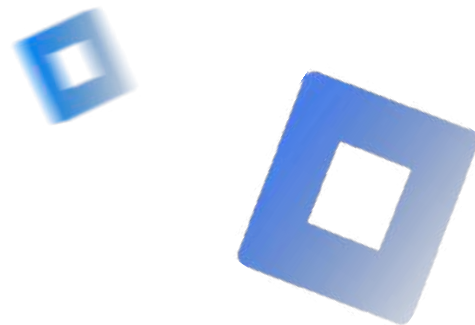
TAU-1M.IP **TAU-2M.IP** **TAU-4M.IP** **TAU-8N.IP** **RG1504GF-Wac**

Features	TAU-1M.IP	TAU-2M.IP	TAU-4M.IP	TAU-8N.IP	RG1504GF-W
Number of FXS ports	1	2	4	8	4
Number of WAN ports	1 port of WAN 10 / 100BASE-T	1 port of WAN 10 / 100BASE-T	1 port of WAN 10 / 100BASE-T (1000BASE-X)	1 port of WAN 10 / 100BASE-T	1 (SFP)
Number of LAN ports	2 ports of LAN 10 / 100BASE-T	1 port of LAN 10 / 100BASE-T	1 port of LAN 10 / 100BASE-T	-	4
Number of 2.0 USB ports	1				
Wi-Fi	-	-	-	-	802.11ac

Subscriber gateways

TAU-16.IP

- 16 analog FXS ports
- Power supply: 220 V AC or 48/60 V DC

TAU-24.IP

- 24 analog FXS ports
- Power supply: 220 V AC or 48/60 V DC

TAU-32.IP

- Modular device with 32 analog FXS/FXO ports
- Power supply: 220 V AC or 48/60 V DC
- Passive cooling

TAU-36.IP

- 36 analog FXS ports
- Power supply: 220 V AC or 48/60 V DC

TAU-72.IP

- 72 analog FXS ports
- Power supply: 220 V AC or 48/60 V DC

IP-phones

VP-12
- 2 SIP-accounts
- 100 MB
- PoE

VP-15P
- 2 SIP-accounts
- 100MB
- PoE

VP-17P
- 2 SIP-accounts
- 1G
- PoE

VP-30P
- 6 SIP-accounts
- PoE+
- Console support
- Model with Bluetooth and Wi-Fi support

+

VP-EXT-22
- 2 × RJ-25 (6P6C)
- 22 keys with light indication
- Color LCD-display

VP-100P   4Q 2024
- 6 SIP-accounts
- PoE+
- Touch screen
- Bluetooth handset support
- Video

Digital Gateways SIP/E1

SMG-2
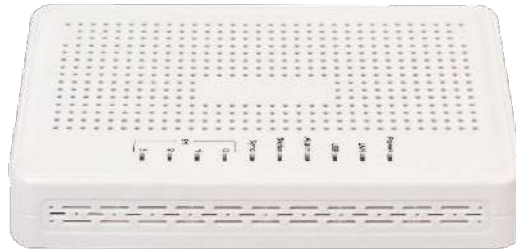
SMG-4
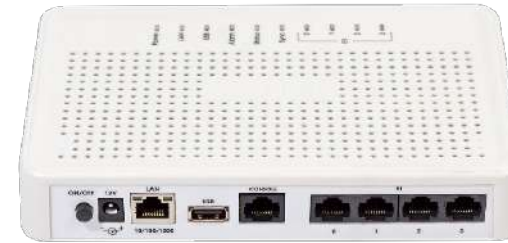
🛰 **Support for semi-permanent connection functionality for satellite link operation**

Features	SMG-2	SMG-4
Alarm support	SS, PRI	
Number of VoIP channels	64	128
Number of E1 streams (RJ-48)	Up to 2	4
Number of CPS	40	
Power	220 V	

Digital gateways with IP-PBX features

SMG-1016M
Up to 2K subscribers

- 2 ports of 1000BASE-X (2 slots for SFP modules)
- 3 ports of 10/100/1000BASE-T (RJ-45)
- E1 (2 CENTRONICS-36 connectors)
- 1 port of USB 2.0
- 1 console port (RS-232)
- 2 ports of SATA (for SSD modules installation)

SMG-3016
Up to 3K subscribers

- 16 ports of E1 (RJ-48)
- 2 ports of 10/100/1000BASE-T (RJ-45) / 1000BASE-X (SFP)
- 2 ports of 10/100/1000BASE-T (RJ-45)
- 2 ports of USB 2.0
- 2 slots for SATA HDD 2.5"

Features	SMG-1016M	SMG-3016
Number of CPS	14	120
Support for V5.2 (LE)	Yes	Yes
E1 signaling	SS, DSS1 (Q.931), PRI	
Auto alert in an emergency	Yes	
Controller-peripheral redundancy via IP and E1	-	Yes
Number of E1 streams	Up to 16 E1 (period of 4 E1)	
Number of IP channels	Up to 768 (period of 128)	
Number of VLAN	Up to 40	
Routing based on Radius protocol	Yes	
Power	220/48 V with hot swapping	
Voice codecs	G.711 (a-law, µ-law), G.729 (A/B), G.723.1, G.726 (32 Kbps)	
VoIP protocols	SIP, SIP-T/SIP-I, SIP-Q; H.3231; SIGTRAN (M2UA, IUA)	

User-friendly web interface

TDM to IP converting

Session Border Controller - SBC

For protection from unauthorized access
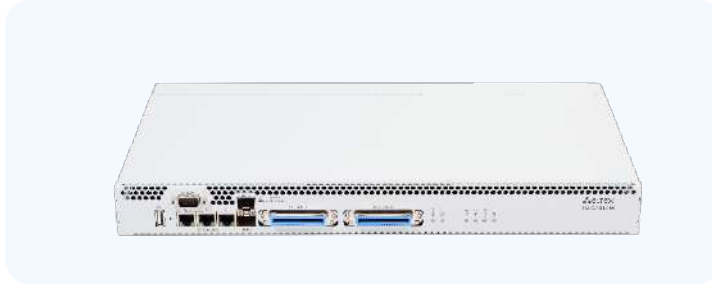
SBC-1000

Up to 500 simultaneous connections
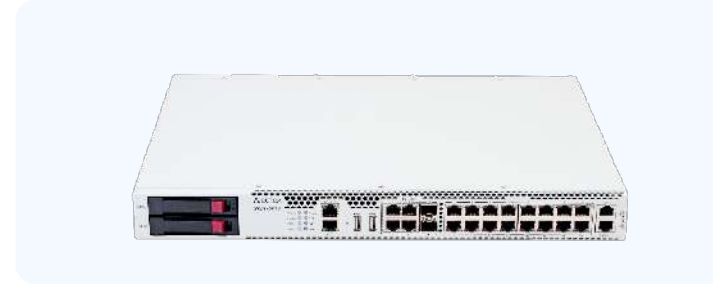
SBC-3000

- Up to 2000 simultaneous connections
- Master-slave reservation

- ✓ Business Process protection
- ✓ Effective management

- ✓ Power redundancy
- ✓ Access control by RADIUS

- ✓ Hiding the network topology
- ✓ Load balancing between trunks

- ✓ SDP analysis and verification
- ✓ Protection against Ddos attacks

E-SBC

Software Session Border Controller

E-SBC

ELTEX

- The solution is integrated with vESR
- Provides full-fledged information security in a given perimeter

SSW — SIP — SBC — SIP — Internet
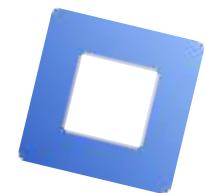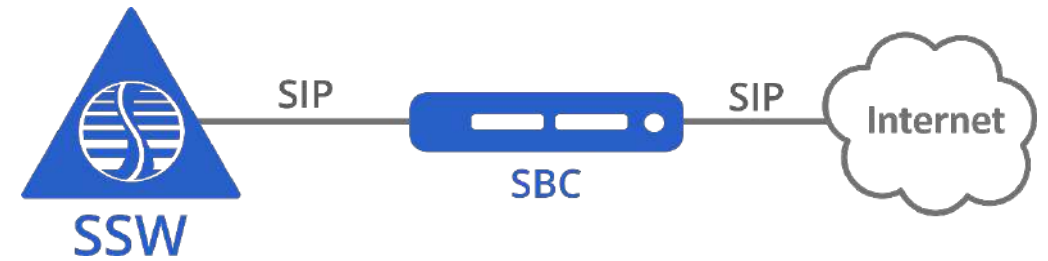
IP-PBX for SMB

SMG-200
Up to 200 subscribers

SMG-500
Up to 500 subscribers

- **Up to 16 FXS/FXO ports**
- **4 ports of Ethernet 10/100/1000Base-T (RJ-45)**
- **1 port of USB2.0, 1 port of USB3.0**
- **1 slot for SD card**
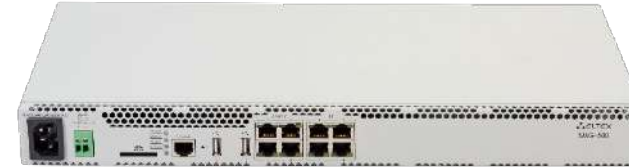
- **Up to 4 E1 flows (RJ-48),**
- **SM-VP-M300 submodule: up to 128 VoIP channels (G.711)**
- **4 ports of Ethernet 10/100/1000Base-T (RJ-45)**
- **1 port of USB2.0, 1 port of USB3.0**
- **1 slot for SD card**

Features	SMG-200	SMG-500
Number of simultaneous calls	50	100
Call-center basic functionality	yes	yes
Call recording	yes	yes
VoIP protocols	SIP, SIP-T/SIP-I, H.323	

SoftSwitch: ECSS-10 solution architecture

ECSS-10 is a software IP-PBX with a large scope of providing VAS.
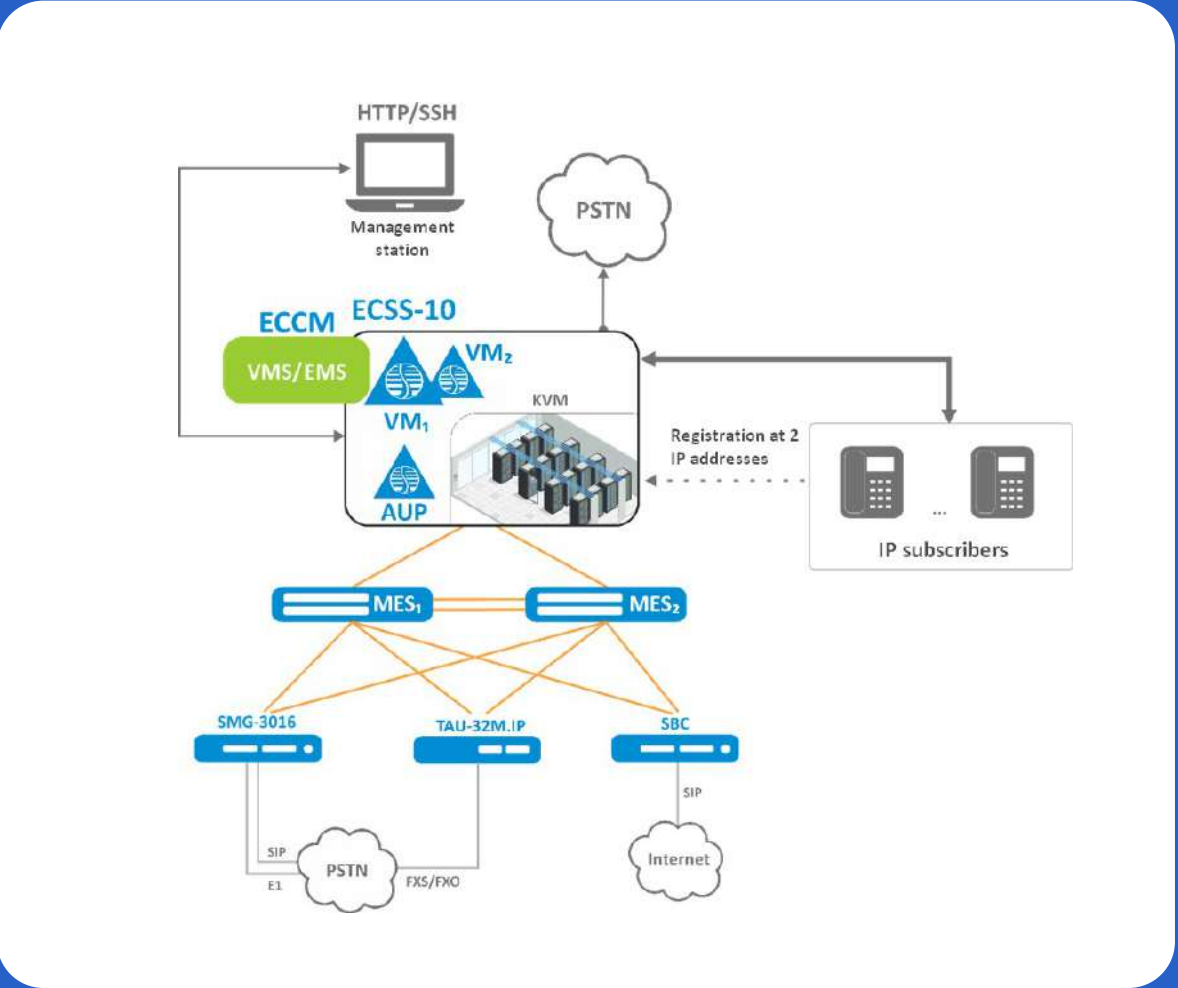
Call Center ECSS-10

- Extended queue, extended queue allocation strategies
- Distribution of operators between different queues
- Operator's room
- Supervisor's room
- The hotline
- Callback Queue Service
- Customer self-service
- Recording of conversations and speech recognition
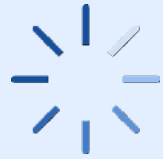- Flexible reporting system
- Output of work statistics

Audio calls conference

Video calls

Statuses

Elph

Unified Communications by Eltex

Speech recognition

Multi-platform

Presentations

Messages and chats

VoIP solution

Eltex VoIP solution consists of ECSS-10 SoftSwitch, IP-PBXs for enterprise, digital gateways, subscriber gateways and IP-phones.

Success stories In Russia

Ministry of Defense, Russia
VoIP corporate network for government factory

- **Up to 15K subscribers (SoftSwitch, gateways)**

Russian railways
Organization of a distributed VoIP network in Krasnoyarsk region

- **Over 20K subscribers based on Eltex**

TELE2
Organization of IP-PBXs for 21 regional offices

- **Over 63K subscribers based on SMG PBX series**

Ministry of Emergency Situations
Emergency call support system using single «112» number

- **Subscriber and digital gateways**

«SIBUR» holding
Modernization of enterprise VoIP network for one of the largest integrated petrochemical company in Russia

- **Over 5K subscribers based on Eltex solution**

NOORANO
نوران ارتباطات نوین

ELTEX

Wireless solutions

Wireless access equipment

Enterprise & SMB

- Indoor/outdoor Wi-Fi access points
- Wireless network controller
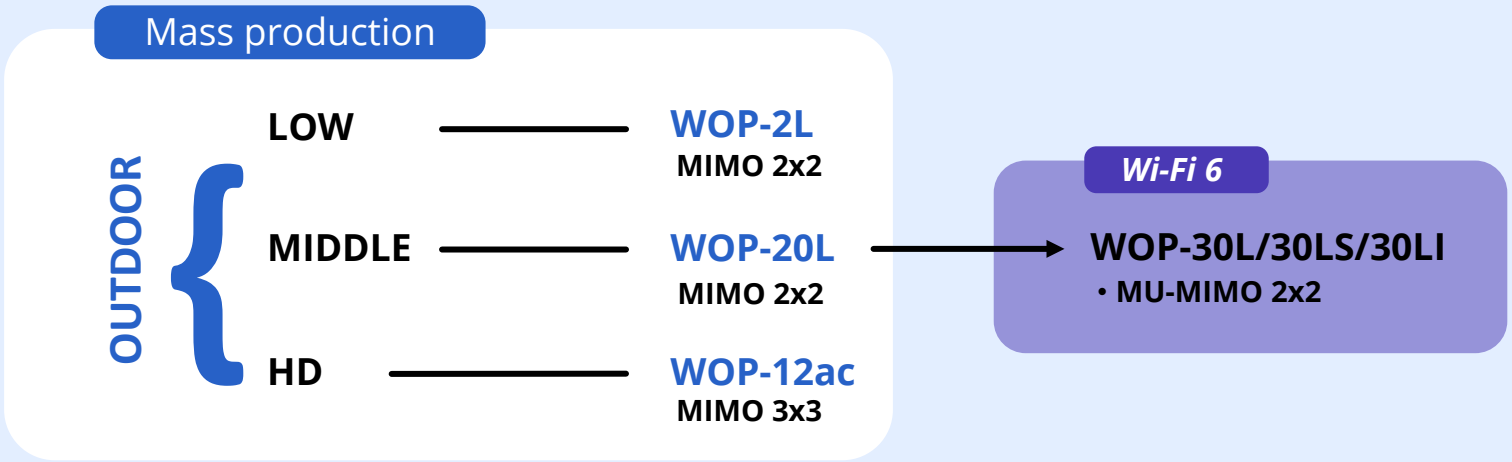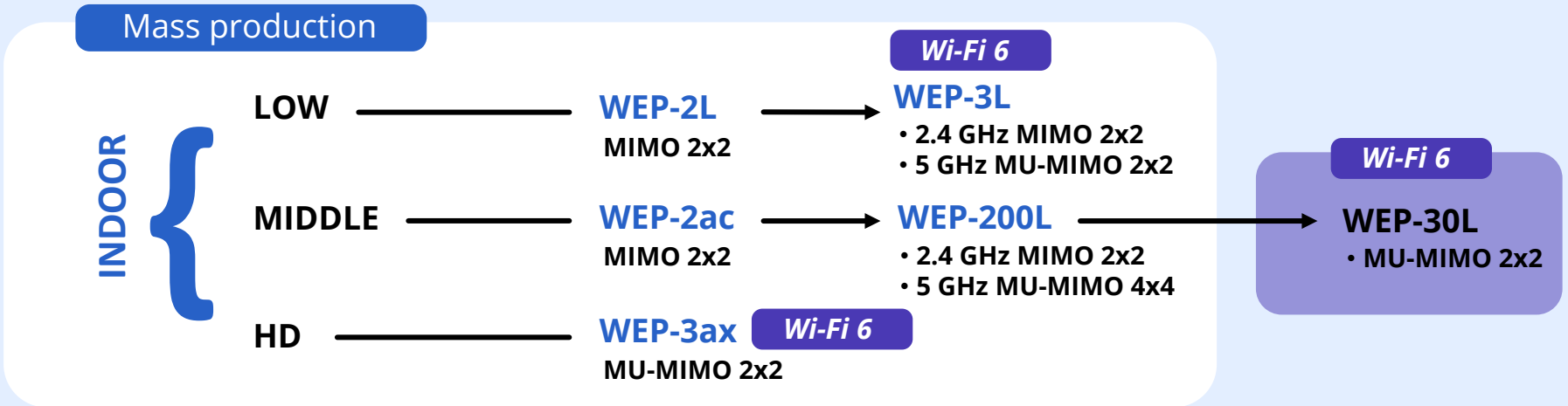- Solutions for telecommunications carriers and business customers

Wireless broadband access

- Organization of wireless networks according to "point to point" (PTP) and "point to multipoint" (PTMP) schemes
- Wide operating temperature range

Wireless access points range

Mass production

INDOOR

LOW ——— **WEP-2L**
MIMO 2x2

→ *Wi-Fi 6* **WEP-3L**
• 2.4 GHz MIMO 2x2
• 5 GHz MU-MIMO 2x2

MIDDLE ——— **WEP-2ac**
MIMO 2x2

→ **WEP-200L**
• 2.4 GHz MIMO 2x2
• 5 GHz MU-MIMO 4x4

→ *Wi-Fi 6* **WEP-30L**
• MU-MIMO 2x2

HD ——— **WEP-3ax** *Wi-Fi 6*
MU-MIMO 2x2

Mass production

OUTDOOR

LOW ——— **WOP-2L**
MIMO 2x2

MIDDLE ——— **WOP-20L**
MIMO 2x2

→ *Wi-Fi 6* **WOP-30L/30LS/30LI**
• MU-MIMO 2x2

HD ——— **WOP-12ac**
MIMO 3x3

Wi-Fi 5 INDOOR

- **Solution for telecommunications carriers and business customers**
- **Single W-Fi management center**

new

LOW
WEP-2L

Middle
WEP-2ac

Middle/HD
WEP-200L

- **2.4 GHz 802.11n / 5 GHz 802.11ac**
- **MIMO 2x2**
- **802.11r/k/v seamless roaming**
- **WDS**
- **1 Ethernet 1G port**
- **PoE 48 B/56 B (IEEE 802.3af-2003)**
- **Up to 40 users**
- **Centralized network management and monitoring with SoftWLC**

- **2.4 GHz 802.11n / 5 GHz 802.11ac**
- **MIMO 2x2**
- **802.11 r/k seamless roaming**
- **WDS**
- **1 Ethernet 1G port**
- **PoE+ 48 B/54 B (IEEE 802.3at-2009)**
- **Up to 50 users**
- **Cluster management**
- **Centralized network management and monitoring with SoftWLC**

- **2.4 GHz 802.11n / 5 GHz 802.11ac**
- **MIMO 2x2 / MU-MIMO 4x4**
- **802.11r/k/v seamless roaming**
- **WDS**
- **1 Ethernet 1G port**
- **PoE 48 B/56 B (IEEE 802.3af-2003)**
- **Up to 60 users**
- **Centralized network management and monitoring with SoftWLC**

Wi-Fi 6 INDOOR

- **Solution for telecommunications carriers and business customers**
- **Single W-Fi management center**

LOW
WEP-3L

Middle
new

WEP-30L

HD
WEP-3ax

- 2.4 GHz 802.11n / 5 GHz 802.11ax
- MIMO 2x2 / MU-MIMO 2x2
- 802.11r/k/v seamless roaming
- 1 Ethernet 1G port
- PoE 48 B/56 B (IEEE 802.3af-2003)
- Up to 40 users
- Centralized network management and monitoring with SoftWLC

- 2.4/5 GHz 802.11ax
- MIMO 2x2
- 802.11 r/k/v seamless roaming
- 1 Ethernet 2.5G port
- PoE 48 B/56 B (IEEE 802.3af-2003)
- Up to 50 users
- Centralized network management and monitoring with SoftWLC

- 2.4/5 GHz 802.11ax
- MU-MIMO 2x2
- 802.11r/k/v seamless roaming
- 1 Ethernet 2.5G port
- PoE+ 48 B/54 B (IEEE 802.3at-2009)
- Up to 100 users
- Centralized network management and monitoring with SoftWLC

Wi-Fi 5 OUTDOOR

- Enterprise-class outdoor access points with external antennas and extended operating temperature range
- Omnidirectional or sectoral antennas make the solution universal in terms of range and coverage
- Ability to built a seamless network with a high density of subscribers, including at industrial facilities

LOW
WOP-2L

Middl
WOP-2ac

new

Middle
WOP-20L

- 2.4 GHz 802.11n / 5 GHz 802.11ac
- MIMO 2x2
- 802.11r/k/v seamless roaming
- WDS
- 1 Ethernet 1G port
- PoE 48 B/56 B (IEEE 802.3af-2003)
- Up to 40 users
- Centralized network management and monitoring with SoftWLC

- 2.4 GHz 802.11n / 5 GHz 802.11ac
- MIMO 2x2
- 802.11r/k seamless roaming
- WDS
- 1 Ethernet 1G port
- PoE 48 B/54 B (IEEE 802.3at-2009)
- Up to 50 users
- Cluster management
- Centralized network management and monitoring with SoftWLC

- 2.4 GHz 802.11n / 5 GHz 802.11ac
- MIMO 2x2:2
- 802.11r/k/v seamless roaming
- WDS
- 1 Ethernet 1G port
- PoE 48 B/56 B (IEEE 802.3af-2003)
- Up to 50 users
- Centralized network management and monitoring with SoftWLC

Wi-Fi 6 OUTDOOR

- **Increasing a wireless network throughput capabilities**
- **Application in high-load networks with a high class of service**

Middle

WOP-30L

New

Middle

WOP-30LS

In development

Middle

WOP-30LI

- **2.4/5 GHz 802.11ax**
- **MU-MIMO 2x2**
- **802.11r/k/v seamless roaming**
- **1 Ethernet 2.5G port**
- **PoE+ 48 B/54 B (IEEE 802.3at-2009)**
- **Up to 50 users**
- **Centralized network management and monitoring with SoftWLC**

- **2.4/5 GHz 802.11ax**
- **MU-MIMO 2x2**
- **802.11r/k/v seamless roaming**
- **60 x 38 9dBi@2.4G, 11dBi@5G directional antenna**
- **1 Ethernet 2.5G port**
- **PoE 48 B/56 B (IEEE 802.3af-2003)**
- **Up to 50 users**
- **Centralized network management and monitoring with SoftWLC**

- **2.4/5 GHz 802.11ax**
- **MU-MIMO 2x2**
- **802.11r/k/v seamless roaming**
- **2 Ethernet 2.5G port**
- **PoE 48 B/56 B (IEEE 802.3af-2003), by 12W source**
- **Up to 50 users**
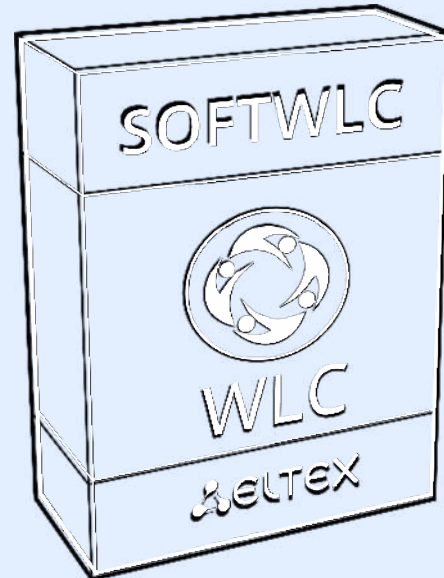- **Centralized network management and monitoring with SoftWLC**

Wireless controllers

A solution for building regional and federal wireless networks with a single control center

SoftWLC
Software controller

Up to 150 000 access points
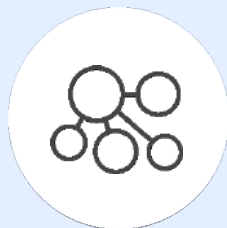
WLC-15/30/3200
Line of Hardware controllers

- HW controllers with router functionality
- Supporting 50-1000 Access Points
- Management via CLI / WEB

SOFTWLC software controller

Up to 100,000 Wi-Fi access point

EMS
Network devices management and monitoring.

Captive Portal + Portal Constructor
Authorization page, design management.

Radius + Database + DHCP server
Password generation and storage, IP address distribution.

Personal account
Creating user accounts, statistics on the number of access points, device information, analytics.

Airtune
- **Automatic configuration of access points radio parameters.**
- **Client balancing.**
- **802.11k roaming.**

WIDS
- **DDoS attacks detection.**
- **Monitoring of password brute force attacks and insecure configuration.**
- **Detection of points replacing SSID and MAC. Preventing clients from connecting to unauthorized access points.**

SOFTWLC software controller

Captive portal: user identification solution

- Customization of portal pages for project tasks
- Clickable banners placement, final redirect to the website
- Paid access for visitors (tariffs)
- Visitor survey
- Video posting

User identification

ELTEX

Please register to access the Internet

+7

Authorization via SMS or call

ELTEX

Enter your personal code to access the Internet

___ ___ ___ ___

Or go though identification procedure by phone number

Authorization via voucher

Building a wireless network
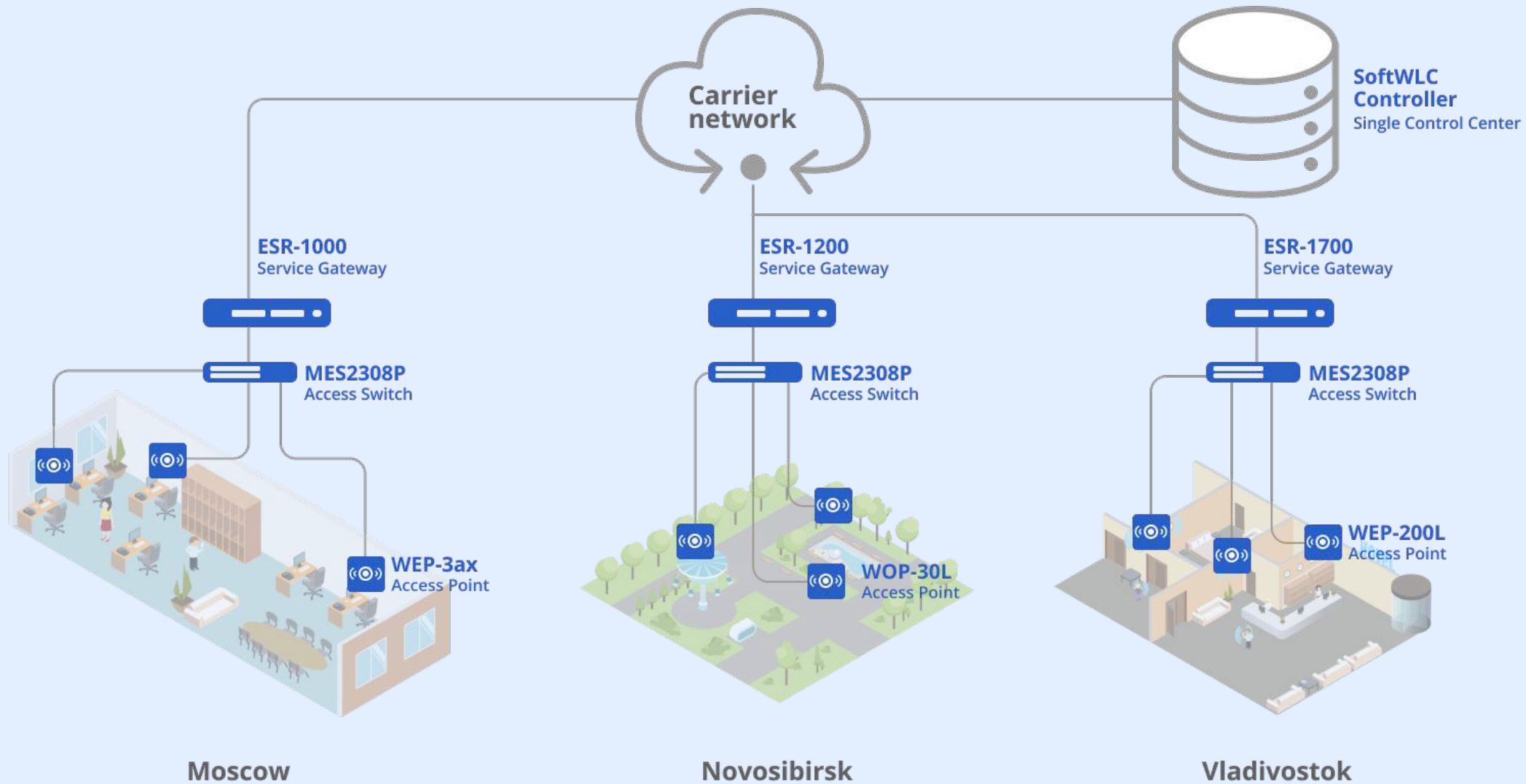
WLC 30 controller

Enterprise-level wireless network management solution

new

WLC-30

The solution for small networks (up to 150 access points) of enterprise-level. WLC-30 allows to quickly and flexibly deploy a wireless network in offices, warehouses and other facilities.

A mechanism for detection and configuration of access points according to preset template ensures fast operational commissioning.

WEB in roadmap 2024

Main functions (v 1.15.3)

- Management and monitoring of Wi-Fi access points
- Configuring the device via the CLI interface
- Airtune. Access point radio parameters management and roaming (802.11 r/k/v)
- WPA-Enterprise/WPA-Personal authorization
- Controller monitoring via SNMP
- Authorization on an external Radius server

HW parameters

- 4 x 10/100/1000BASE-T
- 2 x 10GBASE-R SFP+/1000BASE-X
- 1 x USB 3.0
- 1 x USB 2.0
- 1 microSD socket
- 1 HDD socket
- Console

Wi-Fi parameters:

- Connecting up to 150 access points
- Up to 3500 users

WLC series controllers

Enterprise-level wireless network management solution

- Management and monitoring of Wi-Fi access points

- Ability to configure the device via the CLI
  WEB is under development (3Q 2024)

- Airtune. Access point radio parameters management and roaming (802.11 r/k/v)

- WPA-Enterprise/ WPA-Personal authorization

- Controller monitoring via SNMP

- Authorization on an external Radius server

	WLC-15	WLC-30	WLC-3200
HW parameters	• 4 × 10/100/1000BASE-T • 2 × 1000BASE-X SFP • 1 × USB 2.0 • 1 × Console • 1 HDD slot	• 4 × 10/100/1000BASE-T • 2 × 10GBASE-R SFP+/ 1000BASE-X • 1 × USB 3.0 • 1 × USB 2.0 • 1 × Console • 1 slot for microSD cards •	• 12 × 1000BASE-X/ 10GBASE-R/25GBASE-R • 1 × USB 2.0 • 1 × Console • 1 slot for microSD cards • 1 HDD slot
Wi-Fi parameters	• Connection up to 50 access points • Up to 2000 users	• Connection up to 150 access points • Up to 5000 users	• Connection up to 1000 access points • Up to 30000 users

Ability to expand
up to 100 access points

Ability to expand
up to 500 access points

Ability to expand
up to 1200 access points

Wi-Fi 4 & 5 FBWA Solution

- **Using one frequency for multiple base stations**
- **Synchronization of up to 4 base stations via PTP protocol**
- **Increase of subscriber capacity**

**WOP-2ac-LR2 SYNC /
WOP-2ac-LR5 SYNC**   Base station

**WB-2P-LR2 /
WB-2P-LR5**   Subscriber station

- **2.4 GHz 802.11n / 5-6 GHz 802.11ac**
- **Transmitter power 26 dBm**
- **Polling support**
- **SFP installation option**
- **Signal level indication**
- **Intersectoral synchronization**
- **Up to 30 users**
- **Centralized network management and monitoring with Eltex EMS**

- **2.4 GHz 802.11n / 5-6 GHz 802.11ac**
- **Transmitter power 26 dBm**
- **Polling support**
- **SFP installation option**
- **Centralized network management and monitoring with Eltex ACS**

Wi-Fi 6 FBWA Solution

Under development

WOP-3ax-LR6

Base station

- **6-7 GHz 802.11ax**
- **Transmitter power 28 dBm**
- **SFP installation option**
- **Signal level indication**
- **Intersectoral synchronization**
- **Up to 50 users**
- **Centralized network management and monitoring with Eltex EMS**

**Under development**

WB-3P-LR6

Subscriber station

- **6-7 GHz 802.11ax**
- **Transmitter power 28 dBm**
- **Signal level indication**
- **Centralized network management and monitoring with Eltex ACS**

Wireless broadband access (WBA) solution

Key features

- Using one frequency for multiple base stations
- Synchronization of up to 4 base stations via PTP protocol
- Increase of subscriber capacity

TV set-top box

TV

Router

PTP synchronization
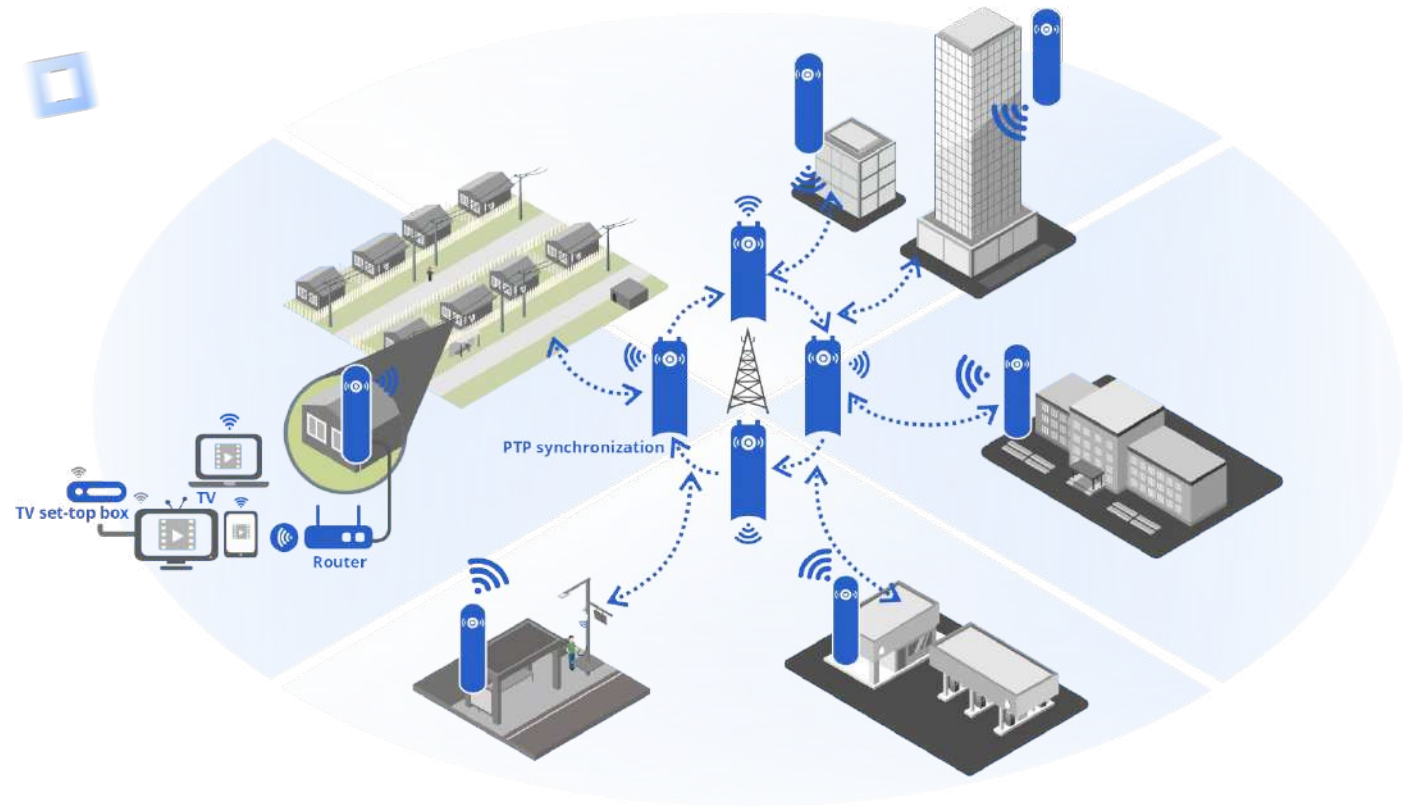
WOP-2ac-LR5 SYNC
Base station

WB-2P-LR5
Subscriber station

Wi-Fi access points and controller

Success stories

SBER bank, Russia
Wi-Fi as a service for the bank provided by Rostelecom based on Eltex platform

- Over 60K of Wi-Fi APs, country-grade wireless controller

Digital educational environment project Ministry of Education, Russia
Digitalization of schools and universities.

- Over 150K of Wi-Fi APs

Arrangement of the wireless network in educational institutions project Ministry of Education, Kazakhstan
Digitalization of 135 educational institutions of Almaty.

- More than 300 Eltex PoE-switches, more than 2K access points + SoftWLC controller

Turkey Petroleum (TPAO), Project in Adana region, Turkey
The project of camera surveillance and weight data transferring from 13 oil wells sites was carried out

- WOP-2ac-LR5 + WB-2P-LR5

İstanbul Cerrahpaşa and İstanbul çapa Medical Universities, Turkey
Wireless network was created for campus buildings, libraries, conference halls and other facilities

- WEP-2ac, WOP-2ac, WOP-2ac-LR5 + WB-2P-LR5

Management systems

EMS

Universal system for network equipment management

- Ethernet switches
- VoIP gateways
- Trunk gateways
- GPON OLT

The single access server provides a Web interface allowing independent and simultaneous control over different network elements.

- Monitoring of the main devices characteristics
- Online display of the device failures in text and graphic forms
- Grouping line terminals into nodes with a capability to display all failures of a selected node
- Automatic search for Eltex devices on network

ACS

Control and administration system

- Subscriber VoIP gateway
- ONT PON
- IPTV metacenters
- Routers
- Thin clients

Automatic Configuration Server (ACS) is intended to simplify and automatize configuration of subscriber devices (CPE) by using the protocol described in TR-069 standard and allows operators to use global network for centralized control over customer equipment.

- Increasing customer loyalty
- Increasing company profit
- Centralization of subscriber devices management
- Reducing the cost of training and competence development

ECCM

Centralized system for network equipment management

- Service gateways
- Ethernet switches
- IP ATC*
- VoIP gateways*
- OLT PON*, etc.

* Under development

Centralized system for network equipment management. The system is managed via modern and user-friendly web interface which provides convenient tools to customize the system and network equipment to user needs.

- Monitoring of the main devices characteristics
- Real-time control of the network configuration change
- System redundancy
- Close integration with Zabbix monitoring system

Eltex cloud configuration manager (ECCM)

Centralized Network Management System

Monitoring and Management

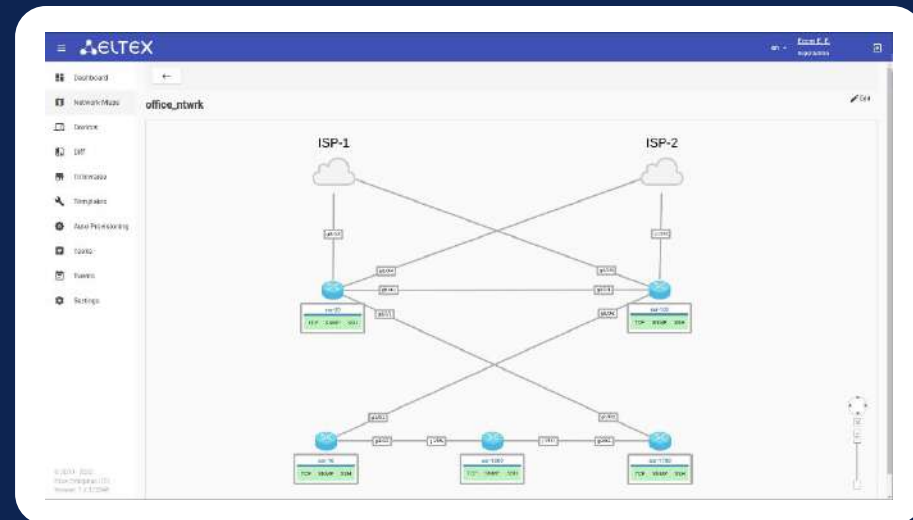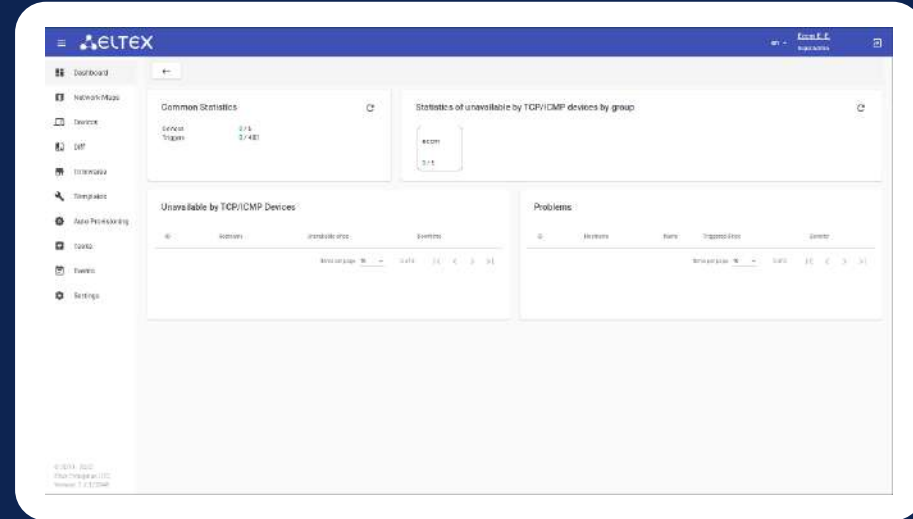**Device Group Management**

Friendly Graphic User Interface

Network Mapping

Scheduled Software Updates

Zero Touch Provisioning

Free testing available

Media

CPE

IPTV

**Eltex
Smart Home**

**EVI Perimeter
video monitoring
system**

CPE

CPE

Subscriber routers

Parameter	RG-5440G-Wac RG-5440G-WZ	RG-5520G-Wax RG-5520G-Wax-Z
WAN port	1 × GE	1 × 2,5GE
LAN port	4 × GE	4 × GE
Wi-Fi	802.11b/g/n 2,4 GHz MIMO 2×2 802.11a/n/ac 5 GHz MU MIMO 4×4	802.11b/g/n/ax 2,4 GHz MIMO 2×2 802.11a/n/ac/ax 5 GHz MU MIMO 2×2
Data rate (when 2 antennas loaded) 2,4/5 GHz	300 Mbps 2.4 GHz 867 Mbps 5 GHz	573 Mbps 2.4 GHz 1201 Mbps 5 GHz
USB 2.0	1	1
Support for Z-Wave protocol	For WZ model	For Z model

CPE

Repeaters

Parameter	RR-10	RR-11
LAN port	4 × GE	4 × GE
Wi-Fi	802.11b/g/n 2,4 GHz MIMO 2×2 802.11a/n/ac 5 GHz MIMO 2×2	802.11b/g/n 2,4 GHz MIMO 2×2 802.11a/n/ac 5 GHz MIMO 2×2
Total data rate 2,4/5 GHz	Up to 1167 Mbps 2.4 GHz 300 Mbps 5 GHz 867 Mbps	Up to 1167 Mbps 2.5 GHz 300 Mbps 5 GHz 867 Mbps

IPTV

Set-top boxes

Parameter	NV-730	NV-731	NV-730-WB	NV-731-WB
RAM	2 GB	1 GB	2 GB	1 GB
Flash	8 GB	8 GB	8 GB	8 GB
OS	Android 11	Android 11	Android 11	Android 11
Support for 4K	4Kp60	4Kp60	4Kp60	4Kp60
USB 2.0	2	2	2	2
HDMI	V2.1	V2.1	V2.1	V2.1
Support for Wi-Fi			802.11a/b/g/n/ac	802.11a/b/g/n/ac
Bluetooth			5.0 (BT)	5.0 (BT)

NOORANO
نوران ارتباطات نوین

**Eltex
Smart Home**

Eltex Smart Home

Eltex Smart Home automates and simplifies many household tasks: from lighting and climate control to home security and monitoring. Smart devices are united into a single system and controlled through convenient services in the Eltex Home application.

Security

Management

Control

Notifications

Voice control

Cloud or local solution

Scenarios
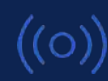
Wireless technologies

Home state monitoring

Eltex Home infrastructure

Wi-Fi routers with smart home Ethernet hub

- Provides operation of the smart home system
- Provides access to the Internet and multimedia services
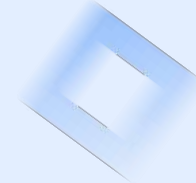
10GPON

RG-5440G-WZ

RG-5520G-Wax-Z

NTU-RG-5420G-WZ

NTU-RG-5521-Wax-Z

Cloud solution
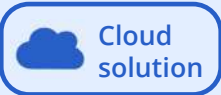
Mass production

Eltex Home infrastructure

Smart home hub

> The device can connect to the router's home network either via LAN or Wi-Fi 2.4
>
> It performs the functions of the main Z-Wave hub
>
> The hub is added via the Eltex Home application

The hub connects Z-Wave smart home sensors with the Eltex SC cloud platform

Key features of the cloud platform:

- Security: Contact door/window sensor, motion sensor
- Management: lighting and electrical appliances
- Control: temperature and humidity sensors, smoke detector, water leak detector
- Cameras: live streaming, recording video data to archive
- Working with scenarios and automation

SH-10-WZ

- RAM 128 Mb
- Flash 32 Mb
- 2.4 GHz 802.11b/g/n MIMO 2×2

Mass production

Cloud solution

Eltex Home infrastructure

Local control center

> Commands and information about the system operation are stored on a separate device where the local platform is installed.
>
> It performs the same functions as the cloud one, but it does not transfer information to a shared storage: the user data does not go beyond the perimeter of the home.

Key capabilities

- Security: Contact door/window sensor, motion sensor
- Management: lighting and electrical appliances
- Control: temperature and humidity sensors, smoke detector, water leak detector
- Cameras: live streaming, recording video data to archive
- Working with scenarios and automation

SL-10

- 1 × 10/100BASE-T (RJ-45)
- RAM 2 GB
- Flash 8 GB
- 2.4 GHz 802.11b/g/n 5 GHz 802.11a/n/ac
- 3 × USB 2.0
- 1 × MicroSD

Mass production

Local solution

Wi-Fi smart devices

Smart relay
with neutral
SW-RLY02

Smart relay
without
neutral
SW-RLY01

Inrush current
limiting relay
RLY-BPS-HP

Smart socket
SW-PLG01

Smart socket
SW-PLG02

Smart IR remote
SW-IRC01

Gas detector
SW-GS01

Under
development
3Q`24

Z-Wave sensors

Temperature and humidity sensor
SZ-AIR-HTO1

Motion sensor
SZ-PIR

Smoke detector
SZ-SMK

Contact sensor
SZ-MCT

Smart switch
SZ-SBR

Water leak detector
SZ-WLK

Under development
3Q`24

Wi-Fi cameras

SV-C01

- Resolution 4 M
- RAM 128 Mb
- Flash 16 Mb
- 25 fps
- 802.11 a/b/g/n
- DWDR
- IR up to 10 m
- Rotation angle: Vertical: 0° ~ 70°, Horizontal: 0° ~ 350°

SV-C02

- Resolution 4 M
- RAM 128 Mb
- Flash 16 Mb
- 25 fps
- 802.11 a/b/g/n
- DWDR
- IR up to 10 m
- Rotation angle: Vertical: 0° ~ 90°, Horizontal: 0° ~ 350°

Eltex Home ecosystem

Two infrastructure options: cloud or local

Cloud infrastructure

Cloud platform

Eltex Smart Cloud

Eltex Home mobile app

Web interface

Wi-Fi router with smart home hub
Wi-Fi
Z-Wave

Smart home hub
Z-Wave

Local infrastructure

Smart home local control center

Wi-Fi
Z-Wave

Eltex Home mobile app

Security

Motion sensor
Z-Wave

Door/window sensor
Z-Wave

Video camera
Wi-Fi

Management

Smart socket
Wi-Fi

Smart relay
Wi-Fi

IR remote control
Wi-Fi

Control

Water leak detector
Z-Wave

Temperature and humidity sensor
Z-Wave

Smoke detector
Z-Wave
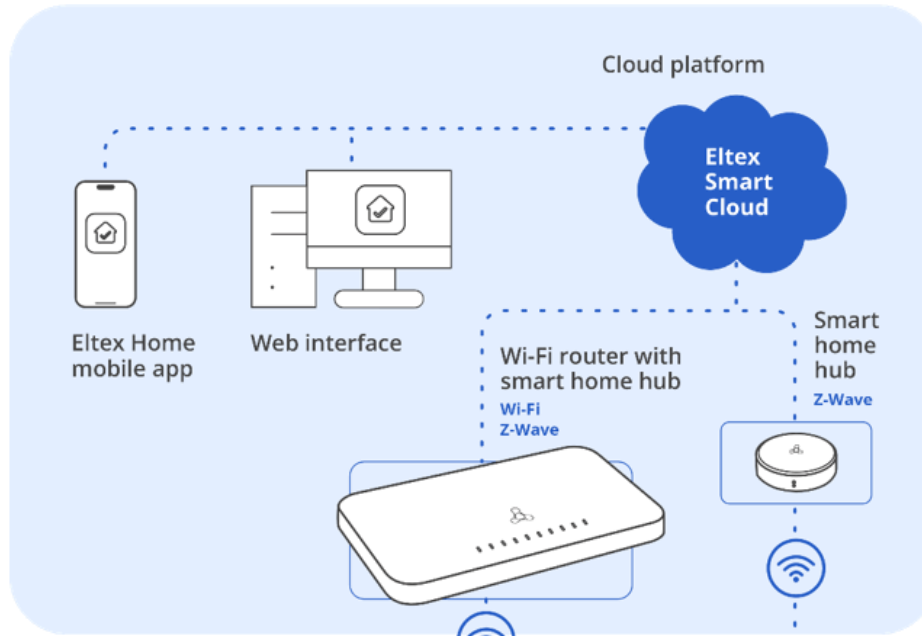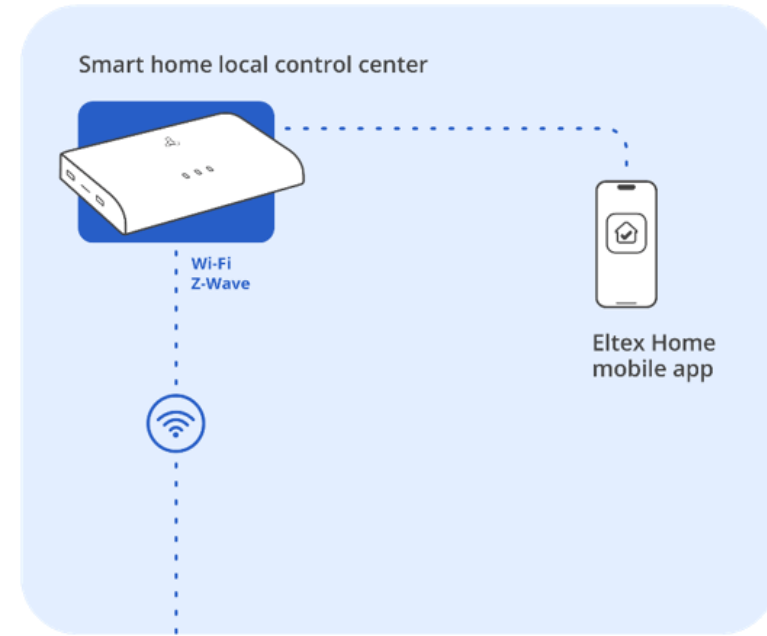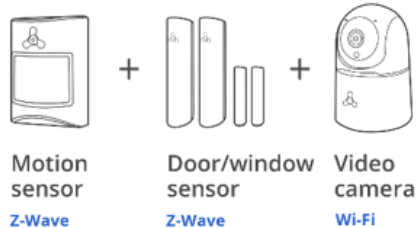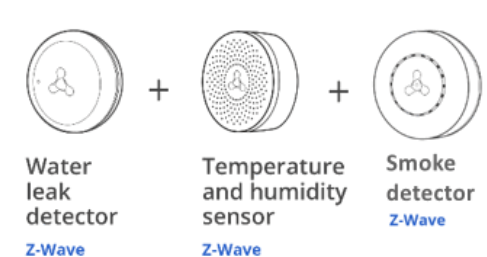
Ecosystem control instruments

Smart device monitoring

Sending event notifications

Creating smart scenarios

Eltex SC platform

Eltex Home application

Use Cases

Security

Specification 1

Magnetic contact door/window sensor	SZ-MCT
Motion and light sensor	SZ-PIR
Camera	SV-C01
Wi-Fi router with smart home hub	RG-5440G-WZ
	RG-5520G-Wax-Z optionally
	NTU RG-5440G-WZ optionally
	NTU RG-5420G-WZ optionally

Specification 2

Magnetic contact door/window sensor	SZ-MCT
Motion and light sensor	SZ-PIR
Camera	SV-C01
Smart home hub	SH-10-WZ

Specification 3

Magnetic contact door/window sensor	SZ-MCT
Motion and light sensor	SZ-PIR
Camera	SV-C01
Smart home local control center	SL-10

Use Cases

Management

Specification 1

Smart socket	SW-PLG01
Smart relay	SW-RLY01
	SW-RLY02 optionally
	RLY-BPS-HP optionally
Wi-Fi router with smart home hub	RG-5440G-WZ
	RG-5520G-Wax-Z optionally
	NTU RG-5440G-WZ optionally
	NTU RG-5420G-WZ optionally

Specification 2

Smart socket	SW-PLG01
Smart relay	SW-RLY01
	SW-RLY02 optionally
	RLY-BPS-HP optionally
Smart home hub	SH-10-WZ

Specification 3

Smart socket	SW-PLG01
Smart relay	SW-RLY01
	SW-RLY02 optionally
	RLY-BPS-HP optionally
Smart home local control center	SL-10

Use Cases

Control

Specification 1

Water leak detector	SZ-WLK
Temperature and humidity sensor	SZ-AIR-HT01
Wi-Fi router with smart home hub	RG-5440G-WZ
	RG-5520G-Wax-Z опционально
	NTU RG-5440G-WZ опционально
	NTU RG-5420G-WZ опционально

Specification 2

Water leak detector	SZ-WLK
Temperature and humidity sensor	SZ-AIR-HT01
Smart home hub	SH-10-WZ

Specification 3

Water leak detector	SZ-WLK
Temperature and humidity sensor	SZ-AIR-HT01
Smart home local control center	SL-10

EVI Perimeter Enterprise – Video Monitoring System
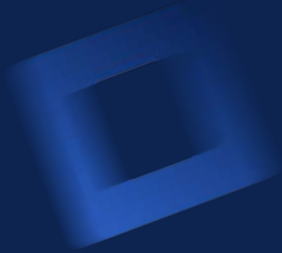
EVI Perimeter

EVI Perimeter (Enterprise) – professional software that provides a complete solution for video monitoring system in a enterprise with minimal delays and the most efficient use of workstation resources.
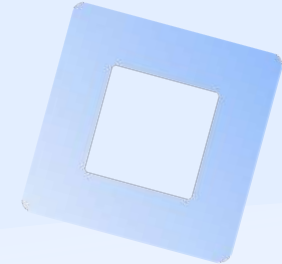
The software package includes:

Videoserver EVI Perimeter

Server designed for video streams receiving from cameras and saving into archive.

Client EVI Perimeter

Client program designed to view video streams from a camera and access the video archive.

Main Features

EVI Perimeter

- Obtaining of CCTV camera video
- Layout of video streams from different cameras on one screen in different configurations (views)
- Video broadcast in real time
- Formation and recording video stream data to archive

- Access to the video archive from the client interface
- Support for multiple video streams from one camera
- Motion detection module
- Support for modern video codecs: H.264, H.265

- Support for RTP/RTSP CCTV standard
- Camera import and export in csv format
- User rights system, role support
- Visual client on Linux and Windows 10

- API for third-party system integration
- IP camera adding with ONVIF
- PTZ camera control
- Support for WebSocket between client and server

- Full-screen mode
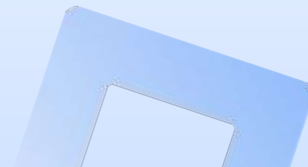- Support for 3 monitor video wall

Further Development

EVI Perimeter

- Sabotage detector.
  Video signal quality control, alarm in case of image obstruction
- Self-diagnostics.
  Overall check of the server and internal components
- Event and alert center
- Service for detecting cameras on local network: enables easy camera adding, without manual filling of main data fields

- Blurring the frame area.
  Active during live broadcasts and in archive stop frame only. Image is not blurred when archive playback
- Hiding private information
- Car license plates recognition
- Face recognition
- All server settings import/export
- Floor plan
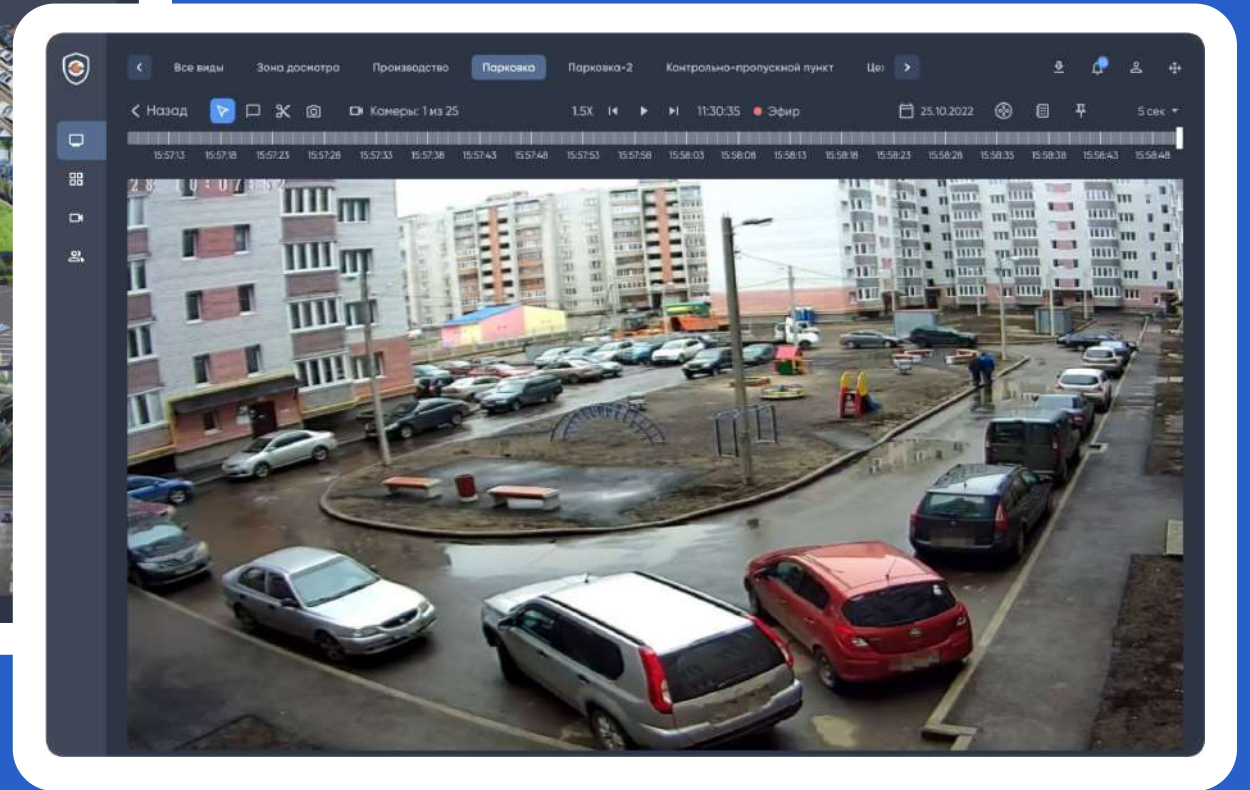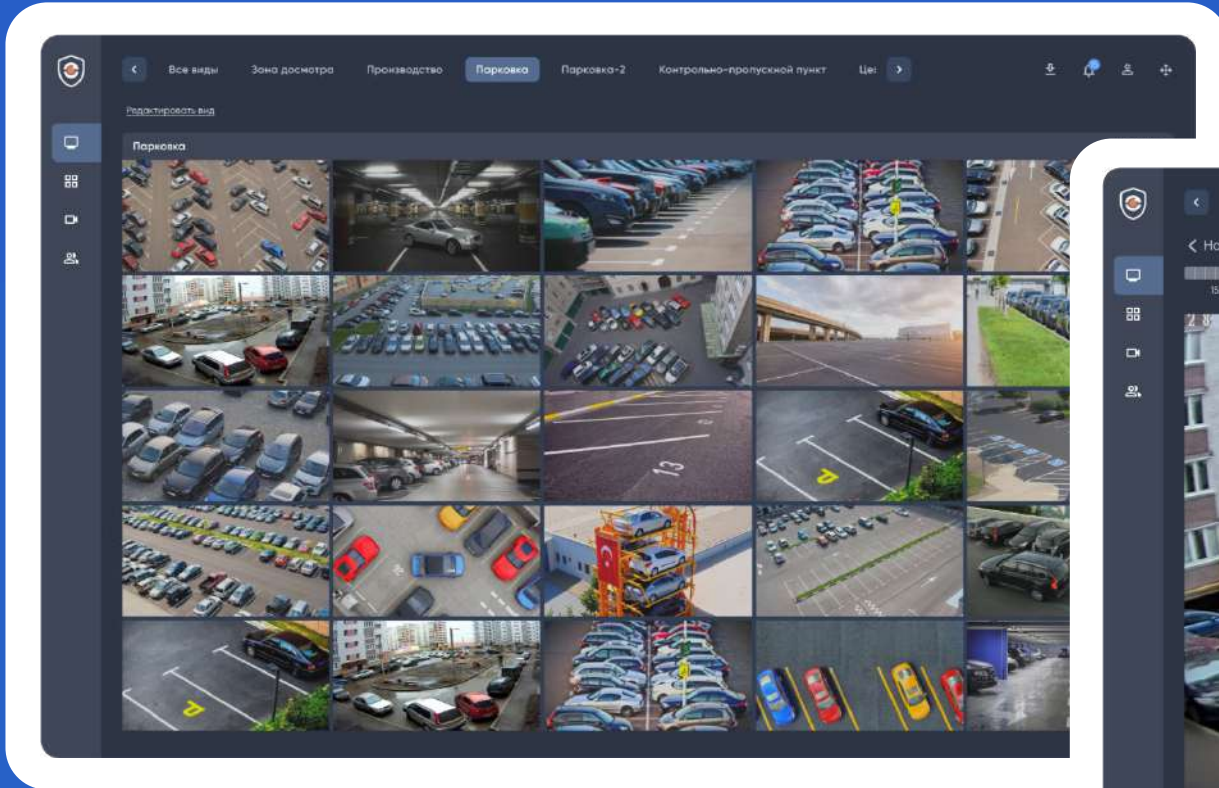
IP Cameras

New Developments

SV-B01

- 4M (2560×1440)
- Built-in microphone and speaker
- Memory card
- RAM 128 Mb
- Flash 16 Mb
- Fixed lens 2.8 mm
- 25 fps
- DWDR
- IR up to 25 m
- DC 12B/ PoE 802.3af

SV-B02

- 4M (2560×1440)
- RAM 128 Mb
- Flash 16 Mb
- Fixed lens 2.8 mm
- 25 fps
- DWDR
- IR up to 25 m
- DC 12B/ PoE 802.3af

SV-B03

- 4M (2560×1440)
- RAM 128 Mb
- Flash 16 Mb
- Varifocal lens 2.8 mm
- 25 fps
- DWDR
- IR up to 25 m
- DC 12B/ PoE 802.3af

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