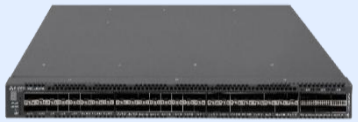
Broadband access scores of 2024 and future plans

Core/data center switches

			
Parameters	**MES5300-48**	**MES5310-48**	**MES5305-48**
Interfaces	48 × 10G SFP+ 6 × 100G QSFP28	48 × 10G SFP+ 6 × 100G QSFP28	48 × 10G SFP+ 6 × 100G QSFP28
Throughput	2.16 Tbit/s	2.16 Tbit/s	2.16 Tbit/s
MAC table	32K	64K	131K
ARP table	16K	32K	30K
Number of unicast IPv4 routes	16K	32K	28K
Number of unicast IPv6 routes	4K	8K	7K
Power supply, number of PSUs	AC/DC, 1+1	AC/DC, 1+1	AC/DC, 1+1

Core/data center switches

It is now possible to select the direction
of airflow from front to back or vice versa

Air stream
front-to-back

Air stream
back-to-front

MES5500-32 **MES5410-48**

Support for breakout modes

100Gb to 4 × 25Gb

40Gb to 4 × 10G

Aggregation switches

MES3400-48F

Interfaces

48 × 1G SFP
4 × 10G SFP+

MAC table

32K

Throughput

176 Gbit/s

Power supply

AC/DC, 1+1

Switches with POE function

MES2410-08DU

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

MAC table
16K

Throughput
80 Gbit/s

Power supply
1 PSU

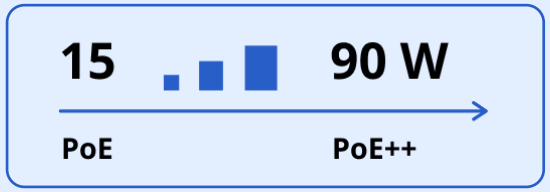
MES2410-08DP

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

MAC table
16K

Throughput
80 Gbit/s

Power supply
1 PSU



Software update

Switches

Key improvements

HardWare BFD

Implemented in the following models only:

MES5332A
MES53xx-xx
MES54xx-xx
MES5500-32

Developing opportunities to use EVPN/VxLAN technology

ARP Suppression and DHCP Relay over EVPN/VxLAN

Service routers

ESR-15VF

Interfaces

8 × 1G
4 × FXS
2 × 1G SFP

Throughput

FW (IMIX) – 600.6 Mbit/s
IPsec (IMIX) - 139 Mbit/s
IPS/IDS – 39.5 Mbit/s

ESR-31

Interfaces

8 × 1G
2 × 10G SFP+
6 × 1G SFP
3 × Serial

Throughput

FW (IMIX) – 3.5 Gbit/s
IPsec (IMIX) – 497.2 Mbit/s
IPS/IDS – 350.2 Mbit/s

ESR-3200L

Interfaces

8 × 10G SFP+
4 × 25G SFP28

Throughput

FW (IMIX) – 9.9 Gbit/s
IPsec (IMIX) – 863.9 Mbit/s
IPS/IDS - 729 Mbit/s

ESR-3300

Interfaces

4 × 25G SFP28
4 × 100G QSFP28

Throughput

FW (IMIX) – 33.9 Gbit/s
IPsec (IMIX) – 1.4 Gbit/s
IPS/IDS – 2.6 Gbit/s

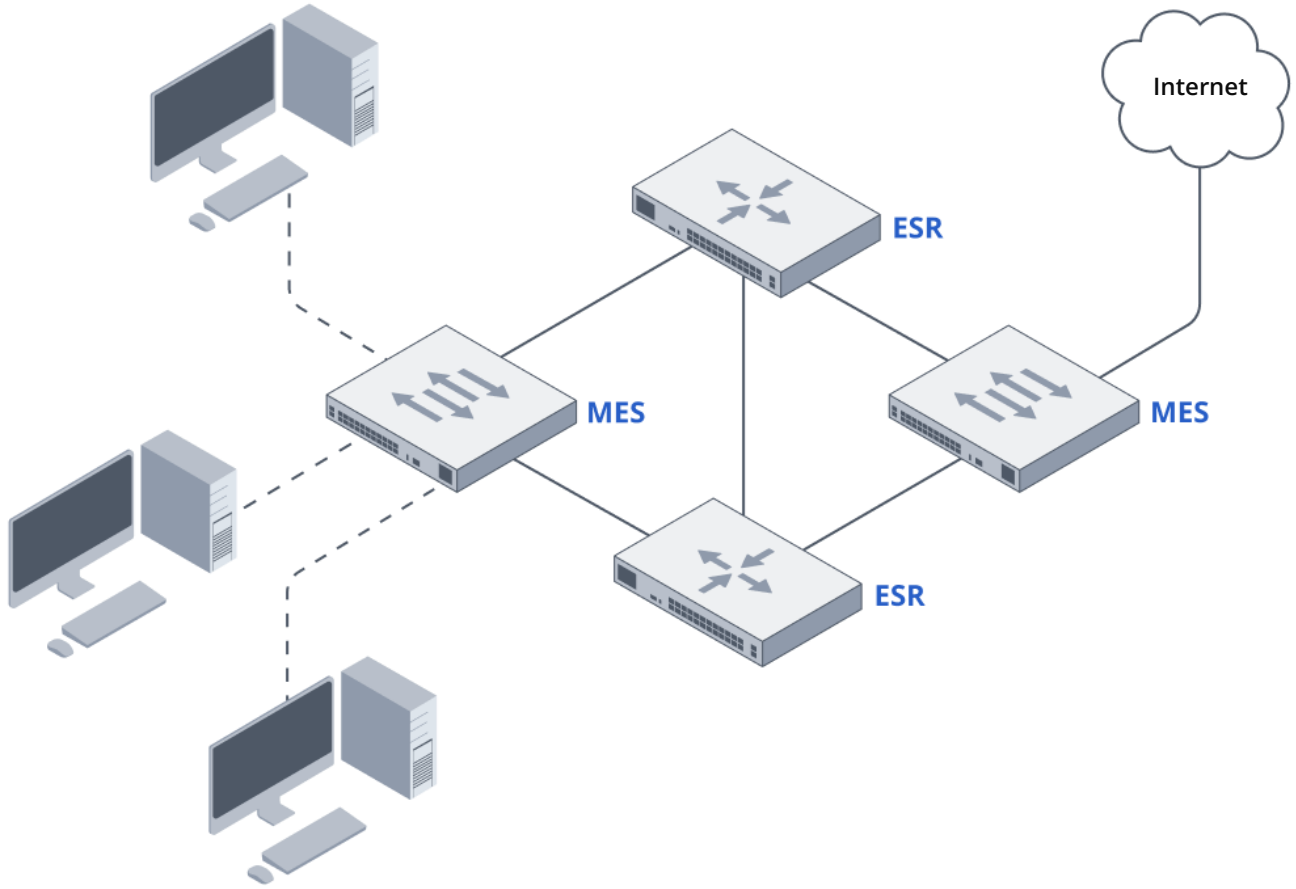
Software

Service routers

Key improvements

Cluster

- Redundancy of routers and all connections in the cluster
- Synchronization of states for fast failover in case of failure
- Centralized cluster management, configuration and monitoring
- Synchronization of configurations
- Replacing one router in a cluster does not require reconfiguration of neighboring devices



Software

Service routers

Key improvements

WireGuard

An advanced and modern VPN protocol that is easy to set up and also provides high speeds

Firewall redesign

Transition from static firewall to dynamic firewall*

*Apply settings without config file overwriting

vESR

Service routers

Key improvements

vESR software = ESR software

The vESR functionality supports all the functionality of the current version of the ESR series devices

Combining vESR with virtualization tools

virt-manager, eve-ng, gns3

Improvements in architecture

- Interface driver support
- Support for hard disk drivers (SCSI and SATA)
- Virtualization (XEN)

Backbone routers

ME5210S

Interfaces

32 × 10G SFP+
6 × 100G QSFP28

Power supply

AC/DC, 1+1

Throughput

920 Gbit/s

Size

1U

ME2001

Interfaces

16 × 10G SFP+
8 × 25G SFP28
2 × 100G QSFP28

Power supply

AC/DC, 1+1

Throughput

300 Gbit/s

Size

1U

Software

Backbone routers

Key improvements

- BGP Inter-AS Option B (MPLS)
- OSPF, IS-IS Multi-instance
- Carrier-supporting-Carrier (CsC)
- MulticastVPN over RSVP-TE P2MP LSP

xPON equipment

Station terminals

LTX-8

Throughput
300 Gbit/s

Number of ONTs
1024/2048

Interfaces
8 × XGS-PON
4 × 100G QSFP28

Power supply
AC/DC, 1+1

LTX-16

Throughput
300 Gbit/s

Number of ONTs
2048/4096

Interfaces
16 × XGS-PON
4 × 100G QSFP28

Power supply
AC/DC, 1+1

Software

xPON equipment

Key improvements

- Web-interface on LTP-8/16 and LTX-8/16
- Support for IPv6 for LTP-8/16 and LTX-8/16
- DHCP option 82 for LTP-8/16 and LTX-8/16

ECCM management system

Key improvements

- User authorization via LDAP and Microsoft Active Directory
- Event generation based on syslog (Fault Management)
- SSH terminal

Access control system NAICE

Main features

- Centralized policy storage and management
- 802.1X (RADIUS) authentication of network users
- User segmentation
- Works with RADIUS-enabled devices from multiple vendors

Cisco ISE → Eltex NAICE

Plans for the future

Industrial switches

New devices

Release in 3Q25

MES3500I-24F

Interfaces
20 × 1G SFP
4 × 1G Combo
4 × 10G SFP+
1 × OOB
1 × USB

Throughput
128 Gbit/s

Power supply
AC/DC

Size
1U

MES3500I-8P8F

Interfaces
8 × 1G PoE+ RJ-45
8 × 1G SFP
2 × 10G SPF+
1 × USB

Throughput
72 Gbit/s

Power supply
DC

Size
4U (DIN-rail)

Release in 4Q25

MES3510S-08P

Interfaces
8 × 1G PoE+ RJ-45
4 × 1G SFP
1 × USB

Throughput
24 Gbit/s

Support for
PTP, SyncE, PRP/HSR

Power supply
DC

Size
4U (DIN-rail)

Release in 2Q26

MES3510DS-24F

Interfaces
16 × 1G SFP
8 × 1G Combo
4 × 10G SFP+
1 × OOB
1 × USB

Throughput
128 Gbit/s

Support for
PTP, SyncE, PRP/HSR

Power supply
AC/DC, 1+1

SIze
1U

Core/data center switches

New devices

Release in 3Q25

MES5320-24

Interfaces
24 × 25G SFP28
2 × 100G QSFP28
1 × Console RJ-45
1 × USB
1 × OOB

Throughput
1.6 Tbit/s

Power supply
AC/DC, 1+1

Size
1U

Release in 3Q26

MES5700-32

Interfaces
32 × 400G
2 × 10G SFP+
1 × Console RJ-45
1 × USB
1 × OOB

Throughput
25.6 Tbit/s

Power supply
AC/DC, 1+1

SIze
1U

Release in 4Q26

MES5600-24

Interfaces
24 × 100G
6 × 400G
1 × Console RJ-45
1 × USB
1 × OOB

Throughput
9.6 Tbit/s

Power supply
AC/DC, 1+1

Size
1U

Multigigabit switches

New devices

Expected release in 3Q25

MES2420D-24DP

Interfaces
24 × 2.5G PoE/PoE+ RJ-45
4 × 10G SFP+
1 × Console RJ-45

Throughput
200 Gbit/s

PoE budget
740 W

Power supply
AC/DC, 1+1

Size
1U

MES2310-48DP

Interfaces
48 × 2.5G PoE/PoE+ RJ-45
4 × 25G SFP28
1 × Console RJ-45
1 × USB
1 × OOB

Throughput
440 Gbit/s

PoE budget
1450 W

Power supply
AC/DC, 1+1

Size
1U

RoadMap 2025

MES23/3300-xx, MES3500I-08/10P, MES5332A, MES53xx-xx, MES54(55)00-xx, MES5410-48

1Q25

- PFC (DCB) incl. Cut Through*
- Commit (replace config)
- Confirm (replace config)
- Sflow in VRF

2Q25

- QCN (DCB)
- NSF L2 (STP, LACP, IGMP)*
- MPLS L3VPN*
- PBR in VRF*
- Spanning-tree bpdu filtering per PVST/PVST+
- ESI ingress replication + arp-suppression
- SCP in VRF

3Q25

- ECN (DCB)
- ETS (DCB)
- NSF L3 (OSPF, VRRP, GR)*
- BGP Additional Paths
- BGP Next Hop Unchanged
- DNS client in VRF

RoadMap 2025/26

MES23/3300-xx, MES3500I-08/10P, MES5332A, MES53xx-xx, MES54(55)00-xx, MES5410-48

4Q25

- DCBX
- Cut Through
- NTP in VRF
- BGP Multipath AS-Path Relax
- Triggered FailOver EVPN/VXLAN
- SFTP client in VRF
- Micro BFD
- IP SLA in VRF
- BGP Inter-AS Option C
- SyncE*
  MES3510S-08P, MES3510DS-24F
- PRP (parallel redundancy)*
  MES3510S-08P, MES3510DS-24F

1Q26

- IEEE 1588v2 (PTP)*
  MES3510S-08P, MES3510DS-24F
- High-availability Seamless Redundancy (HSR)*
  MES3510S-08P, MES3510DS-24F

3Q26

- Integration PRP/HSR & IEEE 1588v2 (PTP)
  MES3510S-08P, MES3510DS-24F

RoadMap 2025

MES24xx, MES24xx-xx, MES3400-xx, MES37xx

1Q25

- Setting buffer charge limit
- Accounting per IEEE 802.1X (RADIUS)

2Q25

- IEEE 802.1X in Stack
- OSPF in Stack*
- RPVST in Stack*
- DHCP Option 82, 18/37 in Stack*
- Dynamic ARP Inspection in Stack*
- PPPoE Option 105 in Stack
- LAG per Stack-port
- RADIUS-based acl
- DHCP Snooping in Stack*
- IP Source Guard in Stack*

3Q25

- Dying Gasp in Stack*
- ACL per VLAN in Stack
- VLAN translation in Stack
- QinQ in Stack*
- Port ingress/egress rate limit in Stack
- Switchport protected in Stack
- Port isolation in Stack*
- IGMP Snooping in Stack*
- EOAM (EEE 802.3ah) in Stack

RoadMap 2025

MES24xx, MES24xx-xx, MES3400-xx, MES37xx

4Q25

- GVRP in Stack*
- IPv6 (static) in Stack*
- ACL UDB in Stack
- IPv6 RA Guard in Stack
- IPv6 NDP in Stack*
- Commit (replace config)
- Confirm (replace config)
- RADIUS Change of Authorization
- Dynamic ACL*
- NSF in Stack*

Service routers

New devices

Expected release in 2Q25

ESR-3350

Interfaces
8 × Combo RJ-45/1G SFP
4 × 50G SFP56
1 × Console RJ-45
1 × microSD
2 × USB

Power supply
AC/DC, 1+1

Size
1Unit

ESR-3250

Interfaces
8 × Combo RJ-45/1G SFP
4 × 25G SFP28
1 × Console RJ-45
1 × microSD
2 × USB

Power supply
AC/DC, 1+1

Size
1Unit

RoadMap 2025

ESR

1Q25

- BFD for RIP*
- Configure unique BGP peers on each cluster member
- GRE/GRE over IPsec with VRRP IP*
- Configure unique Active/ Standby services in VRF* (Cluster)
- Config prompt

2Q25

- uRPF
- Rekeying of an IKEv2
- Active/ Active with VRRP* (Cluster)
- Unit priority (Cluster)
- Hand Switch Master (Cluster)
- BFD for VRRP*
- BGP FlowSpec* (NGFW)
- GeoIP* (NGFW)
- STP BPDU Guard*
- Application Firewall* (NGFW)
- DNS name in src/dst address firewall (NGFW)

3Q25

- PIM-SM*
- MPLS QoS*
- X.509 certificate authority
- Active/Standby 1+N VRRP* (Cluster)
- Fail2ban
- Changing cost of the OSPF route using tracking
- BGP Confederation

4Q25

- Active/Active without VRRP* 1+1 (Cluster)
- PBR resolve-recursive per ip next-hop

RoadMap 2026

ESR

1Q26

- MPLS ECMP*
- MPLS Config Firewall L3VPN*
- MPLS OAM (LSP ping/traceroute)
- MPLS L2VPN backup pseudo wire
- Integration with LDAP/MS AD (NGFW)
- HTTPs-proxy* (NGFW)
- Active/Active without VRRP more than 2 devices* (Cluster)

RoadMap 2025-2026

vESR

1Q25

- Auto Binding Interfaces*
- Shutdown vESR

2Q25

- Serial support (recovery tools)
- Support for image release (recovery tools)

3Q25

- CD-ROM support* (recovery tools)
- ZTP* (recovery tools)

4Q25

- HyperV
- Rosa
- Citrix

1Q26

- Realtek network card
- Broadcom network card
- Yandex Cloud

Backbone routers

New devices

Expected release in 2Q25

ME6008

- 8 slots for ine cards 24 × 100G and 48 × 25G
- Throughput: 19.2 Tbit/s
- Power supply: DC, 1+1
- Size: 15U

ME7000 Series modular routers with 2U-3U form factor

RoadMap 2025

ME

1Q25

- PTP (IEEE1588v2)* (ME2001, ME5201S)
- SCP/SFTP/FTP/TFTP
- VRRP on BVI-interfaces IPv4/IPv6
- L3VPN tunnel selection
- L3VPN multipath*
- LFA for transit MPLS LSP
- HQoS for IP/GRE-tunnels

2Q25

- BGP 6PE
- BGP flowspec for VRF*
- SNMP MIB: IS-IS/ OSPF/ BGP/ LDP/ TE/ LLDP
- Copy files on USB-storage
- BGP (community, prefix-list, active-path)
- BGP IP multicast nexthop over IGP
- Netflow IPv6*
- Filtering for InterVRF routing*
- OSPF/ISIS prefix-priority
- DHCP client on OOB
- BGP table-policy

3Q25

- Routed VPLS*
- EVPN IRB
- BGP Accumulated metric attribute
- L2VPN tunnel selection*
- IS-IS/ OSPF/ RIP/ BFD on BVI-interfaces
- MAC-limit discard on bridge
- Untagged sub-interfaces
- MVPN Draft-Rosen

4Q25

- EVPN Multihoming*
- ACL for HQoS
- Statistics QoS

RoadMap 2026

ME

1Q26

- BGP RT constraints
- BGP Large Communities
- FIB identification (route-map)
- RSVP-TE class-based tunnel selection (ME30xx/ME60xx)
- PW headend
- Remote LFA
- MPLS Explicit null
- MPLS Explicit null

3Q26

- EVPN BUM over mLDP
- EVPN BUM over RSVP-TE P2MP LSP
- EVPN Designated Forwarder Election Extensibility
- MPLS ACL*
- IPv6 Multicast*
- BGP VPNv4 multicast*
- BGP PIC
- Congestion management
- BGP PIC
- PBR nexthop VRF
- IGMP snooping in VPLS*

4Q26

- per-PW counters
- IGMP snooping in VPLS
- L2 protocol tunneling*
- L2 BUM flood blocking
- Software-based Netflow*
- InterAS OptionC without BGP-LU

xPON equipment

Station terminals

Expected release in 2Q25

LTX-8C

Throughput
300 Gbit/s

Interfaces
8 × GPON/XGS-PON Combo
2 × 25G SFP28
2 × 100G QSFP28

Number of ONTs
1024 + 2048

LTX-16C

Throughput
300 Gbit/s

Interfaces
16 × GPON/XGS-PON Combo
2 × 25G SFP28
2 × 100G QSFP28

Number of ONTs
2048 + 4096

Expected release in 3Q25

MA5020

Throughput
Up to160 Gbit/s

Interface modules (2 pcs)
16 × GPON
16 × XGS-PON

Number of ONTs
4K/8K

Size
2U

MA5160

Throughput
Up to 1280 Gbit/s

Interface modules (16 pcs)
16 × GPON
16 × XGS-PON

Number of ONTs
32K/64K

Size
11U

RoadMap 2025

xPON

2Q25

- Dying gasp* (LTP-N/LTX)
- Unknown unicast/ multicast control (LTP-N/LTX)
- WEB-interface* (LTP-N/LTX):
  - Alarm
  - ONT firmware upload/upgrade
  - Backup OLT
  - ONT profiles
  - PON ports
  - Front ports
  - ONT/ports
  - License OLT
- IGMP Snooping (MA5160)
- DHCP Snooping (MA5160)
- PPPoE Snooping (MA5160)
- RADIUS (MA5160)
- TACACS+ (MA5160)
- L2 QoS (MA5160)
- Storm-control for ONT (MA5160)
- Reservation control boards 1+1 (MA5160)
- ONT RG configuration via OMCI* (voice, iphost, pppoe, iptv) (NTU-RG-55xx)

3Q25

- SNMP (MA5160)
- Alarm (MA5160)
- Autofind control (MA5160)
- MAC-migration (MA5160)
- LLDP (MA5160)
- SPAN/RSPAN (MA5160)
- Mapping-mode one gem (MA5160)
- Tunneling ONT (MA5160)
- Management ACL for FC (MA5160)
- L3 interfaces & route (MA5160)
- Isolation slot, front/ pon- ports (MA5160)

4Q25

- Storm-control* (LTP-N/LTX)
- Rate-limit (LTP-N/LTX)
- Selective Q-in-Q* (LTP-N/ LTX)
- Logging user actions (LTP-N/LTX)
- IPSG (MA5020/MA5160)
- DHCP-RA (MA5020/MA5160)
- ACL on linear modules (MA5020/MA5160)

RoadMap 2025

ECCM

1Q25

- Monitoring* (Wireless)
- Fault Management* (Wireless)
- Troubleshooting* (Wireless)
- High level configuration* (Wireless)
- Monitoring of the environment (fans, power supply, sensors) (MES)

2Q25

- Receiving messages via SNMP (Wireless)
- Working with the list of suspicious users (Wireless)
- Monitoring* (ME5000 series)
- Configuring rules for creating user passwords

3Q25

- Synchronizing devices with NAICE*
- Monitoring* (ME6000 Series)
- Configuring user access rules

4Q25

- Public API (devices, interfaces, events, accidents)
- High level configuration* (MES)

RoadMap 2025

NAICE

1Q25

- TACACS+

2Q25

- WEB Portal auth
- RADIUS CoA
- Distribution as a VM image
- Role-based access control (RBAC) for WEB/API

3Q25

- Synchronizing devices with ECCM

4Q25

- BYOD
- Single sign-on for WEB/API (LDAP/MS AD)

Questions

Best regards, Alexander Payvin
International projects coordinator of the Eltex Enterprise Ltd.

WhatsApp/Mob. +7 913 708-59-19
aleksandr.payvin@eltex-co.ru