

- Number of access points:<sup>1</sup>  
50 for WLC-15 and 150 for WLC-30
- Access points monitoring
- WPA/WPA2/WPA3 Enterprise,  
WPA/WPA2/WPA3 Personal user authorization

**WLC-15, WLC-30** are enterprise-level controllers for small- and medium-sized enterprises. The devices allow building distributed wireless networks using different traffic scenarios at L2/L3 level. Firewall features are supported on WLC controllers to ensure network security. The devices can be used to create various user authorization scenarios for corporate and guest networks. LDAP, RADIUS and other corporate services are also available.

Built-in AirTune module allows managing radio parameters of access points (AP) and client balancing, as well as adapting to the current environment. Seamless roaming support (802.11r/k/v) provides the best conditions for client switching between AP.



WLC-15



WLC-30

## Technical features

|                                      | WLC-15                                                                                         | WLC-30                                                                                            |
|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Interfaces                           |                                                                                                |                                                                                                   |
| Ethernet 10/100/1000BASE-T (LAN/WAN) | 4                                                                                              | 4                                                                                                 |
| Ethernet 1000BASE-X SFP              | 2                                                                                              | –                                                                                                 |
| 10GBASE-R SFP+/1000BASE-X (LAN/WAN)  | –                                                                                              | 2                                                                                                 |
| Console (RJ-45)                      | 1                                                                                              | 1                                                                                                 |
| USB 3.0                              | –                                                                                              | 1                                                                                                 |
| USB 2.0                              | 1                                                                                              | 1                                                                                                 |
| HDD slot                             | 1                                                                                              | 1                                                                                                 |
| microSD card slot                    | –                                                                                              | 1                                                                                                 |
| Number of CPUs by role               |                                                                                                |                                                                                                   |
| Management CPU                       | 0                                                                                              |                                                                                                   |
| Balancing CPU                        | 1                                                                                              | –                                                                                                 |
| Service CPU                          | 2–3                                                                                            | 1–3                                                                                               |
| Switching                            |                                                                                                |                                                                                                   |
| Interfaces                           | bridge – 50<br>sub – 64<br>QinQ – 64                                                           | bridge – 250<br>sub – 1024<br>QinQ – 1024                                                         |
| LLDP                                 | interfaces port policies – 8<br>network policies – 64                                          |                                                                                                   |
| Label switching                      |                                                                                                |                                                                                                   |
| MPLS                                 | LDP neighbors – 128<br>pseudowires – 128<br>pseudowire classes – 64<br>Ethernet over MPLS – 64 | LDP neighbors – 1024<br>pseudowires – 1024<br>pseudowire classes – 64<br>Ethernet over MPLS – 256 |

<sup>1</sup> Expansion of access points number is available under license: up to 100 APs for WLC-15 and up to 500 Aps for WLC-30.

## Technical features (continued)

|                                   | WLC-15                                                                                                                                             | WLC-30 |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| System features                   |                                                                                                                                                    |        |
| Access points number <sup>1</sup> | 50                                                                                                                                                 | 150    |
| Maximum clients number            | 2000                                                                                                                                               | 5000   |
| Static routes                     | 1K                                                                                                                                                 | 11K    |
| Concurrent sessions               | 4K                                                                                                                                                 | 256K   |
| VLAN support                      | up to 4K active VLANs according to 802.1Q                                                                                                          |        |
| MAC table                         | 2K entries per bridge                                                                                                                              |        |
| FIB size                          | 1M                                                                                                                                                 | 1.4M   |
| VRF                               | 32                                                                                                                                                 |        |
| Object-groups                     |                                                                                                                                                    |        |
| Object-group network              | instances – 500<br>ip prefixes in group – 1024<br>ip ranges in group – 1024                                                                        |        |
| Object-group address:port         | instances – 500<br>address:port in group – 64                                                                                                      |        |
| Object-group service              | instances – 500<br>port ranges in group – 64                                                                                                       |        |
| Object-group application          | instances – 50<br>apps in group – 128                                                                                                              |        |
| Object-group content filter       | instances – 64<br>categories per vendor – 500                                                                                                      |        |
| Object-group URL                  | instances – 31<br>plain URL in group – 128<br>regex URL in group – 128                                                                             |        |
| Object-group MAC                  | instances – 500<br>macs in group – 64                                                                                                              |        |
| Routing                           |                                                                                                                                                    |        |
| BGP                               | instances – 64<br>networks in instance – 128<br>neighbors – 1k<br>RIB – 5M                                                                         |        |
| OSPFv3                            | instance, neighbors in interface – 64<br>summaries in instance – 128<br>areas – 256<br>networks in area – 64<br>virtual links – 1024<br>RIB – 500k |        |
| IS-IS                             | instances, circuits – 64<br>RIB – 500k                                                                                                             |        |
| RIP(ng)                           | neighbors – 16<br>summaries – 8<br>networks – 128<br>RIB – 10k                                                                                     |        |

<sup>1</sup> Expansion of access points number is available under license: up to 100 APs for WLC-15 and up to 500 Aps for WLC-30.

## Technical features (continued)

|                                                   | WLC-15                                                                                                                                                                                                    | WLC-30                                                                                                                                                    |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Quality of Service (QoS)                          |                                                                                                                                                                                                           |                                                                                                                                                           |
| QoS limitations                                   | class-maps – 50<br>policy-maps – 24<br>classes in policy-map – 76                                                                                                                                         | class-maps – 256<br>policy-maps – 256<br>classes in policy-map – 768                                                                                      |
| Tunneling                                         |                                                                                                                                                                                                           |                                                                                                                                                           |
| VPN tunnels                                       | IPIP – 10<br>GRE – 10<br>Ethernet over GRE – 10<br>GRE SUB – 10<br>SoftGRE – 100<br>SoftGRE SUB – 250<br>L2TPv3 – 10<br>LT – 128<br>IPsec VTI –10                                                         | IPIP – 250<br>GRE – 250<br>Ethernet over GRE – 250<br>GRE SUB – 250<br>SoftGRE – 600<br>SoftGRE SUB – 1500<br>L2TPv3 – 250<br>LT – 128<br>IPsec VTI – 250 |
| IPsec VPN tunnels                                 | 64                                                                                                                                                                                                        | 64                                                                                                                                                        |
| Remote access                                     |                                                                                                                                                                                                           |                                                                                                                                                           |
| Remote Access                                     | L2TP concurrent connections – 10<br>PPTP concurrent connections – 10<br>OpenVPN concurrent connections – 10<br>OpenVPN remote addresses per connection – 8                                                |                                                                                                                                                           |
| WireGuard tunnel, RA                              | instance – 16<br>peers per instance 16<br>local addresses – 1<br>addresses per peer (address-range & obj-group) – 10k                                                                                     |                                                                                                                                                           |
| Services                                          |                                                                                                                                                                                                           |                                                                                                                                                           |
| Source NAT                                        | ruleset – 20<br>rules in ruleset – 100<br>pool – 20                                                                                                                                                       | ruleset – 100<br>rules in ruleset – 100<br>pool – 100                                                                                                     |
| Destination NAT                                   | ruleset – 20<br>rules in ruleset – 20<br>pool – 20                                                                                                                                                        | ruleset – 100<br>rules in ruleset – 100<br>pool – 100                                                                                                     |
| DHCP Server                                       | pools – 20<br>pool size – 10k<br>static address in pool – 128                                                                                                                                             | pools – 100<br>pool size – 10k<br>static address in pool – 128                                                                                            |
| Security                                          |                                                                                                                                                                                                           |                                                                                                                                                           |
| ACL                                               | instances – 512<br>rules – 512                                                                                                                                                                            | instances – 1533<br>rules – 1533                                                                                                                          |
| Firewall                                          | zone – 48<br>zone-pair – 192<br>rules – 4096                                                                                                                                                              | zone – 128<br>zone-pair – 512<br>rules – 10k                                                                                                              |
| IPS                                               | user update servers – 32<br>ips-categories – 20<br>rules – 500                                                                                                                                            |                                                                                                                                                           |
| IKE (v1/v2), IPsec (esp/ah) encryption algorithms |                                                                                                                                                                                                           |                                                                                                                                                           |
| Authentication                                    | md5, sha1, sha2-256, sha2-384, sha2-512                                                                                                                                                                   |                                                                                                                                                           |
| Encryption                                        | des, blowfish128, aes128, camellia128, aes128ctr (IKEv2 only), blowfish192, aes192, camellia192, 3des, aes192ctr (IKEv2 only), blowfish256, aes256, camellia256, aes256ctr (IKEv2 only)                   |                                                                                                                                                           |
| Diffie Hellman                                    | Regular Groups: 1,2,5,14-18.<br>Modulo Prime Groups with Prime Order Subgroup: 22-24.<br>NIST Elliptic Curve Groups: 19-21, 25-26.<br>Brainpool Elliptic Curve Groups: 27-30.<br>Elliptic Curve 25519: 31 |                                                                                                                                                           |

## Technical features (continued)

|                                                      | WLC-15                    | WLC-30             |
|------------------------------------------------------|---------------------------|--------------------|
| Physical specifications and environmental parameters |                           |                    |
| RAM                                                  | 4 GB DDR4                 |                    |
| Flash memory                                         | 8 GB eMMC                 |                    |
| Maximum power consumption                            | 18 W                      | 26 W               |
| Power supply                                         | 100–264 V AC,<br>50–60 Hz |                    |
| Operating temperature                                | from 0 to +40 °C          | from -10 to +45 °C |
| Storage temperature                                  | from -40 to +70 °C        |                    |
| Operating humidity                                   | no more than 80 %         |                    |
| Storage humidity                                     | from 10 to 95 %           |                    |
| Dimensions (W × H × D)                               | 430 × 44 × 226 mm         | 430 × 40 × 225 mm  |
| Weight                                               | 2.7 kg                    | 2.9 kg             |
| Lifetime                                             | no less than 15 years     |                    |

## Features and capabilities

## Access points management

- WPA/WPA2/WPA3<sup>1</sup> Personal
- WPA/WPA2/WPA3<sup>1</sup> Enterprise
- OWE<sup>1</sup> open network
- Local collecting of user account information<sup>2</sup>
- Collecting user account information to an external RADIUS server
- IEEE 802.11r/k/v standard seamless roaming
- Integration with external portals<sup>3</sup>
- Automatic management of radio environment resources
- Access point authorization by certificate

## Supported access points

- WEP-1L
- WEP-2L
- WEP-3L
- WEP-200L
- WEP-30L
- WEP-30L-Z
- WEP-3ax
- WEP-500K
- WEP-550K
- WEP-50L
- WOP-2L
- WOP-20L
- WOP-3L-EX
- WOP-30L
- WOP-30LI
- WOP-30LS
- WOP-50L
- WEP-2ac
- WEP-2ac Smart
- WOP-2ac

- WOP-2ac rev.B
- WOP-2ac rev.C

## Switching

- Up to 4094 VLAN (802.1Q)
- Voice-VLAN
- Q-in-Q (802.1ad)
- MAC-based VLAN
- Bridge domain
- LAG/LACP (802.3ad)
- Port-security, protected port
- Jumbo-frames

## MPLS

- LDP
- L2VPN VPWS
- L2VPN VPLS Martini Mode, Kompella Mode
- L3VPN MP-BGP (Option A, B, C)
- L2VPN/L3VPN over GRE, DMVPN
- Transparent transfer of service protocols

## Routing

## BGP:

- Address family: IPv4, IPv6, VPNv4, L2VPN, IPv4 label-unicast, Flow-spec
- Flexible management of route information by attributes. Support for Conditional Advertisement, Route Aggregation and Local-AS mechanisms
- High scalability and configuration flexibility: support for peer-group, dynamic neighbor, as-range and Route-reflector

<sup>1</sup> WPA3 and OWE are supported for WEP-3ax, WEP-3L, WEP-30L, WEP-30L-Z, WEP-500K, WEP-550K, WOP-30L, WOP-30LI, WOP-30LS APs.

<sup>2</sup> The features will be available in future firmware versions.

<sup>3</sup> Operation with ELTEX-NAICE, WNAM Netams, Cisco ISE is tested.

## Features and capabilities (continued)

- Fall over based on BFD and Fast Error Peer Detection
- Graceful restart
- Authentication
- Flexible redistribution from/to BGP process of other protocol routes
- Ability to run up to 64 processes simultaneously
- ECMP
- Support for policy-based routing

**OSFP(v3):**

- Different types of zones: Normal, Stub, Totally stub, NSSA, Totally NSS
- Operation in different types of networks: Broadcast, NBMA, Point-to-point, Point-to-multipoint, Point-to-multipoint non-broadcast
- Summarization and filtering of route information
- Authentication
- ECMP
- Passive interface
- Flexible redistribution from/to OSPF process of other protocol routes
- Ability to run up to 64 processes simultaneously
- Support for BFD
- Auto cost calculation mechanism
- Support for policy-based routing

**IS-IS:**

- Operation in different types of networks: Broadcast, Point-to-point
- Setting the neighbourhood of L1/L2 layers
- Metric style: narrow, wide, transition
- Authentication
- Filtering of route information
- Flexible redistribution from/to IS-IS process of other protocol routes
- Ability to run up to 64 processes simultaneously
- Support for policy-based routing

**RIP(ng):**

- Operation modes (RIP only): Broadcast, Multicast, Unicast
- Summarization and filtering of route information
- Managing route metrics
- Authentication
- Passive interface
- Flexible redistribution from/to RIP process of other protocol routes
- Support for policy-based routing

**Static:**

- Support for BFD
- Recursive search
- Managing route metrics
- Ability to select the option of notifying the sender when traffic is blocked

**Quality of Service (QoS)**

- Up to 8 priority or weighted queues per port
- L2 and L3 traffic prioritization (802.1p (CoS), DSCP, IP Precedence (ToS))
- Hierarchical QoS
- Queue management: RED, GRED, SFQ, CBQ, WFQ, WRR
- Session labeling
- Bandwidth management (policing, shaping)

**IPsec**

- Policy-based and route-based modes
- Incapsulation modes: tunnel and transport
- Authentication pre-shared key, public key, xauth (ikev1 only), eap (ikev2)
- Support for mobike (ikev2 only)
- Support for ike ikering

**Remote Access**

- PPTP, L2TP over IPsec, OpenVPN, WireGuard
- PPPoE/PPTP/L2TP client
- User authentication
- Connection encryption

**Security**

- Access Control Lists (ACL) based on L2/L3/L4 fields
- Zone-based Firewall in two modes: stateful and stateless. Rule triggering logging, counters
- Filtering by applications
- Protection against DoS/DDoS/Spoof attacks and their logging
- Intrusion Detection/Prevention system (IPS/IDS) and their logging<sup>1</sup>
- Signature analysis via IPS in two modes: transit and mirrored traffic analysis<sup>1</sup>
- Interaction with Eltex Distribution Manager to obtain licensed content: rule sets provided by Kaspersky SafeStream li<sup>2</sup>

<sup>1</sup> Activated by a license.

<sup>2</sup> Rule sets are available by subscription. The minimum subscription period is 1 year.

## Features and capabilities (continued)

### Monitoring and management

- Support for standard and extended SNMP MIB, RMONv1
- Zabbix agent/proxy
- Authentication methods: RADIUS, TACACS+, LDAP
- Protection against configuration errors, automatic configuration recovery
- CLI, Syslog
- System resource usage monitoring
- Ping, monitor, traceroute (IPv4/IPv6), packet information in the console output
- Firmware upgrade, configuration upload and download via TFTP, SCP, FTP, SFTP, HTTP(S)
- Support for NTP
- Netflow v5/v9/v10 (exporting of URL statistics for HTTP, host for HTTPS)
- Local control via RS-232 (RJ-45)
- Remote control, WEB, Telnet and SSH (IPv4/IPv6)
- LLDP, LLDP MED
- Local/remote router configuration storage

### SLA

- SLA-responder for Cisco-SLA-agent
- Eltex SLA:
  - Delay (one-way/two-way)
  - Jitter (one-way/two-way)
  - Packet loss (one-way/backward/two-way)
  - Packet Error Rate
  - Out-of-order delivery (one-way/backward/two-way)

### Redundancy and clustering

- VRRP v2, v3
- Tracking based on VRRP or SLA test
- Managing VRRP parameters
- Managing PBR parameters
- Managing the administrative status of the interface
- Activating and deactivating a static route
- Managing AS-PATH and preference attributes in a route-map
- DHCP failover to reserve the IP address database issued by the DHCP server
- Failover Firewall to reserve Firewall and NAT sessions
- MultiWAN
- Dual-Homing
- Certificate synchronization
- WLC state synchronization

### Fault-tolerant cluster:

- Easy administration and integration: synchronization of configurations, time, versions, licences; Zero Touch Provisioning (ZTP)
- Redundancy of all connections in the cluster
- Router redundancy (in current version 1+1 redundancy is supported)

### Services

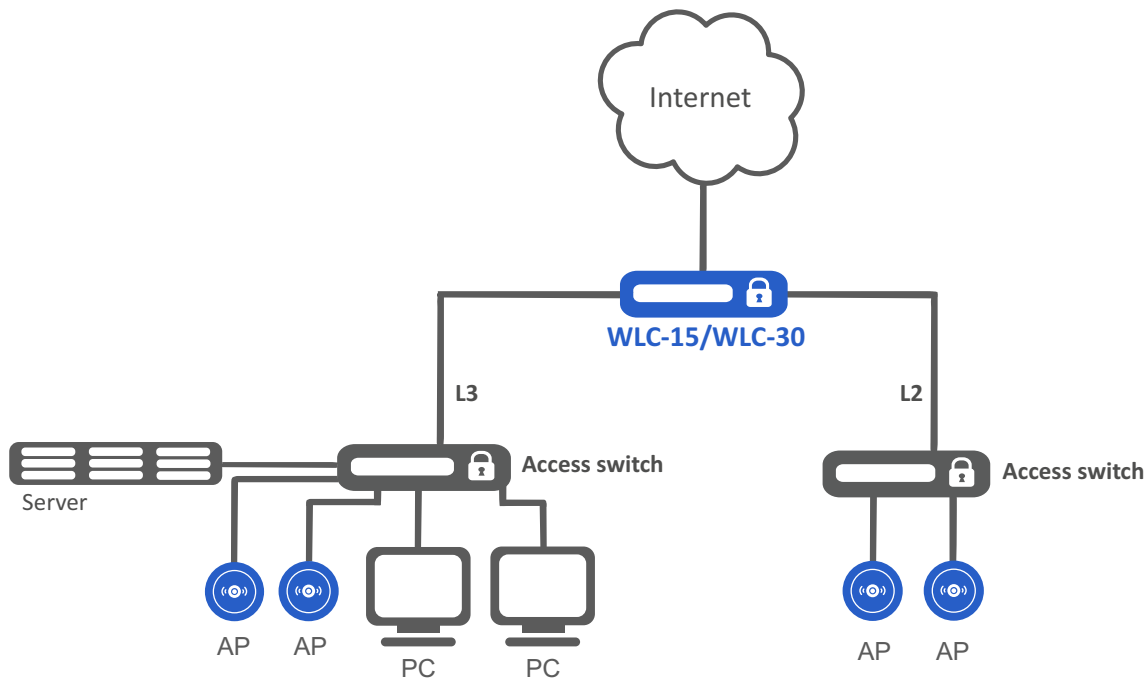
- DHCP client, DHCP server
- DHCP Relay Option 82
- DNS resolver
- NTP
- TFTP-сервер
- E1/multilink, modems

### BRAS (IPoE)<sup>1</sup>

- Subscriber termination
- White/black URL lists
- Quotas for traffic volume, session time, network applications
- HTTP/HTTPS Proxy
- HTTP/HTTPS Redirect
- Session accounting via Netflow protocol
- Interaction with AAA, PCRF servers
- Bandwidth management by offices, SSIDs and user sessions
- User authentication by MAC or IP address

<sup>1</sup> Activated by a license.

Use case in the corporate network



Ordering information

| Name   | Description                                                                                                                                                                                                                  |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WLC-15 | WLC-15 wireless access controller, 4 × Ethernet 10/100/1000BASE-T, 2 × Ethernet 1000BASE-X SFP, 1 × Console (RJ-45), 1 × USB 2.0, 1 × HDD slot, 4 GB DDR4 RAM, 8 GB eMMC, 100–264 V AC                                       |
| WLC-30 | WLC-30 wireless access controller, 4 × Ethernet 10/100/1000BASE-T, 2 × 10GBASE-R SFP+/1000BASE-X, 1 × Console (RJ-45), 1 × USB 3.0, 1 × USB 2.0, 1 × HDD slot, 1 × microSD card slot, 4 GB DDR4 RAM, 8 GB eMMC, 100–264 V AC |

| Related software   |                                                                                                                                          |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| WLC-AP             | WLC-AP option to extend the built-in license on a WLC controller for one access point                                                    |
| WLC-AP-R           | WLC-AP-R option for extending the built-in license for plug-in access points to a backup WLC-series controller for a single access point |
| WIDS/WIPS-WLC-15   | WIDS/WIPS-WLC-15 option: wireless intrusion detection and prevention service for the WLC-15 controller                                   |
| WIDS/WIPS-WLC-15-R | WIDS/WIPS-WLC-15-R option: wireless intrusion detection and prevention service for the WLC-15 standby controller                         |
| WIDS/WIPS-WLC-30   | WIDS/WIPS-WLC-30 option: wireless intrusion detection and prevention service for the WLC-30 controller                                   |
| WIDS/WIPS-WLC-30-R | WIDS/WIPS-WLC-30-R option: wireless intrusion detection and prevention service for the WLC-30 standby controller                         |

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.