ELTEX

Integrated Networking Solutions

— **High-performance solution based on Realtek chipset**

— **Dual band access point with support for 802.11ac**

— **Radio interface with MIMO 2x2 support**

— **PoE+ power supply (IEEE 802.3at)**

— **Up to 40 clients per an access point**

— **Up-to-date authentication and encryption means**

All-weather access point

WOP-2L provides high-performance and safe wireless connection that combines numerous features and services absolutely necessary for convenient network access in crowded areas. WOP-2L is a proper solution for organization of wireless networks in various climatic conditions: in a wide range of operating temperatures and high humidity (in parks, at factories, stadiums, etc.). The device provides an optimal platform for communication networks organization in suburban settlements and remote locations.

Scalability

The WOP-2L wireless access point is an up-to-date flexible solution that allows you to change the network coverage in order to increase the quantity of serviced mobile devices. Due to high performance hardware platform, scalability features and easy-to-use interface , it is possible to set up IT infrastructure simply and fast.

Wireless connection

Due to support for IEEE 802.11n/ac standards the WOP-2L access point provides 300 Mbps (at 2.4 GHz) and 867 Mbps (at 5 GHz) data rates.

The use of MIMO technology and embedded omnidirectional antennas makes WOP-2L a universal solution for corporate networks construction.

Security

WOP-2L provides personal data protection and corporate environment security due to the support for modern authentication technologies. Particularly, it uses a dynamic key that is unique for each active user station.
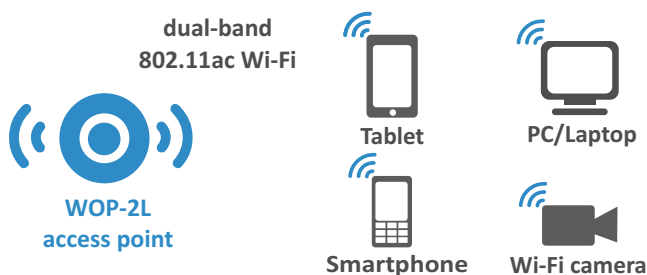
Performance

The high-performance Realtek processors are used in the devices in order to provide reliability and high data processing rates.

Power supply

The PoE+ technology makes installation of the equipment possible virtually everywhere, regardless of the power supply location. The use of PoE+ technology reduces total cost by discarding power cables and makes installation easier and faster.

Application diagram

dual-band
802.11ac Wi-Fi

Tablet

PC/Laptop

**WOP-2L
access point**

Smartphone

Wi-Fi camera

WOP-2L interface configuration

Name	Ethernet	SMA-type connectors for antenna connection
WOP-2L	1x1G	2

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Features and capabilities

Interfaces
– 1 port of 10/100/1000Base-T (RJ-45)
– 2 SMA-type connectors (female) for external antenna connection (Omni, sectoral, panel, etc.)

WLAN capabilities
– Support for IEEE 802.11a/b/g/n/ac
– Data aggregation, including A-MPDU (Tx/Rx) and A-MSDU (Rx)
– WMM-based packet priorities and planning
– Dynamic frequency selection (DFS)
– Support for hidden SSID
– 8 virtual access points
– External access points detection
– Spectrum analyzer

Network features
– Automatic speed negotiation, duplex mode negotiation and MDI-MDI-X switch-over
– VLAN support (Access, Trunk, General)
– 802.1X authentication support
– DHCP client
– GRE support
– Support for GRE over IPsec
– Transmission of subscriber traffic out of tunnels
– ACL support
– NTP support
– Syslog support

QoS functions
– Packet priorities and planning based on profiles
– Bandwidth limiting for each SSID

Security
– Centralized autorization via RADIUS server (WPA/WPA2 Enterprise)
– WPA/WPA2 encryption
– Support for Captive Portal

Configuration
– Remote management via Telnet, SSH
– CLI
– NETCONF
– WEB interface

Wireless interface specifications
– Frequency range 2402–2482 MHz, 5170–5835 MHZ

– DSSS, CCK, BPSK, QPSK, 16QAM, 64QAM, 256QAM modulations
– Support for MIMO 2x2
– Two Wi-Fi Realtek chipsets: RTL8197FS (2.4 GHz) and RTL8812FR (5 GHz)
– Bandwidth: 20, 40 MHz for 2.4 GHz;
      20, 40 and 80 MHz for 5 GHz.

Operating channels[1]
‾802.11b/g/n: 1–13 (2402–2482 MHz)
– 802.11a/n/ac: 36–64 (5170–5320 MHz)
      100–144 (5490–5720 MHz)
      149–165 (5745–5835 MHz)

Data rate[2]
– 802.11a: up to 54 Mbps
– 802.11b: up to 11 Mbps
– 802.11g: up to 54 Mbps
– 802.11n: up to 300 Mbps
– 802.11ac: up to 867 Mbps

Receiver sensitivity
– 2.4 GHz: up to -94 dBm
– 5 GHz: up to -92 dBm

Maximum power of the transmitter[1]
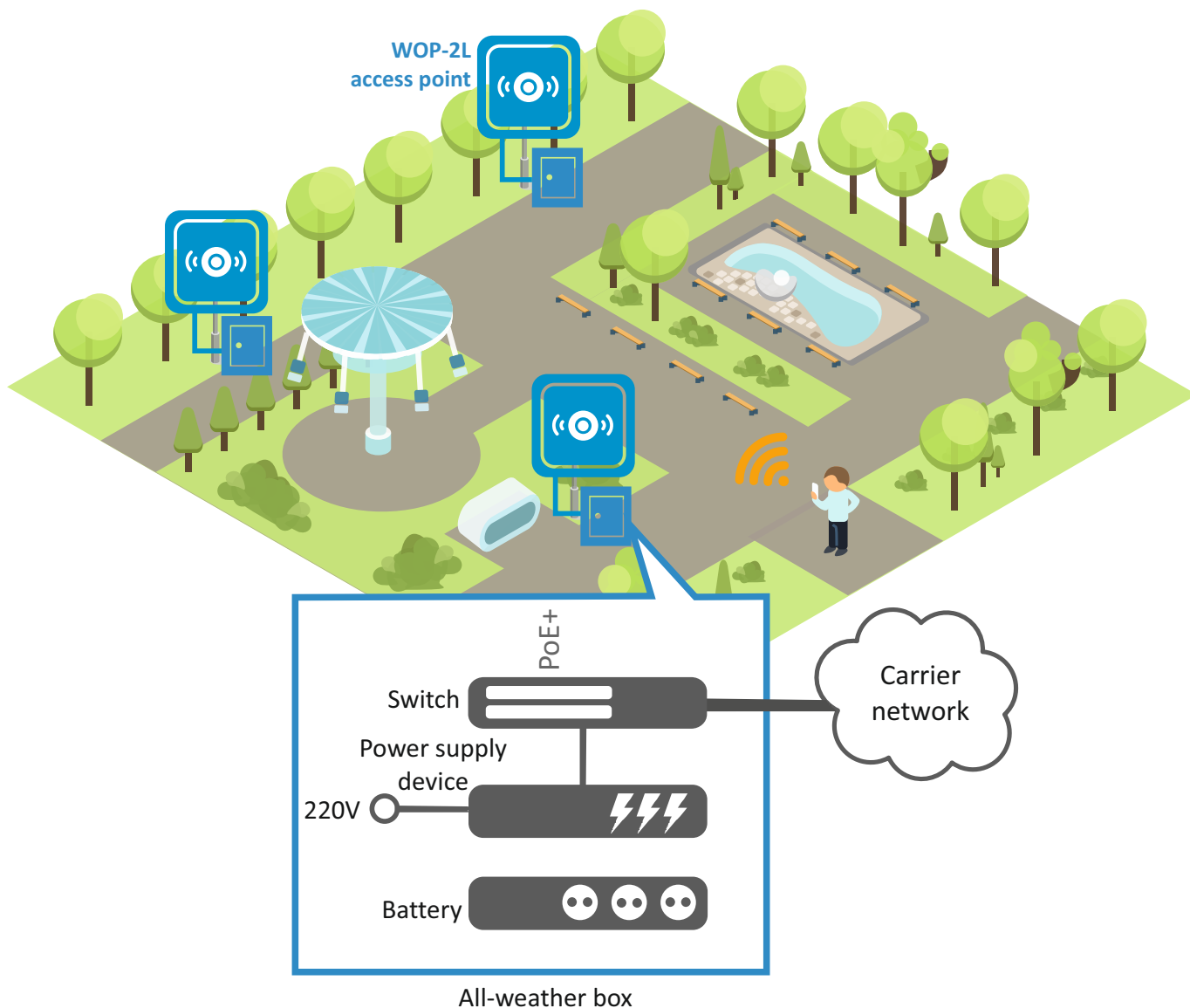– 2.4 GHz: 20 dBm
– 5 GHz: 20 dBm

Physical specifications
– Maximum power consumption – 8 W
– Realtek RTL8197FS 1 GHz processor
– 32 MB Flash
– 128 MB RAM
– Power supply:
    – PoE+ 48V/54V (IEEE 802.3at-2009)
– Operating temperature from -45^{0}C to +65^{0}C
– IP54 protection level
– Dimensions (WxHxD): 88x232.5x47 mm
– Pole mount

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[1]   The number of channels and the value of the maximum output power will vary according to the rules of radio frequency regulation in your country

[2]   The maximum wireless data rate is defined according to IEEE 802.11n/ac standard. The real bandwidth can be different. Conditions of the network, environment , the amount of traffic, building materials and constructions and network service data can decrease the real bandwidth. The environment can influence on the network coverage range.

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Application diagram

WOP-2L
access point

PoE+

Switch

Power supply
device

220V

Battery

Carrier
network

All-weather box

Ordering information

Name	Description	Image
WOP-2L	WOP-2L wireless access point, 802.11a/b/g/n/ac, 2.4 GHz, 5 GHz; radio interface with MIMO 2x2; 1 port of 10/100/1000Base-T (RJ-45), 2 x SMA-type connectors (female) for external antenna connection.	

About Eltex

Eltex company is a leading Russian developer and manufacturer of telecommunication equipment with 25 years of history. Integrity of solutions and seamless integration capability into Customer infrastructure is a priority area of company development.