ELTEX
Integrated Networking Solutions

— **802.11a/n/ac (5G Wi-Fi)**

— **MIMO 2×2**

— **Power of the transmitter up to 28 dBm**

— **Integrated antenna 12 dBi**

— **PoE injector 24 V**

— **Reset button on the injector**

WB-2P-LR5 is a high-performance wireless user station designed to provide up-to-date high-speed services via Wi-Fi technology.

Wireless connection

WB-2P-LR5 is developed for connection to Wi-Fi access network which might be constructed using base stations within long distances.
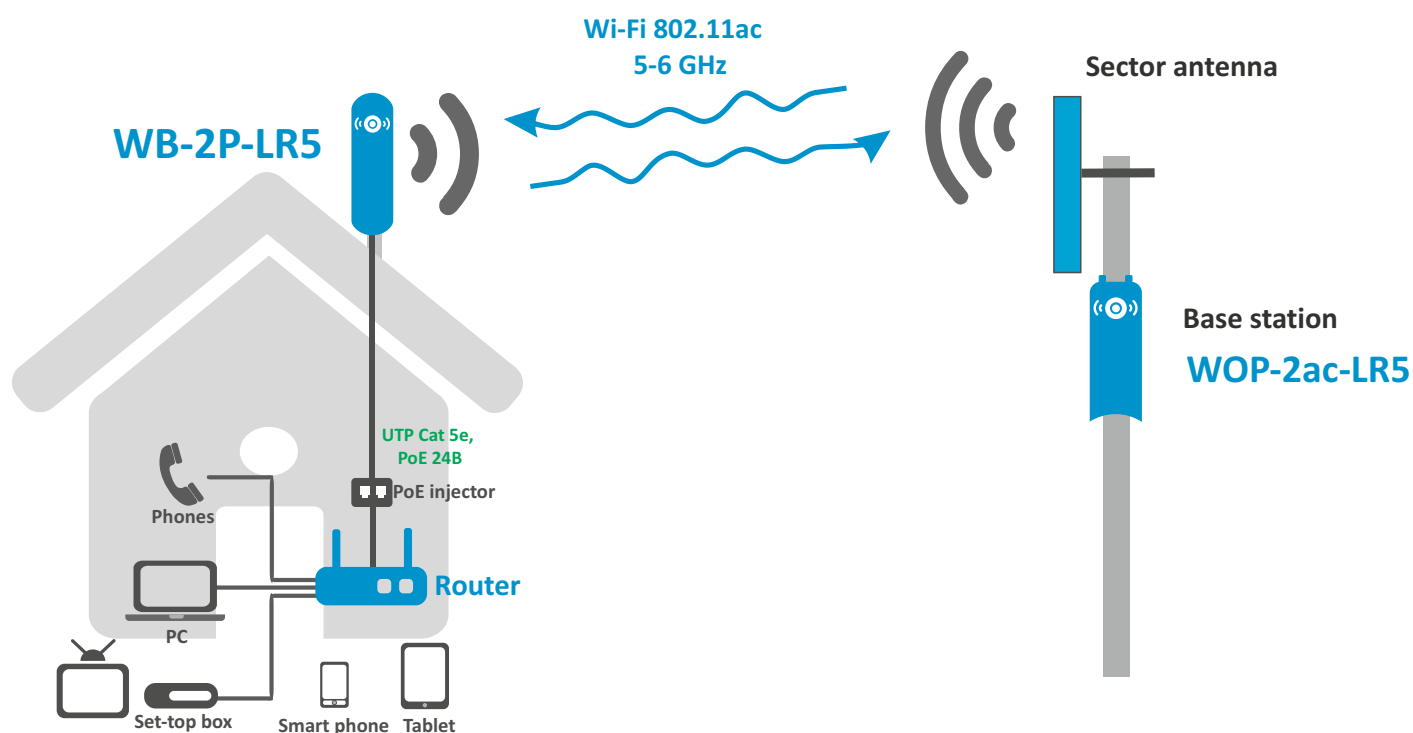
Performance

To ensure a stable and uninterrupted operation, the device is equipped with high-performance processors providing high routing rates and ensuring the effective operation of FBWA (Fixed Broadband Wireless Access) technology.

Interface configuration

Name	WAN	LAN
WB-2P-LR5	802.11a/n/ac	1×G

Use case

**Wi-Fi 802.11ac
5-6 GHz**

Sector antenna

WB-2P-LR5

Base station

WOP-2ac-LR5

**UTP Cat 5e,
PoE 24B**

PoE injector

Phones

Router

PC

Set-top box   **Smart phone**   **Tablet**

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Features and capabilities

Interfaces
– 1 Ethernet port 10/100/1000BASE-T (RJ-45)
– Wi-Fi 5-6 GHz IEEE 802.11a/n/ac
– Service Wi-Fi 2.4 GHz 802.11b/g/n
  (short-range interface for adjustment and device setup
  during the installation period)[1]

WLAN
– Support for IEEE 802.11a/n/ac standards
– Data aggregation, including A-MPDU (Tx/Rx) and A-MSDU (Rx)
– WMM-based priorities and packet planning
– Access points detection
– Spectrum analyzer
– Polling
– Support for wireless bridges (WDS)
– Channel list limitation
– Support for fixed center frequency

Security
– Centralized authentication via RADIUS server
  (WPA/WPA2 Enterprise)
– WPA/WPA2 encryption
– 64/128/152-bit WEP encryption

Network functions
– VLAN Trunk
– Management VLAN
– General VLAN
– Transparent Mode
– VLAN Mapping
– Wireless transparent bridge
– Static routing
– Time synchronization via NTP
– PPPoE client
– MVR
– Limiting the number of MAC addresses learned

Configuration
– Firmware upgrade and configuration via DHCP-autoprovisioning,
  TR-069
– Remote management via Telnet, SSH
– Web interface
– SNMP (Monitoring)

Wireless interface parameters
– Frequency range 5150–5835 MHz
– Frequency range 5150–6160 MHz (for WB-2P-LR5 rev.B and rev.C)
– BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation
– MIMO 2×2
– Bandwidth: 5, 10, 20, 40, 80 MHz
– Channel selection in 5 MHz steps

Operating channels[2]
– 802.11a/n/ac: 32–165 (5150–5835 MHz)[3]

Operating channels (for WB-2P-LR5 rev.B and rev.C)[2]
– 802.11a/n/ac: 32–230 (5150–6160 MHz)[3]

Data rate[4]
– 802.11a: up to 54 Mbps
– 802.11n: up to 300 Mbps
– 802.11ac: up to 867 Mbps

Receiver sensitivity
– 5-6 GHz: up to -94 dBm

Maximum power of the transmitter
– 5-6 GHz: 24 dBm (28 dBm)[1]

Antenna parameters
– Antenna gain: 12 dBi
– Linear polarization: H/V
– SWR: 2.0:1
– Beam width (H): 60°
– Beam width (V): 15°

Physical specifications
– Power consumption up to 8 W
– RAM 128 MB
– Flash 32 MB
– Power supply: PoE 24 V
– Operating temperature: from -45 °C to +65 °C
– Operating humidity: up to 95 %
– Dimensions (W × H × D): 80 × 282 × 66 mm
– Ip55 protection
– Pole mounting

[1] For WB-2P-LR5 rev.C

[2] 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.

[3] Channels 32–35 are available with 5, 10, 20 MHz channel width.

[4] The maximum wireless data rate is defined according to IEEE 802.11n/ac standards. 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 the network coverage range.

Ordering information

Name	Description
WB-2P-LR5	WB-2P-LR5 wireless user station. PoE injector 24 V, power cable and mounting kit are included.