

- Support for 802.11ax (2.4G Wi-Fi)
- Radio interface with MU-MIMO 2×2
- Transmitter power up to 26 dBm
- Built-in antenna 8 dBi
- Real throughput up to 460 Mbps
- Access point and client modes
- Distance up to 2 km without offset parabolic antenna
- Distance up to 8 km with offset parabolic antenna
- Passive PoE 24 V
- Reset button on the power injector
- Support for TDD

# Wireless bridge

WB-3P-PTP2 is a new generation Wi-Fi 6 device, designed to provide modern high-speed services. The device is a universal solution for organizing radio bridges in various climatic conditions within a wide range of operating temperatures and high humidity.

# **Wireless connection**

Due to support for IEEE 802.11ax standard the WB-3P-PTP2 wireless bridge provides up to 574 Mbps data rate. The offset parabolic antenna makes WB-3P-PTP2 a universal solution for organizing radio bridges over long distances.

## **Performance**

For stable and continuous operation of the device, the highperformance processors are used, providing the highest data routing speed and the best efficiency of FBWA (fixed broadband wireless access) technology.



 $^{*}$  Offset antenna is not included in the suppy package

#### **Security**

To ensure a secure connection, modern authentication and encryption technologies according to the WPA3 standard are supported. The new generation of wireless bridges meet the highest requirements for security and compatibility with earlier versions of the 802.11 standard. To manage the wireless bridge, access rights are divided by roles with the ability to authenticate using a local account. as well as via a RADIUS server.

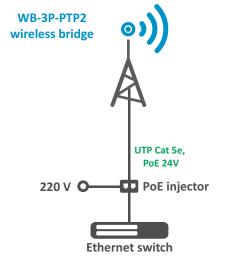
## **Power supply**

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

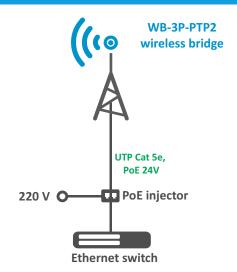
### Interface configuration

Ethernet	Wi-Fi
1×1G	802.11b/g/n/ax

# Use case







www.eltex-co.com



# Features and capabilities

#### **Interfaces**

- 1 port of 10/100/1000BASE-T (RJ-45)
- Wi-Fi 2.4 GHz IEEE 802.11b/g/n/ax

#### **WLAN** capabilities

- Support for IEEE 802.11b/g/n/ax
- Data aggregation, including A-MPDU (Tx/Rx) and A-MSDU (Rx)
- WMM-based packet priorities and planning
- Access point (AP-PTP/AP-PMP) mode
- Wireless client (STA) mode
- Support for hidden SSID
- Support for MAC ACL
- Third-party access points detection
- Support for APSD
- Channel list limiting
- Spectrum analyzer
- Fixed center frequency support
- TDD
- Antenna alignment

#### **Network features**

- Automatic negotiation of speed and duplex mode
- VLAN (Access, Trunk, General) support
- Management VLAN
- DHCP client
- VLAN Mapping
- Loopback Detection
- MVR
- NTP
- Syslog
- DHCP snooping
- IGMP snooping (limit on the maximum number of groups)
- Limiting the number of MAC addresses learned (MAC learning)
- BPDU
- IPv6
- LLDP
- Ping Watchdog

### **QoS functions**

- Bandwidth limiting
- Configuring WMM parameters for the radio interface
- Priority by 802.1p, DSCP and VLAN ID
- Traffic priority based on MAC/IP address

#### Security

- Centralized autorization via RADIUS server (802.1X WPA/WPA2/WPA3 Enterprise)
- WPA/WPA2/WPA3/OWE encryption
- Authorization via RADIUS server when logging

# Configuration

- Remote management via Telnet, SSH
- Web interface
- CLI
- NETCONF
- SNMP

## Wireless interface specifications

- Frequency range 2400-2483.5 MHz
- BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulations
- Built-in sector antenna
- Support for MU-MIMO 2×2
- Support for OFDMA
- Bandwidth: 5, 10, 20, 40 MHz
- Channel selection with 5 MHz increments

# Operating channels<sup>1</sup>

-802.11b/g/n/ax: 1-13 (2401-2483 MHz)

# Data rate<sup>2</sup>

-802.11ax: 574 Mbps

#### Maximum power of the transmitter<sup>1</sup>

- 2.4 GHz: 26 dBm

#### Antenna parameters

- Gain: 8 dBi
- Linear polarization: H/V
- SWR: no more than 2
- Beam width (H): 60°
- Beam width (V): 60°

### Receiver sensitivity

- 2.4 GHz: up to -95 dBm

#### **Physical specifications**

- Power consumption: no more than 10 W
- 128 MB SPI-NAND Flash
- 256 MB DDR3 RAM
- Power supply: Passive PoE 24 V
- Operating temperature: -45 to +65 °C
- Ingress protection: IP67
- Dimensions (W  $\times$  H  $\times$  D):

 $108 \times 100 \times 66 \text{ mm}$ 

 $108 \times 100 \times 121$  mm (with cable gland)

- Weight: 0.3 kg
- Pole/wall mount, in a holder of an offset parabolic antenna

www.eltex-co.com

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.

<sup>&</sup>lt;sup>2</sup>The maximum wireless data rate is defined according to IEEE 802.11 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 on the network coverage range.



# **Ordering information**

Name	Description
WB-3P-PTP2	WB-3P-PTP2 wireless bridge. Passive PoE 24 V injector, power cable.
WB-3P-PTP2 with pole/wall mounting kit	WB-3P-PTP2 wireless bridge. Passive PoE 24 V injector, power cable, pole/wall mounting kit.
WB-3P-PTP2 with an offset parabolic antenna	WB-3P-PTP2 wireless bridge. Passive PoE 24 V injector, power cable, offset parabolic antenna with reflector size $450 \times 495$ mm.

Contact us **About Eltex** 









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