ELTEX
Integrated Networking Solutions

— **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**

— **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**

* Offset antenna is not included in the suppy package

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 high-performance processors are used, providing the highest data routing speed and the best efficiency of FBWA (fixed broadband wireless access) technology.

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.
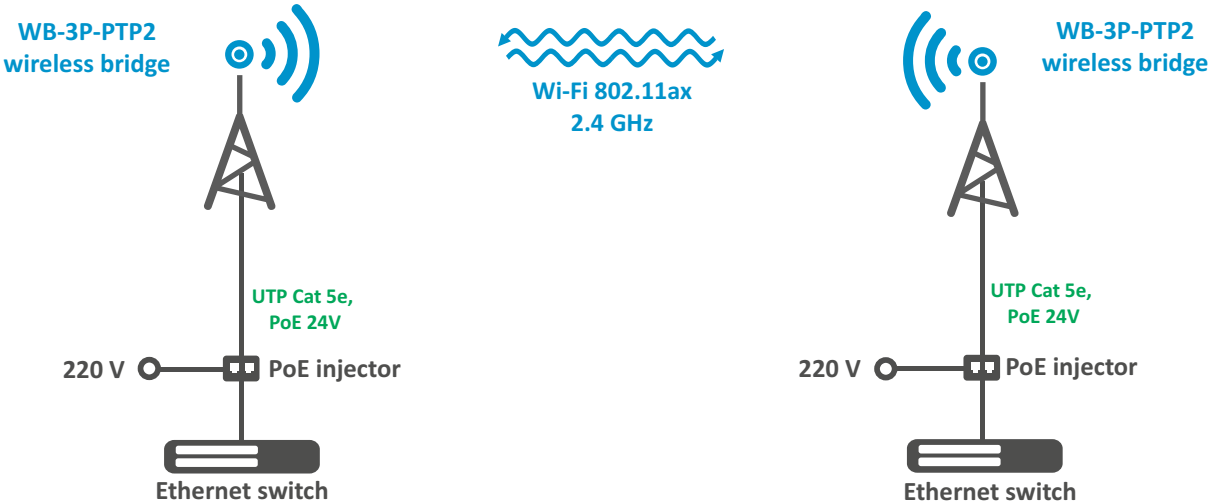
Power supply

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

WB-3P-PTP2 wireless bridge

Wi-Fi 802.11ax 2.4 GHz

WB-3P-PTP2 wireless bridge

UTP Cat 5e, PoE 24V

220 V — PoE injector

Ethernet switch

UTP Cat 5e, PoE 24V

220 V — PoE injector

Ethernet switch

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
– Support for hidden SSID
– Support for MAC ACL
– Third-party access points detection
– APSD
– Spectrum analyzer
– Antenna align

Network features
– Automatic speed negotiation and duplex mode
– VLAN support (Access, Trunk, General)
– Management VLAN
– DHCP client
– NTP
– Syslog
– DHCP snooping
– IGMP snooping (limit on the maximum number of groups)
– BPDU
– IPv6
– LLDP
– Ping Watchdog

QoS functions
– Bandwidth limiting
– Configuring WMM parameters for the radio interface
– Priority by 802.1p, DSCP and VLAN ID

Security
– Centralized autorization via RADIUS server
  (802.1X WPA/WPA2/WPA3 Enterprise)
– WPA/WPA2/WPA3/OWE encryption

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: 20, 40 MHz

Operating channels[1]
– 802.11b/g/n/ax: 1–13 (2401–2483 MHz)

Data rate[2]
– 802.11ax: 574 Mbps

Maximum power of the transmitter[1]
– 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 × H × D):
  108 × 100 × 66 mm
  108 × 100 × 121 mm (with cable gland)
– Weight: 0.3 kg
– Pole/wall mount, in a holder of an offset parabolic antenna

[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 802.11 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 19.5 dBi gain and reflector size 450 × 495 mm.

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