

# Warning!

Please read the user manual included in this work as it contains important information related with safety of installation and use of the device.

Only persons who read the user manual may use the device.

The user manual must be kept because it may be required in the future. The device is to be used exclusively for purposes specified in this user manual.

The device must be unpacked prior to starting-up. After removing the packaging make sure the device is in working order. If the product has defects, it should not be used until it is repaired.

The product is intended for use at home and commercial use and may not be used for other than intended use.

The manufacturer is not liable for damages resulting from not adhering to the rules contained in the user manual, therefore, we recommend to follow the aforementioned safety rules for operation and maintenance of the device. In this way you will ensure yourself safety and avoid causing damage to the device.

The manufacturer and the supplier are not liable for losses or damages arising out of the product, including financial or intangible losses, loss of profits, income, data, pleasure from use of the product or other products related with it - indirect, incidental or consequential loss or damage. The above provisions apply whether the loss or damage concerns:

1. Deterioration of quality or the lack of operation of the products or products related with it due to damage as well as the lack of access to the product when it is undergoing repair, which results in stoppage the loss of user's time or a break in business activity; 2. Improper results of operation of the product or products related with it;

3. It applies to losses and damages according to any legal category, including negligence and other losses, termination of a contract, expressed or implied guarantee and strict liability (even if the manufacturer or the supplier was notified about the possibility of occurrence of such damages).

#### Safety measures:

Particular attention at designing was directed to quality standards of the device where ensuring safety of operation is the most important factor.

The device must be secured against contact with caustic, staining and viscous fluids.

The device was designed in such a way that it restarts operation when power supply is restored after a break.

Attention! We recommend using protections to further protect the device from possible overvoltages in installations. Surge protectors are effective protection against accidental pass to the device voltages higher than the rated. Damages caused by pass the voltages higher than specified in manual, are not under warranty.

Turn off the device before transporting it.

Prior to connecting the device to a power source check whether the supplied voltage is consistent with rated voltage specified in the user manual.

#### Proper product disposal:

A marking of a crossed out waste bin indicates that the product may not be disposed together with other household waste in the entire EU. To avoid possible damage to the natural environment of health due to uncontrolled waste disposal, therefore, it should be handed over for recycling, propagating in this way sustainable use of natural resources.

To return a worn-out product, use a collection and disposal system of this type of equipment or contact a seller from whom it was purchased. He will then be recycled in an environmentally-friendly way.







Outdoor access point TL-CPE210 High Power 2.4 GHz is dedicated for WISPs (Wireless Internet Service Provider) to wireless data transmission. The device is equipped with a high gain antenna, which, together with the electronic board, is put in a weather-resistant housing.

Thanks to the antenna with 9 dBi gain, high output power of the transmitter equal 27 dBm and high sensitivity of the receiver, the device allows to create long-range, stable and efficient wireless connections. Device allows to secure data transmission using the encryption protocols: WEP, WPA/WPA2 and WPA-PSK/WPA2-PSK (64/128/152 bits).

Frequency range:	2.4 GHz 2.483 GHz
Antenna type:	2Tx 2Rx MIMO
Gain :	9 dBi
Polarization:	vertical/horizontal
Standards:	IEEE 802.11b, IEEE 802.11g, IEEE 802.11n
Baud rates:	<ul> <li>max. 300 Mbps @ 40 MHz (dynamic)</li> <li>max. 144.4 Mbps @ 20 MHz (dynamic)</li> <li>max. 72.2 Mbps @ 10 MHz (dynamic)</li> <li>max. 36.1 Mbps @ 5 MHz (dynamic)</li> </ul>
Receiver sensitivity:	<ul> <li>IEEE 802.11b : 11 M : -95 dBm, 5.5 M : 96 dBm, 2 M : 96 dBm, 1 M : 96 dBm</li> <li>IEEE 802.11g : 54 M : -79 dBm, 48 M : -80 dBm, 36 M : -84 dBm, 24 6 M : -88 dBm</li> <li>IEEE 802.11n : MCS15 : -76 dBm, MCS14 : -78 dBm, MCS13 : -80 dBm, MCS12 : -84 dBm, MCS11 : -87 dBm, MCS10 : -91 dBm, MCS9 : -93 dBm, MCS8 : -96 dBm, MCS7 : -76 dBm, MCS6 : -78 dBm, MCS5 : -80 dBm, MCS4 : -84 dBm, MCS3 : -87 dBm, MCS2 : -91 dBm, MCS1 : -93 dBm, MCS0 : -96 dBm</li> </ul>
Operation modes:	AP, Client, Repeater, AP router, WISP
Protections:	WEP 64/128/152-bit, WPA/WPA2, WPA-PSK/WPA2-PSK
LAN ports:	<ul> <li>1 x 10/100Mb LAN 0 + PoE, Shielded</li> <li>1 x 10/100Mb LAN 1 + PoE Passthrough, Shielded</li> </ul>
Management interface:	Web browser, PharOS Control application



DELTA-OPTI Monika Matysiak; https://www.delta.poznan.pl POL; 60-713 Poznań; Graniczna 10 e-mail: delta-opti@delta.poznan.pl; tel: +(48) 61 864 69 60



## User Manual Code: TL-CPE210 ACCESS POINT **TL-CPE210** 2.4 GHz TP-LINK

Transmitter power:	max. 25 dBm
Horizontal beam width (H):	65 °
Vertical beam width (V):	40 °
Housing:	Outdoor, plastic (Weatherproof) - IPX5
Overvoltage protection:	<ul><li> 15 kV ESD</li><li> 6 kV lightning</li></ul>
Power supply PoE:	✓ (up to 60 m via UTP cable)
Power supply:	24 V / 1 A Passive PoE (power adapter included)
Power consumption:	6 W
Operation temp:	-30 °C 70 °C
Permissible relative humidity:	10 % 90 %
Memory:	64MB DDR2, 8MB Flash
Processor:	Qualcomm 650MHz, MIPS 24Kc
Main features:	<ul> <li>MIMO technology - increases the throughput of wireless link (multiple antennas transmission)</li> <li>Adjustable transmission power</li> <li>TP-LINK Pharos MAXtream TDMA Technology</li> <li>Transmission range even up to 5 km</li> <li>PharOS Control Central Management System</li> <li>Support for tools Antenna Alignment, Distance Setting, Ping Watch Dog and Wireless Speed Test</li> <li>Wireless Speed Test</li> <li>Wireless signal quality indicators</li> <li>Bandwidth : 5, 10, 20, 40 MHz</li> <li>Multi-SSID</li> <li>WDS</li> <li>MAC addresses filtering</li> <li>SSID hiding</li> <li>DDNS</li> <li>SSH</li> <li>Watchdog built-in</li> <li>RESET button</li> </ul>
Weight:	0.338 kg
Dimensions:	224 x 79 x 60 mm
Manufacturer / Brand:	TP-LINK
Guarantee:	3 years

Mounting side view:



TL-CPE210





Signal indicator:

connector:







PoE Power Supply and Adapter:





DELTA-OPTI Monika Matysiak; https://www.delta.poznan.pl POL; 60-713 Poznań; Graniczna 10 e-mail: delta-opti@delta.poznan.pl; tel: +(48) 61 864 69 60

2024-04-27

TL-CPE210



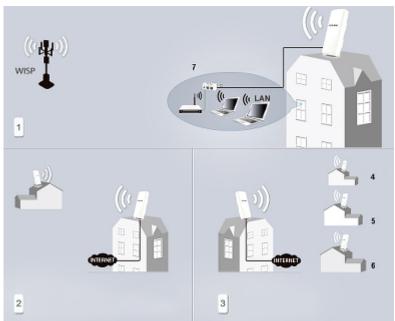




Transmission schematic diagram:







- 1. WISP client
- 2. Point-to-Point connection
- 3. Connection point-to-multipoint
- 4.1 client
- 5.2 client
- 6.3 client
- 7. Local Area Network

### PACKAGE

Dimensions (L x W x H): 0x0x0 mm Gross Weight: 0 kg

