

Experience the unrivaled potential of seamless indoor connectivity with Kenstel KCP-510, The Future of Indoor Connectivity!"

Unlock unparalleled performance with KCP510, delivering lightning-fast speeds of up to 7500 Mbps download and 3000 Mbps upload. Seamlessly navigate high-definition streaming and business applications with ease. enterprise-grade security and intuitive management. Say goodbye to connectivity issues even in the most demanding indoor environments.



Dual-band 4×4 MIMO 802.11ax/ac Wave 2 CPE device with cloud management



### Education

Experience Life in High Speed.



### Hospitality

Enabling Seamless Connectivity for Every Guest Experience



### Office

Keeping Your Office Connected and Efficient

### PRODUCT HIGHLIGHTS

- Can be used as ceiling mount, wall mount/ desktop device.
- Aggregate data rate of 5.4Gbps.
- Self-configuring, Self-healing mesh
- Inbuilt 5dBi Omnidirectional Antennas
- Remote management via HTTP, HTTPSs, Secure SSH, Telnet, SSL, SNMP management v1/v2c/v3
- Configuration file backup and restore by TFTP or FTP, HTML
- Rich system information –AP status, station status, event logs
- IPv4 and IPv6 dual stack support
- IEEE 802.11a/b/g/n/ac/ax compliant
- 2.4GHz and 5GHz concurrent radios

### TECHNICAL SPECIFICATION

#### Cellular Technology Supported

- 5G sub-6 GHz
- NSA, SA, NR-CA, DSS supported
- SRS Antenna Switching
- 4x4 MIMO 5G sub-6 GHz
- 4G LTE Cat 22
- 4X4 MIMO 4G LTE
- 3G HSPA+/UMTS

#### Sim Type

- 5G 4FF Nano SIM

#### Cellular Bandwidth

- 5G sub-6 GHz : 200 MHz bandwidth, 4x4 MIMO

#### Cellular Data rate

- 5G Peak Download Speed: 7500 Mbit/s
- 5G Peak Upload Speed: 3000 Mbit/s

#### Wi-Fi Standards

- IEEE 802.11b/g/n/ax on 2.4GHz
- IEEE802. 11a/n/ac/ax on 5GHz

#### MIMO

- 2x2 SU-MIMO/MU-MIMO on 2.4 Ghz
- 4x4 SU-MIMO/MU-MIMO on 5Ghz

**TECHNICAL SPECIFICATION****Wireless Capabilities**

- DL-OFDMA UL-OFDMA, TWT support, BSS Coloring
- 4 × 4 multiple input, multiple output (MIMO) with four spatial streams
- SU-MIMO, UL MU-MIMO and DL MU-MIMO support
- Maximal ratio combining (MRC) & beamforming
- 20 and 40 MHz channels (802.11n); 20, 40, and 80 MHz channels (802.11ac Wave 2); 20, 40 80 and
- 160 MHz channels (802.11ax)
- Up to 1024-QAM on both 2.4 GHz & 5 GHz bands

**Antennas**

- External Omni Directional Antennas for WiFi (5dBi gain at 2.4 GHz, 5dBi gain at 5 GHz)
- External Omni Directional Antennas for Cellular (2-5dBi Gain)

**Max aggregate frame rate (Mbps)**

- 2.4 GHz: Max 600
- 5 GHz: Max 4800

**Supported Data Rates (Mbps)**

- 802.11ax:
- 2.4 GHz: 9 to 574 (MCS0 to MCS11, NSS = 1 to 2)
- 5 GHz: 18 to 4800 (MCS0 to MSC11, NSS = 1 to 4)
- 802.11b: 1, 2, 5.5, 11
- 802.11a/g: 6, 9, 12, 18, 36, 48, 54
- 802.11n: 6.5 to 300 Mbps (MCS0 to MCS15)
- 802.11ac: 6.5 to 1733 Mbps (MCS0 to MCS9, NSS = 1 to 4), , 2166 with 1024-QAM

**Supported Radio Technologies**

- 802.11b: Direct-sequence spread-spec trum (DSSS)
- 802.11a/g/n/ac: Orthogonal frequency-di vision multiplexing (OFDM)
- 802.11ax: Orthogonal frequency-division multiple access (OFDMA) with up to 16 resource units (RU)

**Supported Modulation**

- 802.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
- 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
- 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM
- 802.11b: BPSK, QPSK, CCK

### TECHNICAL SPECIFICATION

#### Channelization

- 802.11ax supports high efficiency (HE) —HE 20/40/80/160 MHz
- 802.11ac supports very high throughput (VHT) —VHT 20/40/80 MHz
- 802.11n supports high throughput (HT) —HT 20/40 MHz
- 802.11n supports very high throughput under the 2.4GHz radio —VHT40 MHz (256-QAM)
- 802.11n/ac/ax packet aggregation: A-MPDU, A-SPDU

#### Physical Interface

- 2 x GE Port (PoE)
- 1 x Reset Button
- 1X DC Jack

#### Power Source

- 12V/5A DC Input

#### Maximum Power Consumption

- 30W

## CLOUD MANAGEMENT



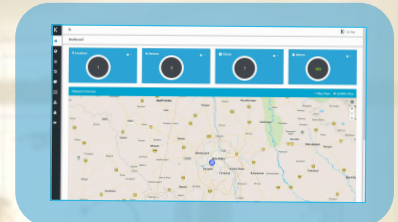
#### Wireless Access Point

Our CPEs are specifically engineered to meet the demanding networking needs of businesses, government agencies, educational institutions, and more.



#### WLAN Controller

It serves as a centralized platform that enables administrators to configure, monitor, and maintain multiple CPEs within the network.



#### Cloud Management

A powerful and intuitive web-based interface that revolutionizes the way you manage and monitor your wireless network infrastructure.



**SOFTWARE SPECIFICATION****IP**

- IPv4, IPv6, dual stack

**Cellular Statistics**

- Signal strength (RSSI), Modem Status, IMEI, IMSI, Roaming Status, Operator, Band, PLMN, EARFCN, Preferred Network Type

**Cellular Features**

- Band Locking
- Multi PDN Support
- Private APN Configuration
- Multi Sim support
- GPS Based Location Detection
- Band Locking
- Roaming Support
- Bridge/Routing Mode Support
- Sim Locking
- Auto Sim switching

**Max Concurrent User**

- Upto 256

**Max SSID**

- Upto 16

**Wireless authentication**

- WEP, WPA, WPA2-PSK, WPA3 - Personal, WPA3 - Enterprise, WPA3 - Enhanced Open (OWE)
- EAP-TLS, EAP-TTLS, EAP-MSCHAPv2, EAP-SIM
- IEEE 802.1X based Authentications

- HOTSPOT 2.0

**Roaming**

- Fast roaming based on 802.11r/k
- Seamless Roaming for Captive Portal user

**RRM**

- Automatic interference cancellation
- Smart Frequency selection
- Automatic Transmit power Optimization
- Coverage hole detection and mitigation

**Captive Portal**

- Click Through
- Simple Password
- Voucher
- Local User
- SMS OTP
- Custom Survey
- Social Media
- Advertisement

**External Authentication**

- Authentication via Radius
- Authentication via Active Directory (AD)

**Operating Modes**

- Bridge Mode
- Gateway Mode

**SOFTWARE SPECIFICATION****Tunnels**

- L2TP V2/V3
- GRE/EoGRE
- Openvpn
- IPSEC
- PPTP
- Wireguard/SSL

**Routing**

- Static routes
- RIP v1/v2
- OSPF
- BGP4
- Policy based Routing(PBR)

**Security**

- Port/Mac/IP/Proto based filtering
- ICMP/TCP/UDP/DHCP Flood attack defence
- ARP Spoofing Prevention
- Rogue AP detection
- Man in middle and Honeytrap Attack prevention
- Client Isolation
- L2/L3 ACL
- MFP

**QoS**

- WMM and 802.1e
- Port/Proto/DSCP/IP/Mac based Traffic Shaping
- Per SSID Bandwidth Limiting
- Airtime Fairness
- Band Steering

**VLAN Tagging**

- Supports 802.1q SSID-to-VLAN Tagging

**SNMP**

- v1, v2c, v3

**MIB**

- I/II, Private MIB

**Management**

- Local UI,SSH,TELNET,SNMP,TR069

**IP Rating**

- IP40

## MECHANICAL SPECIFICATION



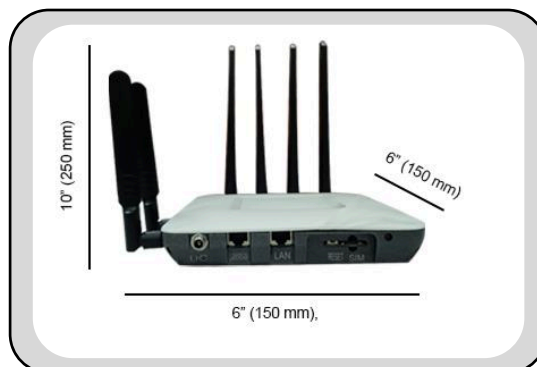
### Temperature Range

Operating temperature 0°C to +50°C / +32°F to +122°F  
Storage Temperature -40° C to +70° C (-40° F to +158° F)



### Humidity (non-condensing)

Humidity 5%~95% non-condensing  
Storage Humidity 5%~95% non-condensing  
Internal



### Dimensions

Weight - 1Kg, Width - 6" (150 mm), Length - 6" (150 mm),  
Height - 10" (250 mm).

Experience connectivity redefined with KCP-510 - your partner in solving the challenges of indoor and industrial connectivity with unparalleled speed, reliability, and intelligence. Embrace the future of wireless communication with Kenstel!