

Kenstel KCP-540 is a two- radio, 4x4 MIMO 802.11ax 5G CPE. Designed for general purpose, next-generation deployments in harsh outdoor locations and industrial conditions, the KCP-540 offers performance, enterprise-grade security, and intuitive management. The KCP-540 delivers a maximum 5.4 Gbps aggregate frame rate with concurrent 2.4 GHz and 5 GHz radios. KCP-540 delivers the high throughput, reliability, and flexibility required by the most demanding business applications like voice and high-definition streaming video, even in the harshest outdoor environments.



5G CPE with Dual-band 4x4 MIMO 802.11ax Access Point



### Education

Experience Life in High Speed.



### Hospitality

Enabling Seamless Connectivity for Every Guest Experience



### Office

Keeping Your Office Connected and Efficient

Manufactured By:

Kenstel Networks Limited 34D Sector 57 HSIIDC Industrial Area Phase 4 Kundli Haryana - 131028.  
mail id - kenstel@gmail.com.

## PRODUCT HIGHLIGHTS

- Can be used as ceiling mount, wall mount/ desktop device.
- Aggregate data rate of 5.4Gbps.
- Self-configuring, Self-healing mesh
- Inbuilt external 7dBi Omnidirectional Antennas
- Remote management via HTTP, HTTPS, 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
- 3GPP Release 16 compliant.

### 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

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## 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-spectrum (DSSS)
- 802.11a/g/n/ac: Orthogonal frequency-division 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

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

### Power Source

- 12V/5A DC Input

### Maximum Power Consumption

- 30W

## CLOUD MANAGEMENT



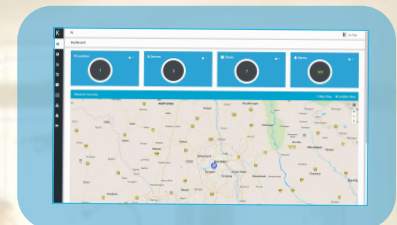
### CPE Device

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

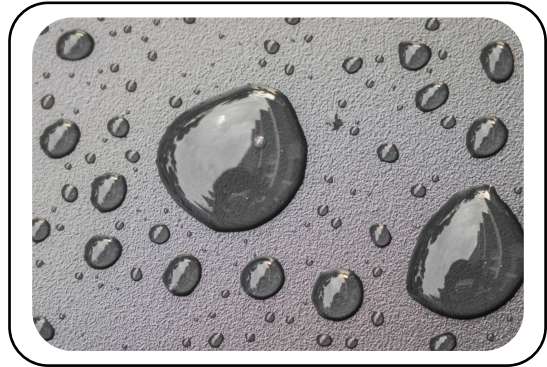
- IP68

## 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)



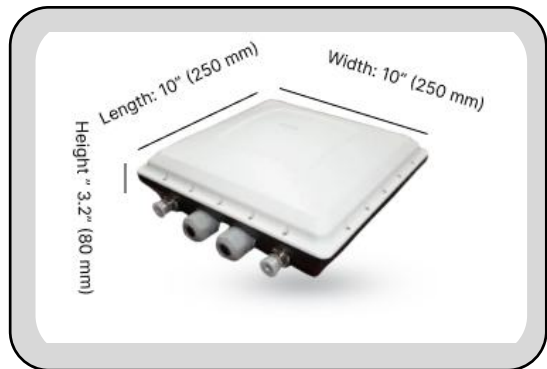
### Waterproof & Dustproof

IP68-Rated Enclosure



### Humidity (non-condensing)

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



### Dimensions

Weight: 2.5Kg | Width: 10" (250 mm) | Length: 10" (250 mm) | Height " 3.2" (80 mm)

Experience connectivity redefined with KCP-540 - your partner in solving the challenges of outdoor and industrial connectivity with unparalleled speed, reliability, and intelligence. Embrace the future of wireless communication with Kenstel!