

# KKAC

ENCRYPTED WI-FI ACCESS  
POINT





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## ENCRYPTED WI-FI ACCESS POINT

Encrypted Wi-Fi Access Point is an encrypted Wi-Fi Access Device. It supports IEEE802.11ac protocol, communicates with peer devices and Encrypted Wi-Fi Terminal Devices and uses a trust relationship to prevent unauthorized access to the Wi-Fi network. It uses a national encryption algorithm for secure communication. Access to the secure network and establishment of an encrypted connection requires a 3 Factor Authentication. Encrypted Wi-Fi Access Point supports mesh network architecture; if one or more network devices fail, active connections are rerouted through the remaining devices and the network stays operational. Encrypted Wi-Fi Access Point supports MAC Address Filtering; only devices with predefined MAC addresses can access the secure network. It has an encrypted data communication speed of 300 MBitps.

Encrypted Wi-Fi Access Points are used in connection with Encrypted Wi-Fi Terminal Devices and a dedicated Wireless Network Management Software.

### Properties of Encrypted Wi-Fi Access Points

- The encryption algorithm is designed and developed in Turkey and certified as National Secret.
- Encrypted communication between Encrypted Wi-Fi Access Points can only start after a successful 3 Factor Authentication.
- All encryption protocols used, including the 3 Factor Authentication, are certified as National Secret.
- National Secret certification is issued by the certification authority of the office of General Chief of Staff of the Turkish Army.
- If one or more Encrypted Wi-Fi Access Points in the mesh network fail, terminals (Encrypted Wi-Fi Terminal Devices) connected to those failed Encrypted Wi-Fi Access Points are automatically rerouted through the remaining Encrypted Wi-Fi Access Points and stay operational.
- Power can be supplied from the standard 220 V network or an external AC Power Source.
- Device Antennas are omnidirectional and each Antenna has 5 dBi gain at 5 GHz.
- Encrypted Wi-Fi Access Point is operational from  $-20^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$  and in the relative humidity range from 10% to 95%.
- Encrypted Wi-Fi Access Point is a MIMO device that supports IEEE802.11ac Wi-Fi protocol.
- 3 Spatial Streams are supported.
- 40-MHz and 80-MHz channels are supported.
- DFS is supported.
- If one or more Encrypted Wi-Fi Access Points in the mesh network fail, active connections are rerouted through the remaining Encrypted Wi-Fi Access Points and the network stays operational.
- WIPS is supported.
- In connection with the Wireless Network Management Software, Encrypted Wi-Fi Access Point adjusts Antenna Power to determine the coverage area.
- In connection with the Wireless Network Management Software, Encrypted Wi-Fi Access Point chooses the frequency channel.
- Encrypted Wi-Fi Access Point supports MAC Address Filtering; only devices with predefined MAC addresses can access the secure network.
- Mesh network is supported.
- In the mesh network, the most suitable path to the root Encrypted Wi-Fi Access Point is chosen automatically for each Encrypted Wi-Fi Access Point. If an Encrypted Wi-Fi Access Point in the mesh network fails, the affected Encrypted Wi-Fi Access Points are automatically rerouted to the root Encrypted Wi-Fi Access Point by calculating the most suitable path for each of them in the available network. The loss of communication has a maximum duration of 40 seconds.
- If coverage areas of different networks overlap so that Encrypted Wi-Fi Access Points belonging to other networks enter the coverage area of a given network, each Encrypted Wi-Fi Access Point will stay connected to its own network. Network operation will not be affected.
- Encrypted Wi-Fi Access Point has an encrypted data communication speed of 300 MBitps.
- Encrypted Wi-Fi Access Point can be managed by the dedicated Wireless Network Management Software.

