



# KEENETIC

## STELLAR 6

AX3000 Wi-Fi 6 Indoor/Outdoor Access Point with a Gigabit Ethernet Port and Power over Ethernet

- All-weather ready -40 to +65°C
- IP65 dust and rain protection
- Versatile wall or pole installation
- Single-cable deployment with 802.3at PoE
- Long range omnidirectional coverage with two external antennas and high-power amplifiers
- Seamless connectivity through roaming and band steering
- Protect data with traffic and resource segmentation
- Convenient local, remote and cloud-based management via any Keenetic router

### Keenetic Solutions for Business

Keenetic routers and access points deliver cost-effective solutions for environments with constrained budgets, ensuring functionality, performance, ease of setup, reliability and comprehensive support. For offices, branches, retail outlets, restaurants, small hotels and clinics, Keenetic offers essential business-class features:

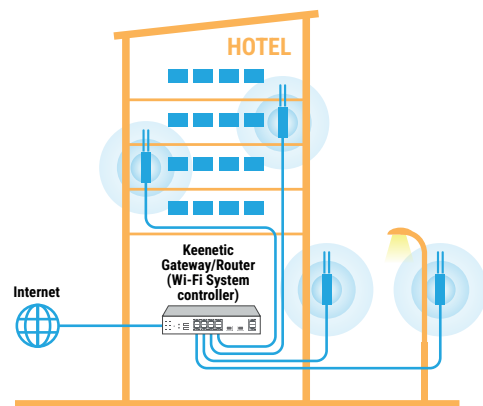
- Uninterrupted Internet access with redundancy and load balancing;
- Secure VPN connectivity for branch offices and remote workers;
- Network segmentation to protect against data breaches;
- Internet filtering to optimise employee productivity and protect corporate information;
- Guest hotspot for visitor identification and Wi-Fi marketing;
- Scalable Wi-Fi coverage with centralised management;
- Remote monitoring and management for distributed enterprise networks.

### Easy Installation in Any Conditions

Stellar 6 is easy to mount on a wall or pole indoors or outdoors, and uses PoE so power and data run through a single Ethernet cable. Its all-weather IP65 enclosure with built-in heater supports operation from -40 to +65°C, while 6 kV surge protection (including lightning) and 8 kV ESD protection ensure stable performance in any conditions.

### Continuous Outdoor Coverage

Stellar 6's omnidirectional external antennas and discrete signal amplifiers provide reliable Wi-Fi coverage across large outdoor spaces. Seamless 802.11k/r/v roaming technology enables client devices to automatically connect to the access point with the strongest signal without interruption or data loss. This happens in a fraction of a second, ensuring an uninterrupted experience in spaces such as courtyards, terraces, outdoor seating areas, car parks, campuses and other areas where staff and guests are constantly on the move.



### Effortless Expansion for Any Wi-Fi Network

Stellar 6 is ideal for building a new Wi-Fi network or extending an existing one, delivering reliable connectivity, high speeds and network segmentation<sup>1</sup>. Its full capabilities are unlocked within the Keenetic Mesh Wi-Fi System, with seamless 802.11k/r/v roaming and centralised management via the router web interface, mobile app or cloud service.

### Secure Network Segmentation

With network segmentation using VLANs and individual Wi-Fi SSIDs, you can effectively separate application traffic and access to information resources. Establish isolated networks for guests, employees or specific departments to enhance security and maintain network stability. This approach protects your corporate data, reduces the risk of congestion and keeps your business-critical applications running smoothly.

## Key features

- Model number: KAP-650
- CPU: MT7981B 1300 MHz, dual core
- RAM: 256 MB DDR3
- Flash memory, Dual Image: 128 MB
- Wi-Fi 2.4 + 5 GHz
- Wi-Fi class: AX3000
- Wi-Fi antennas: 2.4 + 5 GHz dual-band: 2 external, detachable with RP-SMA connectors
- Wi-Fi client capacity: Up to 256 in 2.4 & 5 GHz (shared)
- Ethernet ports: 1 × 1 Gbps + PoE
- Mesh Wi-Fi System
- DFS support: Zero Wait DFS (ch. 52–64)  
Standard DFS (ch. 100–140)

## Performance

- 2.4 GHz Wi-Fi network:  
574\* Mbps (802.11ax)  
2T × 2R: 2SS, 40 MHz
- 5 GHz Wi-Fi network:  
2402\* Mbps (802.11ax)  
2T × 2R: 2SS, 160 MHz

## Wireless network

- Seamless roaming 802.11k/r/v
- MU-MIMO
- Airtime Fairness
- Beamforming
- OFDMA
- Pre-configured Wi-Fi protection
- WEP, WPA-PSK
- WPA2-PSK, WPA2-Enterprise
- WPA3-PSK, WPA3-Enterprise, OWE
- Multiple Wi-Fi networks: Up to 7
- Access control by MAC address
- Wi-Fi Multimedia (WMM)

## Features and protocols

- VLAN IEEE 802.1Q
- Direct or cloud access via KeenDNS

## Troubleshooting and management

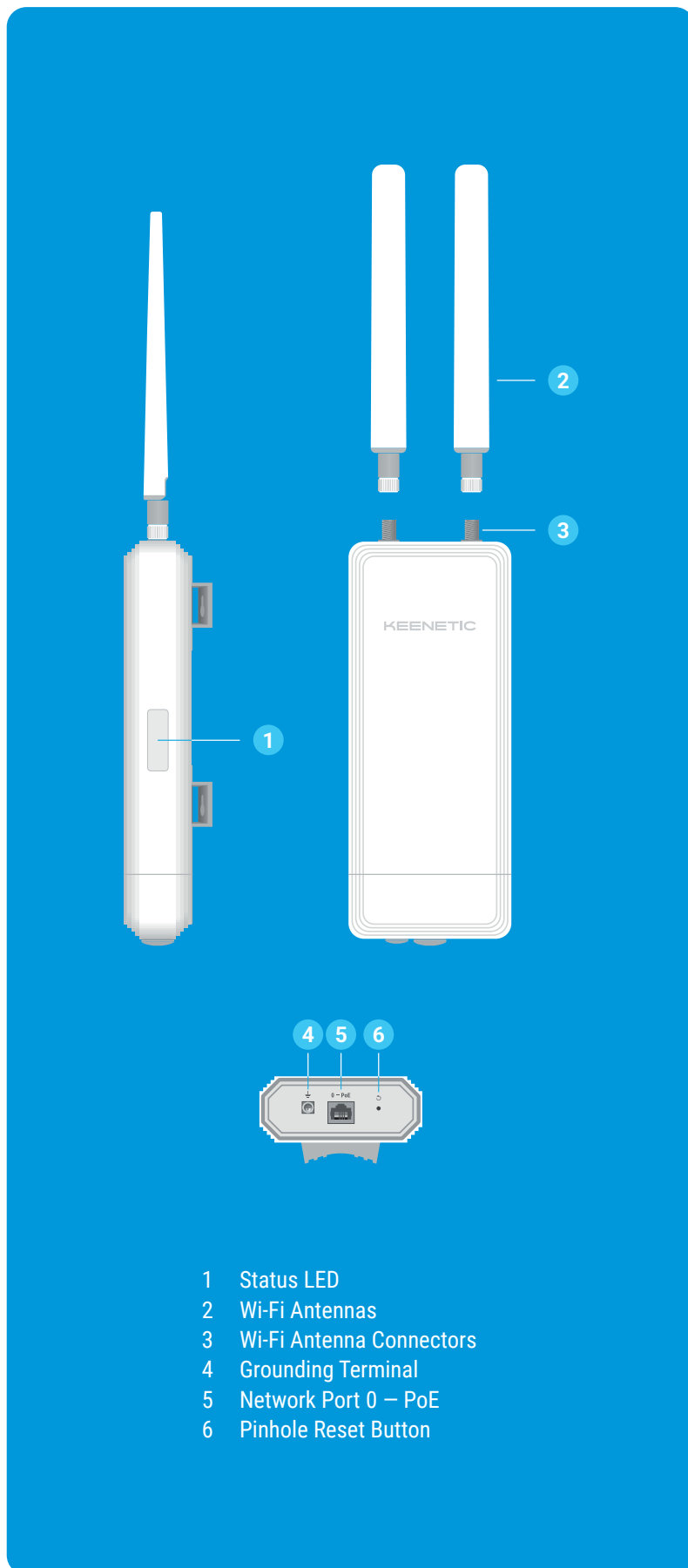
- Cloud-based Remote Network Monitoring and Management
- Web Interface with the Initial Setup Wizard and HTTPS security
- Command Line (CLI) via TELNET/SSH
- An option to control from external network
- Backup and restore configuration
- Automatic OS updates
- System event logging

## Physical specifications and environment requirements

- Device dimensions excluding antenna,  
w × d × h: 99 mm × 53 mm × 240 mm
- Device weight: 477 g
- Operating temperature: -40 ... +65 °C
- Operating humidity: 10–95% non-condensing
- Ingress protection rating: IP65
- Power supply voltage: 802.3at (PoE+ 18 W) or passive PoE 48 V

## Package contents

- Device
- Wi-Fi antennas
- Power adapter: Passive PoE 48 V
- Pole and wall mount kits
- Quick start guide



- 1 Status LED
- 2 Wi-Fi Antennas
- 3 Wi-Fi Antenna Connectors
- 4 Grounding Terminal
- 5 Network Port 0 – PoE
- 6 Pinhole Reset Button

## Ordering Information

Model name	Part number	Short description
Keenetic Stellar 6 (KAP-650)	KAP-650-EU	AX3000 Wi-Fi 6 Indoor/Outdoor Access Point with a Gigabit Ethernet Port and Power over Ethernet

## KEENETIC

© Keenetic Limited., 2026. All rights reserved.

Names of products or companies mentioned herein may be the trademarks or service marks of their respective owners. Keenetic Limited. reserves the right to make changes and improvements to any product without prior notification.

\* 2402 and 574 Mbps are maximum wireless signal rates derived from the 802.11ax specification, used when connecting to clients using four spatial streams and an 160/40 MHz channel bandwidth for transmission and reception. Actual data throughput and wireless coverage will vary and may be lowered by the features and settings of the equipment, the number of client devices in the network, obstacles to signal propagation, the presence of other wireless networks, and/or radio interference.