

Alcatel-Lucent OmniAccess Stellar AP1362-T

Alcatel-Lucent OmniAccess® Stellar AP1362-T on-board Access Points with 802.11ax technology enables faster speeds, more capacity. This enables Access Points to better service higher density of clients, deliver more capacity for bandwidth hungry and latency sensitive voice and video clients, and provide a dependable secure network for IoT devices while increasing their battery powered lifespan. The OmniAccess® Stellar WLAN brings unparalleled experience for connectivity, coverage and performance for the modern IoT connected Enterprise. AP1362-T adopts industrial grade, meet the requirements for train-ground wireless.



The 802.11ax high performance and AP1362-T models are designed to accommodate diverse growing capacity needs of next generation Mobility & IoT enabled networks. The AP1362-T models support maximum aggregate data rate 2.4Gbps (5GHz) . The AP1362-T models can be connected to the network via M12.

OmniAccess® Stellar AP1362-T support all mandatory and several optional 802.11ax features, which include DL OFDMA with up to 37 RUs, UL OFDMA with up to 37 RUs, DL MU-MIMO, UL MU-MIMO, 1024-QAM modulation and more, making tomorrows diverse digital workspaces .

Featuring enhanced WLAN technology with RF Radio Dynamic Adjustment, a distributed control Wi-Fi architecture, secure network admission control with Unified Access, built in application intelligence and analytics, making it ideal of all sizes demanding a simple, secure and scalable Wireless solution.

Datasheet

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802.11ax (Wi-Fi 6) high efficiency features

IEEE 802.11ax deliver high performance wireless LAN services with increased throughput, enabling more clients in dense environments and bringing power efficiency to Internet of Things (IoT) devices, while it remains fully backward compatible with existing 802.11 a/b/g/n/ac deployments. The 802.11ax standard is a dramatic step forward in wireless LAN technology for all organizations. Some of the key 802.11ax features enabled on OmniAccess Stellar AP1362-T are:

- Orthogonal frequency division multiple access (OFDMA) enables more clients to simultaneously operate in the same channel and thereby improving efficiency, latency, and throughput. OFDMA can concurrently address multiple clients in both directions downlink (DL) and uplink (UL), including full 37 OFDMA Resource Units (RUs). OFDMA is very effective in environments where there are many devices with short frames demanding lower latency.
- Multi-user multiple input, multiple output (MU-MIMO) allows more data to be transferred at once and enables an access point to handle a larger number of concurrent clients. This capability was introduced with 802.11ac, but now with 802.11ax the multi-user performance can be concurrently delivered in both directions downlink (DL) and uplink (UL).
- 1024 quadrature amplitude modulation mode (1024-QAM) boosting peak data-rates by as much as 25 percent.
- BSS Coloring improves spatial reuse in dense environments by providing a mechanism for color coding different overlapping BSS's, allowing more simultaneous transmissions.
- Extended Range (ER) provides increased coverage in scenarios where receiving side encounters high path loss and channel delay spread, especially in outdoor environments.
- Target wake time (TWT) makes Wi-Fi CERTIFIED 6 devices more power efficient. This capability lets client devices to sleep much longer, and wake up to less contention, extending the battery life of smart phones, IoT sensors, and other devices.
- Transmit beamforming improves signal power resulting in significantly higher rates at a given range.

Deliver higher grade security and scale with simplicity

OmniAccess Stellar enables a visionary distributed Wi-Fi architecture with centralized management and policy control, enforcing security at every step starting at the network edge, and allowing unparalleled scale in network capacity. This architecture is vital for enabling the next generation Digital Network that demands business agility, seamless mobility and secure IoT enabled infrastructure empowering business transformation through continuous innovation.

OmniAccess Stellar provides enhanced security with WPA3, a new security standard for enterprise and public networks, improving Wi-Fi security by using advanced security algorithms and stronger ciphers in Network including 192-bit security suite. Public spaces which provide open non-protected access, can now provide encryption and privacy using OmniAccess Stellar, which supports a new security standard Wi-Fi Enhanced Open based on opportunistic wireless encryption (OWE).

Quality of service for unified communication apps

The OmniAccess Stellar AP1362-T supports fine-tuned, quality of service (QoS) parameters to differentiate and provide appropriate QoS for each application such as voice, video and desktop sharing. Application aware RF scanning avoids interruption of real-time applications.

RF management

Radio Dynamic Adjustment (RDA) technology automatically assigns channels and power settings, provides DFS/TPC, and ensures that access points stay clear of all radio frequency interference (RFI) sources to deliver reliable, high-performance WLAN. The OmniAccess Stellar AP1362-T series can be configured to provide part-time or dedicated scanning for spectrum analysis and wireless intrusion protection.

Product specifications

Feature	Description
Radio Specification	<ul style="list-style-type: none"> • AP type: On-board Wireless AP • Dual Radio, 5 GHz 802.11ax 4x4:4 and dedicated scanning radio for Roaming <ul style="list-style-type: none"> - 5 GHz: 4x4:4 up to 2.4Gbps wireless data rate to individual 4SS HE80 802.11ax client devices. • Supported frequency bands (country-specific restrictions apply): <ul style="list-style-type: none"> - 5.150 to 5.250 GHz - 5.250 to 5.350 GHz - 5.470 to 5.725 GHz - 5.725 to 5.850 GHz • Available channels: Dependent on configured regulatory domain • Maximum (aggregate, conducted total) transmit power (limited by local regulatory requirements): <ul style="list-style-type: none"> - 27dBm on 5GHz (21dBm per chain) • DFA (Dynamic Frequency Adjustment) optimizes available channels and provides proper transmission power • Short guard interval for 20-MHz, 40-MHz, 80-MHz, and 160(80+80)MHz channels • Transmit beam forming (TxBF) for increased signal reliability and range • 802.11n/ac packet aggregation: Aggregated Mac Protocol Data Unit (A-MPDU), Aggregated Mac Service Data Unit (A-MSDU) • Supported data rates (Mbps): <ul style="list-style-type: none"> - 802.11n(5GHz): 6.5 to 600 (MCS0 to MCS31, HT20 to HT40) - 802.11ac: 6.5 to 1733 (MCS0 to MCS9, NSS = 1 to 4, VHT20 to VHT80; NSS=2, VHT160(80+80)) - 802.11ax(5GHz): 3.6 to 2,402 (MCS0 to MCS11, NSS = 1 to 4, HE20 to HE80; NSS=2, VHT160(80+80)) • Supported modulation types: <ul style="list-style-type: none"> - 802.11a/g/n/ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM - 802.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM • 802.11n high-throughput (HT) support: HT 20/40 • 802.11ac very high throughput (VHT) support: VHT 20/40/80/160(80+80) • 802.11ax high efficiency (HE) support: HE 20/40/80/160(80+80) • Advanced Cellular Coexistence (ACC) <ul style="list-style-type: none"> - Minimizes interference from 3G/4G cellular networks, distributed antenna systems, and commercial small cell/ femtocell equipment • Full band 1x1 radio dedicated for Roaming
Interfaces	<ul style="list-style-type: none"> • 1x Console (RJ-45) port • 1x 10/100/1000 Mbps IEEE 802.3 compliant auto-sensing (RJ-45) Debug port • 1x M12 uplink port
Visual Indicators(1LEDs)	<ul style="list-style-type: none"> • SYS ON: Power on and system running • SYS Flashing: Bootloader-OS loading or upgrading

Feature	Description
Security	<ul style="list-style-type: none"> • Integrated Trusted Platform Module (TPM 2.0) for secure storage of credentials and keys • 802.11i, WPA2, WPA3-Enterprise with CNSA Option, Personal(SAE), Enhanced Open(OWE) • 802.1X • WEP, Advanced Encryption Standard (AES), Temporal Key Integrity Protocol (TKIP) • Portal page authentication
Antenna	<ul style="list-style-type: none"> • AP1362-T: 4x4:4 @ 5GHz - 5 N-Type external antenna connectors - ANTO-ANT4 are 5GHz antenna connectors, ANT5 for the dedicated scanning radio.
Power	<ul style="list-style-type: none"> • M12 power interface • Maximum power consumption in idle mode: <ul style="list-style-type: none"> - 10W
Mounting	<ul style="list-style-type: none"> • 19" cabinet
Environmental	<ul style="list-style-type: none"> • Operating: <ul style="list-style-type: none"> - Temperature: -25°C to +55°C - Humidity: 10% to 90% non-condensing • Storage and transportation: <ul style="list-style-type: none"> - Temperature: -40°C to +85°C
Ingress Protection	<ul style="list-style-type: none"> • IP43
Dimensions/Weight	<ul style="list-style-type: none"> • Single AP excluding packing box and accessories: <ul style="list-style-type: none"> - 440mm (W) x 300mm (D) x 44mm (H)
Software feature	<ul style="list-style-type: none"> • Auto channel selection • Auto transmit power control • Bandwidth control per SSID • Fast roaming • Wireless QoS • Band steering • Zero-touch provisioning (ZTP) • NTP Client • ACL • DHCP/DNS/NAT • Wireless MESH P2P/P2MP • Wireless Bridge • Rogue AP location and containment • Dedicated Scanning AP • System log report • SSHv2 • SNMPv2
IEEE standard	<ul style="list-style-type: none"> • IEEE 802.11a/b/g/n/ac/ax • IEEE 802.11e WMM, U-APSD • IEEE 802.11h, 802.11i, 802.11e QoS • IEEE 802.1Q (VLAN tagging) • 802.11k Radio Resource Management • 802.11v BSS Transition Management • 802.11r Fast roaming