


Alcatel·Lucent 
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OmniAccess Stellar Product Line Matrix

WLAN product & antenna comparison guide

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	AP1521	AP1511
WI-FI STANDARD	802.11be - Wi-Fi 7 Retro-compatible	802.11be - Wi-Fi 7 Retro-compatible
TYPE OF USE	Indoor	Indoor
MAX THROUGHPUT	12.2 Gbps	9.328 Gbps
NB OF RADIOS	5 <small>(incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)</small>	4 <small>(incl. 1 BLE/Zigbee radio)</small>
SUPPORT BANDS	2.4GHz, 5GHz & 6GHz	2.4GHz, 5GHz & 6GHz
RADIO MIMO TYPE	X8 Downlink & Uplink MU-MIMO simultaneous spatial streams	X6 Downlink & Uplink MU-MIMO simultaneous spatial streams
OFDMA / OFDM	OFDMA	OFDMA
MAX NB OF SSIDS <small>(per AP)</small>	36	36
MAX NB OF ASSOCIATED CLIENTS <small>(per AP)</small>	1536	768
MAX TRANSMIT POWER <small>(per radio chain, MCSO, 2.4GHz/5GHz)</small>	<i>To be determined</i>	<i>To be determined</i>
INTEGRATED ANTENNAS	✓ Omni	✓ Omni
ANTENNA PEAK GAIN <small>(2.4 GHz / 5GHz)</small>	<i>To be determined</i>	<i>To be determined</i>
RF CONNECTORS <small>(RF-SMA)</small>	✗	✗
TPM MODULE	✓	✓
NETWORK INTERFACES	1 x 10GbE + 1 x 1GbE	1 x 5GbE
USB HOST INTERFACE	✓ USB 2.0 Type C	✓ USB 2.0 Type C
BLE or ZIGBEE	BLE 5.1/Zigbee Integrated	BLE 5.1/Zigbee Integrated
PoE POWERED	802.3at/bt	802.3at
PoE PSE	✗	✗
DC POWER SUPPORT	✓	✓
OPERATING TEMP RANGE	0°C to 50°C	0°C to 50°C
ENCLOSURE VOLUME <small>(excluding packing box & accessories)</small>	<i>To be determined</i>	<i>To be determined</i>
WEIGHT <small>(excluding packing box & accessories)</small>	<i>To be determined</i>	<i>To be determined</i>
RATING	UL2043 (plenum rated)	UL2043 (plenum rated)
DEEP PACKET INSPECTION	✓	✓
MAX POWER CONSUMPTION <small>(excluding USB, PoE PSE)</small>	<i>To be determined</i>	<i>To be determined</i>
SHIPPED WITH MOUNTING KIT	✗ To be ordered separately	✗ To be ordered separately

Wi-Fi 7 Indoor Access Points

Wi-Fi 7 extends the features and capabilities of Wi-Fi 6/6E into the 6GHz band, in addition to the 2.5GHz and 5GHz bands and includes support for up to four super-wide 320 MHz channels.

This new Wi-Fi generation goes beyond using three bands to optimize spectral efficiency to increase more devices and users within the available frequency bands.

Moreover, Wi-Fi 7 improved reliability and performance to provide a more stable and robust wireless experience especially in dense areas of Wi-Fi devices.





	AP1451	AP1431	AP1411
WI-FI STANDARD	802.11ax - Wi-Fi 6E Retro-compatible	802.11ax - Wi-Fi 6E Retro-compatible	802.11ax - Wi-Fi 6E Retro-compatible
TYPE OF USE	Indoor	Indoor	Indoor
MAX THROUGHPUT	10 Gbps	4.2 Gbps	3.6 Gbps
NB OF RADIOS	5 (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)	4 (incl. 1 BLE/Zigbee radio)	3 (incl. 1 BLE/Zigbee radio)
SUPPORT BANDS	2.4GHz, 5GHz & 6GHz	2.4GHz, 5GHz & 6GHz	2.4GHz / 5GHz / 6GHz (configurable dual-band)
RADIO MIMO TYPE	x8 Downlink & Uplink MU-MIMO simultaneous spatial streams	x2 Downlink & Uplink MU-MIMO simultaneous spatial streams	x2 Downlink & Uplink MU-MIMO simultaneous spatial streams
OFDMA / OFDM	OFDMA	OFDMA	OFDMA
MAX NB OF SSIDS (per AP)	48	16 (limit to 4 on 6GHz)	16 (limit to 4 on 6GHz)
MAX NB OF ASSOCIATED CLIENTS (per AP)	1536	1536	1024
MAX TRANSMIT POWER (per radio chain, MCSO, 2.4GHz/5GHz)	24dBm / 27dBm / 22 dBm	25dBm / 25dBm / 25dBm	25dBm / 25dBm / 25dBm
INTEGRATED ANTENNAS	✓ Omni	✓ Omni	✓ Omni
ANTENNA PEAK GAIN (2.4 GHz / 5GHz)	3.9 dBi	4.5 dBi	4.5 dBi
RF CONNECTORS (RF-SMA)	✗	✗	✗
TPM MODULE	✓	✓	✓
NETWORK INTERFACES	2 x1 / 2.5 / 5 / 10GE	2x 1/2.5GE uplinks	1/2.5GE uplink + 1GE(IoT)
USB HOST INTERFACE	✓ USB 3.0 Type A	✓ USB 3.0 Type A	✓ USB 3.0 Type A
BLE or ZIGBEE	BLE 5.1/Zigbee Integrated	BLE 5.1/Zigbee Integrated	BLE 5.1/Zigbee Integrated
PoE POWERED	802.3bt	802.3bt	802.3bt/at
PoE PSE	✗	✗	✗
DC POWER SUPPORT	✓	✓	✓
OPERATING TEMP RANGE	0°C to 45°C	0°C to 45°C	0°C to 45°C
ENCLOSURE VOLUME (excluding packing box & accessories)	260mm (W) x 260mm (D) x 60mm (H)	180 mm (W) x 180 mm (D) x 36 mm (H)	180 mm (W) x 180 mm (D) x 36 mm (H)
WEIGHT (excluding packing box & accessories)	2370 g	985 g	985 g
RATING	UL2043 (plenum rated)	UL2043 (plenum rated)	UL2043 (plenum rated)
DEEP PACKET INSPECTION	✓	✓	✓
MAX POWER CONSUMPTION (excluding USB, PoE PSE)	49W	34W	25W
SHIPPED WITH MOUNTING KIT	✗ To be ordered separately	✗ To be ordered separately	✗ To be ordered separately

Wi-Fi 6E Indoor Access Points

Wi-Fi 6E extends the features and capabilities of Wi-Fi 6 into the 6GHz frequency band, in addition to the existing 2.4 GHz and 5GHz bands. It includes support for up to fourteen 80MHz channels or seven super-wide 160 MHz channels.

Using the 6GHz band means getting rid of the overhead and traffic from legacy devices, and in consequence, having better connectivity and less interference. What it all comes down to is the ability to support more bandwidth-intensive applications.





	AP1362	AP1361D	AP1361	AP1351	AP1331	AP1322	AP1321	AP1311	AP1301	AP1301H
WI-FI STANDARD	802.11ax - Wi-Fi 6 Retro-compatible			802.11ax - Wi-Fi 6 Retro-compatible	802.11ax - Wi-Fi 6 Retro-compatible	802.11ax - Wi-Fi 6 Retro-compatible	802.11ax - Wi-Fi 6 Retro-compatible	802.11ax - Wi-Fi 6 Retro-compatible	802.11ax - Wi-Fi 6 Retro-compatible	802.11ax - Wi-Fi 6 Retro-compatible
TYPE OF USE	Outdoor			Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Hospitality/Remote access
MAX THROUGHPUT	3 Gbps			10 Gbps	3.55 Gbps	3 Gbps	3 Gbps	1,77 Gbps	1,77 Gbps	1.77 Gbps
NB OF RADIOS	4 (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)			5 (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)	4 (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)	4 (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)	4 (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)	4 (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)	2	3 (incl. 1 BLE/Zigbee radio)
SUPPORT BANDS	2.4GHz & 5GHz			2.4GHz & 5GHz	2.4GHz & 5GHz	2.4GHz & 5GHz	2.4GHz & 5GHz	2.4GHz & 5GHz	2.4GHz & 5GHz	2.4GHz & 5GHz
RADIO MIMO TYPE	x4 Downlink & Uplink MU-MIMO simultaneous spatial streams			x8 Downlink & Uplink MU-MIMO simultaneous spatial streams	x4 Downlink & Uplink MU-MIMO simultaneous spatial streams	x4 Downlink & Uplink MU-MIMO simultaneous spatial streams	x4 Downlink & Uplink MU-MIMO simultaneous spatial streams	x2 Downlink & Uplink MU-MIMO simultaneous spatial streams	x2 Downlink & Uplink MU-MIMO simultaneous spatial streams	x2 Downlink & Uplink MU-MIMO simultaneous spatial streams
OFDMA / OFDM	OFDMA			OFDMA	OFDMA	OFDMA	OFDMA	OFDMA	OFDMA	OFDMA
MAX NB OF SSIDs (per AP)	32			24	32	32	32	16	16	32
MAX NB OF ASSOCIATED CLIENTS (per AP)	1024			1536	1024	1024	1024	512	512	1024
MAX TRANSMIT POWER (per radio chain, MCSO, 2.4GHz/5GHz/6GHz)	20dBm/20dBm			18dBm/18dBm	18dBm / 18dBm	18dBm / 18dBm	18dBm / 18dBm	18dBm / 18dBm	18dBm / 18dBm	18dBm / 18dBm
INTEGRATED ANTENNAS	x	✓ Directional	✓ Omni	✓ Omni	✓ Omni	x	✓ Omni	✓ Omni	✓ Omni	✓ Omni
ANTENNA PEAK GAIN (2.4 GHz / 5GHz)	ref. page 4	7.5/7.4 dBI	4.85/6.48 dBI	3.9/3.9 dBI	3.9dBi / 4.6dBi		3.61dBi/4.45dBi	3.3dBi / 3.3dBi	3.3dBi / 3.3dBi	3.92dBi / 4.41dBi
RF CONNECTORS (RF-SMA)	6 N-Type	x		x	x	4 RP-SMA	x	x	x	x
TPM MODULE	✓			✓	✓	✓	✓	✓	x	x
NETWORK INTERFACES	2.5GE + 1 SFP port + 1GE (IoT)			2 x 1 / 2.5 / 5 / 10GE	2x5GE uplinks	1GE + 2.5GE	1GE + 2.5GE	2x1GE + 1GE (IoT)	2x1GE	1GE uplink + 4GE downlink + 1 pair RJ45 passthrough
USB HOST INTERFACE	x	✓ USB 2.0 Type C	✓ USB 3.0 Type A	✓ USB 3.0 Type A	✓ USB 3.0 Type A	✓ USB 2.0 Type A	✓ USB 2.0 Type A	✓ USB 2.0 Type C	✓ USB 2.0 Type C	✓ USB 2.0 Type A
BLE or ZIGBEE	BLE 5.1/Zigbee Integrated			BLE 5.1/Zigbee Integrated	BLE 5.1/Zigbee Integrated	BLE 5.1/Zigbee Integrated	BLE 5.1/Zigbee Integrated	BLE 5.1 /Zigbee Integrated	x	BLE 5.1 /Zigbee Integrated
PoE POWERED	802.3bt/at			802.3bt	802.3bt/at	802.3at (max 18W)	802.3at (max 18W)	802.3af/at	802.3af	802.3at/af
PoE PSE	15.4W/30W			x	x	x	x	x	x	✓ 802.3af
DC POWER SUPPORT	x			48V DC (nominal)	48V DC (nominal)	48V DC	48V DC	48V DC (nominal)	48V DC (nominal)	48V DC (nominal)
OPERATING TEMP RANGE	-40°C to +65°C			0°C to 45°C	0°C to 45°C	0°C to 50°C	0°C to 50°C	0°C to 45°C	0°C to 45°C	0°C to 45°C
ENCLOSURE VOLUME (excluding packing box & accessories)	243mm (W) x 243mm (D) x 85mm (H)			260mm (W) x 260mm (D) x 60mm (H)	210mm (W) x 210mm (D) x 40mm (H)	180 mm (W) x 180 mm (D) x 36 mm (H)	180 mm (W) x 180 mm (D) x 36 mm (H)	180 mm (W) x 180 mm (D) x 36 mm (H)	180 mm (W) x 180 mm (D) x 36 mm (H)	86 mm (W) x 29 mm (D) x 162.5 mm (H)
WEIGHT (excluding packing box & accessories)	2230 g			1200 g	985g	700 g	700 g	582 g	574 g	320 g
RATING	IP67			UL2043 (plenum rated): Under testing	UL2043 (plenum rated)	UL2043 (plenum rated)	UL2043 (plenum rated)	UL2043 (plenum rated): Under testing	UL2043 (plenum rated)	x N/A
DEEP PACKET INSPECTION	✓			✓	✓	✓	✓	✓	✓	✓
MAX POWER CONSUMPTION (excluding USB, PoE PSE)	70 W			50 W	23 W	24.8 W	24.8 W	19.1 W	13.1 W	12.7 W
SHIPPED WITH MOUNTING KIT	x To be ordered separately			x To be ordered separately	x To be ordered separately	x To be ordered separately	x To be ordered separately	x To be ordered separately	x To be ordered separately	✓ Wall mounting kit

Wi-Fi 6 Access Points



	AP1232	AP1231	AP1201
WI-FI STANDARD	802.11ac - Wi-Fi 5 Retro-compatible		802.11ac - Wi-Fi 5 Retro-compatible
TYPE OF USE	Indoor		Indoor
MAX THROUGHPUT	4.2 Gbps		1.3 Gbps
NB OF RADIOS	4 (incl. 1 BLE radio)		3 (incl. BLE/Zigbee radio)
SUPPORT BANDS	2.4GHz & 5GHz		2.4GHz & 5GHz
RADIO MIMO TYPE	x4 Downlink MU-MIMO simultaneous spatial streams		x2 Downlink MU-MIMO simultaneous spatial streams
OFDMA / OFDM	OFDM		OFDM
MAX NB OF SSIDS (per AP)	24		32
MAX NB OF ASSOCIATED CLIENTS (per AP)	768		512
MAX TRANSMIT POWER (per radio chain, MCSO, 2.54GHz/5GHz)	18dBm/18dBm		18dBm/18dBm
INTEGRATED ANTENNAS	x	✓	✓
ANTENNA PEAK GAIN (2.4 GHz / 5GHz)	(ref page 4)	4.38dBi/4.47dBi	4.7dBi/4.6dBi
RF CONNECTORS (RF-SMA)	8	x	x
TPM MODULE	✓		✓
NETWORK INTERFACES	1GE + 2.5GE		1GE
USB HOST INTERFACE	✓ USB 2.0 Type A		x
BLE or ZIGBEE	✓ BLE		✓ BLE / ✓ Zigbee
PoE POWERED	✓ 802.3at (max 60W)		✓ 802.3af (max 15W)
PoE PSE	x		x
DC POWER SUPPORT	48V DC (nominal)		48V DC (nominal)
OPERATING TEMP RANGE	0 to 45°C		0 to 45°C
ENCLOSURE VOLUME (excluding packing box & accessories)	230 mm (W) x 230 mm (D) x 47 mm (H)		155 mm (W) x 155 mm (D) x 28 mm (H)
WEIGHT (excluding packing box & accessories)	1400 g		310 g
RATING	UL2043 (plenum rated)		UL2043 (plenum rated)
DEEP PACKET INSPECTION	✓		✓
MAX POWER CONSUMPTION (excluding USB, PoE PSE)	27.6 W		11 W
SHIPPED WITH MOUNTING KIT	✓		✓

Wi-Fi 5 Indoor Access Points

The Wi-Fi 5 (802.11ac) standard was designed to address the growing demand for throughput and high-speeds in enterprise wireless LAN networks. Wi-Fi 5 is today a powerful and cost-efficient Wi-Fi solution for enterprises that do not foresee a huge increase in the number of users, IoT devices, and real-time applications, in the short term.



OmniAccess Stellar Access Point External Antennas Matrix

	Indoor	Indoor	Indoor	Indoor	Indoor	Outdoor	Outdoor	Outdoor	Outdoor
ANTENNA MODEL	ANT-O-6	ANT-O-M4-5	ANT-S-M4-60	ANT-S-M4-120	ANT-S-M4-30	ANT-O-M2-5	ANT-O-M4-9	ANT-S-M6-60-9	ANT-O-M6-8
CONFIGURATION	Omni Dual Band	Omni Dual Band	Sector Dual Band	Sector Dual Band	Sector 5GHz Band (37°)	Omni Dual Band	Omni Dual Band	Sector Dual Band (60°)	Omni Dual Band
GAIN	4dBi@2.4GHz 6dBi@5GHz	3.3dBi@2.4GHz 5.5dBi@5GHz	4.5dBi@2.4GHz 6dBi@5GHz	5dBi@2.4GHz 5dBi@5GHz	13dBi@5GHz	5dBi@2.4GHz 8dBi@5GHz	7.5dBi@2.4GHz, 9dBi@5GHz	9dBi±1dBi@2.4GHz, 9dBi±1dBi@5GHz	6dBi@2.4GHz, 8dBi@5GHz
3DB BEAM-WIDTH	H-Plane: 360°	H-Plane: 360°	H-Plane 60°, E-Plane 60°	H-Plane 120°, E-Plane 70°	H-Plane 37°, E-Plane 37°	Azimuth (Omni), Elevation (35°/25°)	Azimuth (Omni), Elevation (22°/11°)	H-Plane: 65±10°, V-Plane: 35±10°	H-Plane: 360°
POLARIZATION	Linear & Vertical	Linear, Vertical & Horizontal	Linear, Vertical & Horizontal	Double dual Slant ±45°	Vertical, Horizontal & Dual Slant (±45°)	Vertical & Horizontal	Vertical & Horizontal	Vertical & Horizontal	Linear, Vertical & Horizontal
CONNECTOR	RPSMA-J	RPSMA-J	RPSMA-J	RPSMA-J	RPSMA-J	2*N-Type Female	4*N-Type Female	6*N-Type Female	6*N-Type Female
CABLE	Direct attach	RPSMA-J+086	SMA-J/RPSMA-J+086	SMA-J/RPSMA-J	SMA-J/RPSMA-J				
OPERATING TEMPERATURE	-10°C to 60°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 65°C	-40°C to 65°C	-40°C to 65°C	-40°C to 65°C	-40°C to 65°C
WORKING WITH AP1222 	Direct mount ✓	Typically used in indoor ceiling mount, Omni Wi-Fi coverage. ✓	Typically used in indoor wall mount, 60° directional Wi-Fi coverage. ✓	Typically used in indoor wall mount, 120° directional Wi-Fi coverage. ✓	Typically used in indoor wall mount, 30° directional high-gain coverage. ✓	✗	✗	✗	✗
WORKING WITH AP1232 	Direct mount ✓	Typically 1*AP1232+2*ANT-O-M4-5, used in indoor ceiling mount, Omni Wi-Fi coverage. ✓	Typically 1*AP1232+2*ANT-S-M4-60, used in indoor wall mount, 120° directional Wi-Fi coverage. ✓	Typically 1*AP1232+2*ANT-S-M4-120, used in indoor wall mount, 240° directional Wi-Fi coverage. ✓	Typically 1*AP1232+2*ANT-S-M4-30, used in indoor wall mount, 60° directional high-gain coverage. ✓	✗	✗	✗	✗
WORKING WITH AP1322 	Direct mount ✓	Typically used in indoor ceiling mount, Omni Wi-Fi coverage. ✓	Typically used in indoor wall mount, 60° directional Wi-Fi coverage. ✓	Typically used in indoor wall mount, 120° directional Wi-Fi coverage. ✓	Typically used in indoor wall mount, 30° directional high-gain coverage. ✓	✗	✗	✗	✗
WORKING WITH AP1362 	✗	✗	✗	✗	✗	AP1362 - 2.4GHz 2*2 MIMO Wi-Fi Coverage. ✓	AP1362 - 5GHz 4*4 MIMO Wi-Fi Coverage. ✓	AP1362 - 2.4GHz 2*2 MIMO + 5GHz 4*4 MIMO Wi-Fi Coverage. ✓	AP1362 - 2.4GHz 2*2 MIMO + 5GHz 4*4 MIMO Wi-Fi Coverage. ✓

OmniAccess Stellar

Based on Alcatel-Lucent Enterprise distributed WLAN control architecture

Alcatel-Lucent Enterprise **OmniAccess Stellar products embed WLAN control in all access points** (APs) eliminating the need for physical centralised controllers.

ALE smart and advanced APs are managed as a single system or cluster, in a distributed and coordinated manner.

Distributed architecture from ALE delivers the best performance and scalability, and ensures high availability, with operational simplicity and low Total Cost of Ownership (TCO).



**Enterprise
grade Wi-Fi.
Operational
simplicity.**