

# **OmniAccess Stellar Product Line Matrix**

WLAN product & antenna comparison guide





	AP1521	AP1511			
WI-FI STANDARD	<b>802.11be - Wi-Fi 7</b> Retro-compatible	<b>802.11be - Wi-Fi 7</b> Retro-compatible			
TYPE OF USE	Indoor	Indoor			
MAX THROUGHPUT	12.2 Gbps	9.328 Gbps			
NB OF RADIOS	<b>5</b> (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)	(incl. 1 BLE/Zigbee radio)			
SUPPORT BANDS	2.4GHz, 5GHz & 6GHz	2.4GHz, 5GHz & 6GHz			
RADIO MIMO TYPE	Downlink & Uplink MU-MIMO simultaneous spatial streams	Downlink & Uplink MU-MIMO simultaneous spatial streams			
OFDMA / OFDM	OFDMA	OFDMA			
MAX NB OF SSIDs (per AP)	48	48			
MAX NB OF ASSOCIATED CLIENTS (per AP)	1280	768			
MAX TRANSMIT POWER (per radio chain, MCSO, 2.4GHz/5GHz/6GHz)	25dBm / 29dBm / 27dBm	26dBm / 26dBm / 27dBm			
INTEGRATED ANTENNAS	Omni	Omni			
ANTENNA PEAK GAIN (2.4 GHz / 5GHz / 6GHz)	4.6dBi / 5.8dBi / 6.4dBi	5.6dBi / 5.9dBi / 6.4dBi			
<b>RF CONNECTORS</b> (RF-SMA)	×	×			
TPM MODULE 2.0	✓	✓			
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			
WAN RESILIENCY	✓	×			
POE RESILIENCY/LOADSHARING	×	×			
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			
<b>ENCLOSURE VOLUME</b> (excluding packing box & accessories)	210mm (W) x 210mm (D) x 43mm (H)	190mm (W) x 190mm (D) x 38mm (H			
WEIGHT (excluding packing box & acccessories)	1020g	764g			
RATING	UL2043 (plenum rated)	UL2043 (plenum rated)			
DEEP PACKET INSPECTION	✓	✓			
MAX POWER CONSUMPTION (excluding USB, PoE PSE)	40.2W	23.4W			
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 superwide 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	<b>802.11ax - Wi-Fi 6E</b> Retro-compatible	<b>802.11ax - Wi-Fi 6E</b> Retro-compatible	<b>802.11ax - Wi-Fi 6E</b> Retro-compatible		
TYPE OF USE	Indoor	Indoor	Indoor		
MAX THROUGHPUT	10 Gbps	4.2 Gbps	3.6 Gbps		
NB OF RADIOS	<b>5</b> (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)	<b>4</b> (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 stream		
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	<b>V</b> 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 2.0	✓	✓	<b>✓</b>		
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 Integrate		
WAN RESILIENCY	✓	✓	×		
PoE RESILIENCY/LOADSHARING	Active / Active	Active / Active	×		
PoE POWERED	802.3bt	802.3bt	802.3bt/at		
PoE PSE	×	×	×		
DC POWER SUPPORT	<i>√</i>	√	··		
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 & acccessories)	2370 g	985 g	985 g		
RATING	UL2043 (plenum rated)	UL2043 (plenum rated)	UL2043 (plenum rated)		
DEEP PACKET INSPECTION	<b>/</b>	<b>✓</b>	1		
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 separate		

## Wi-Fi 6E **Indoor Access Points**

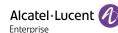
Wi-Fi 6E extends the features and capabilities of Wi-Fi 6 into the 6GHz frequency band, in addition to the existing 2.4 GHz and 5GHz bands. It includes support for up to fourteen 80MHz channels or seven super-wide 160 MHz channels.

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		. <b>11ax - Wi</b> - etro-compatib		<b>802.11ax - Wi-Fi 6</b> Retro-compatible	<b>802.11ax - Wi-Fi 6</b> Retro-compatible	<b>802.11ax</b> Retro-co		<b>802.11ax - Wi-Fi 6</b> Retro-compatible	<b>802.11ax - Wi-Fi 6</b> Retro-compatible	<b>802.11ax - Wi-Fi 6</b> Retro-compatible						
TYPE OF USE		Outdoor		Indoor	Indoor	Ind	oor	Indoor	Indoor	Hospitality/Remote access						
MAX THROUGHPUT		3 Gbps		10 Gbps	3.55 Gbps	3 Gbps		1,77 Gbps	1,77 Gbps	1.77 Gbps						
NB OF RADIOS	<b>4</b> (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)		<b>5</b> (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)	<b>4</b> (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)	<b>4</b> (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)		4 (incl. 1 for dedicated scanning & 1 BLE/Zigbee radio)	2	<b>3</b> (incl. 1 BLE/Zigbee radio)							
SUPPORT BANDS	2.	.4GHz & 5GH	Ηz	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	MU-MIMO simultaneous spatial streams	Downlink & Uplink MU-MIMO simultaneous spatial streams		X4 MU-MIMO		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						
MAX NB OF SSIDs (per AP)		32		24	32	32		16	16	32						
MAX NB OF ASSOCIATED CLIENTS (per AP)		1024		1536	1024	10	24	512	512	1024						
MAX TRANSMIT POWER (per radio chain, MCSO, 2.4GHz/5GHz/6GHz)	2	0dBm/20dBi	m	18dBm/18dBm	18dBm / 18dBm	18dBm / 18dBm		18dBm / 18dBm		18dBm / 18dBm	18dBm / 18dBm	18dBm / 18dBm				
INTEGRATED ANTENNAS	×	<b>✓</b> Directional	<b>✓</b> Omni	Omni	Omni	×	<b>√</b> Omni	<b>√</b> Omni	<b>√</b> Omni	<b>√</b> 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	*	<b>t</b>	×	×	4 RP-SMA	×	×	×	×						
TPM MODULE 2.0	<b>✓</b>			✓	✓	✓		✓	×	×						
NETWORK INTERFACES	2.5GE + 1 SFP port + 1GE (IoT)		1GE (IoT)	2 x 1 / 2.5 / 5 / 10GE	2x5GE uplinks	1GE + 2.5GE		2x1GE + 1GE (IoT)	2x1GE	1GE uplink + 4GE downlink + 1 pair RJ45 passthrough						
USB HOST INTERFACE	<b>★ USB</b> 2.0 Type C		.0 Type C	✓ USB 3.0 Type A	✓ USB 3.0 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 Inte	egrated	BLE 5.1/Zigbee Integrated	BLE 5.1/Zigbee Integrated	BLE 5.1/Zigbe	e Integrated	BLE 5.1 /Zigbee Integrated	×	BLE 5.1 /Zigbee Integrated						
WAN RESILIENCY		×		✓	✓	•	•	✓	✓	×						
POE RESILIENCY/LOADSHARING		×		Active / Active	Active / Active	Active / Standby		Active / Standby	Active / Standby	×						
PoE POWERED		802.3bt/at		802.3bt	802.3bt/at	802.3at (max <b>18W</b> )		802.3at (max <b>18W</b> )		802.3af/at	802.3af	802.3at/af				
PoE PSE		15.4W/30W		*	×	×		×		×	×	<b>✓</b> 802.3af				
DC POWER SUPPORT		×		48V DC (nominal)	48V DC (nominal)	48V DC		48V DC		48V DC		48V DC (nominal)	48V DC (nominal)	48V DC (nominal)		
OPERATING TEMP RANGE	-2	40°C to +65°	С	0°C to 45°C	0°C to 45°C	0°C to 50°C		0°C to 50°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)	86 mm (W) x 29 mm (D) x 162.5 mm (H)		
WEIGHT (excluding packing box & acccessories)	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)	<b>X</b> N/A				
DEEP PACKET INSPECTION		✓		✓	<b>✓</b>	<b>✓</b>		✓		✓	✓	✓				
MAX POWER CONSUMPTION (excluding USB, POE PSE)		70 W		50 W	23 W	24.8 W		19.1 W	13.1 W	12.7 W						
SHIPPED WITH MOUNTING KIT	<b>X</b> To b	e ordered se	eparately	★ To be ordered separately	<b>★</b> To be ordered separately	X To be orde	ered separately	<b>★</b> To be ordered separately	★ To be ordered separately	✓ Wall mounting kit						

Wi-Fi 6 Access Points





		1				
	AP1232	AP1231				
WI-FI STANDARD		<b>802.11ac - Wi-Fi 5</b> Retro-compatible				
TYPE OF USE		Indoor				
MAX THROUGHPUT	4.2 Gbps					
NB OF RADIOS		4 (incl. 1 BLE radio)				
SUPPORT BANDS		2.4GHz & 5GHz				
RADIO MIMO TYPE	Downlink MU-MIMO simultaneous spatial streams					
OFDMA / OFDM		OFDM				
MAX NB OF SSIDs (per AP)		24				
MAX NB OF ASSOCIATED CLIENTS (per AP)		768				
MAX TRANSMIT POWER (per radio chain, MCSO, 2.54GHz/5GHz)		18dBm/18dBm				
INTEGRATED ANTENNAS	×	✓				
ANTENNA PEAK GAIN (2.4 GHz / 5GHz)	(ref page 4)	4.38dBi/4.47dBi				
RF CONNECTORS (RF-SMA)	8	×				
TPM MODULE	✓					
NETWORK INTERFACES	1GE + 2.5GE					
USB HOST INTERFACE		✓USB 2.0 Type A				
BLE or ZIGBEE		✓BLE				
PoE POWERED		✓ 802.3at (max <b>60W</b> )				
PoE PSE		*				
DC POWER SUPPORT		48V DC (nominal)				
OPERATING TEMP RANGE		0 to 45°C				
ENCLOSURE VOLUME (excluding packing box & accessories)	230 mm (W) x 230 mm (D) x 47 mm (H)					
WEIGHT (excluding packing box & acccessories)	1400 g					
RATING	UL2043 (plenum rated)					
DEEP PACKET INSPECTION	✓					
MAX POWER CONSUMPTION (excluding USB, PoE PSE)		27.6 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	IT-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		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
BDB 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), Elavation (35°/25°)	Azimuth (Omni), Elavation (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 & Horizonta
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* 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.