Nomadix Networks WLAN Access Points

Wi-Fi	AP 6WA | Wall Plate	AP 6WB | Wall Plate PoE Out	AP 6SA | Indoor Standard	AP 6NA | Indoor High-Density	AP 6RA | Outdoor
Standard	IEEE 802.11ax - Wi-Fi 6 Concurrent 802.11ax and 802.11a/b/g/n/ac				
Radio	Dual-radio, dual-band: • 2.4GHz 11ax: 2×2 MIMO • 5GHz 11ax: 2x2 MIMO	Dual-radio, dual-band: • 2.4GHz 11ax: 2×2 MIMO • 5GHz 11ax: 2×2 MIMO	Dual-radio, dual-band: • 2.4GHz 11ax: 2x2 MIMO • 5GHz 11ax: 2x2 MIMO	Tri-radio, dual-band: • 2.4GHz 11ax: 4x4 MIMO • 5GHz 11ac: 2x2 MIMO • 5GHz 11ax: 4x4 MIMO	Dual-radio, dual-band: • 2.4GHz 11ax / 5GHz 11ax: 2×2 MIMO • 5GHz 11ax: 2x2 MIMO
Operating Bands May vary by country	• 802.11b/g/n/ax: 2.4GHz~2.483GHz • 802.11a/n/ac/ax: 5.150~5.350GHz, 5.47~5.725GHz, 5.725~5.850GHz	• 802.11b/g/n/ax: 2.4GHz~2.483GHz • 802.11a/n/ac/ax: 5.150GHz~5.350GHz, 5.470GHz~5.725GHz, 5.725GHz~5.850GHz	• 802.11b/g/n/ax, 2.4GHz~2.4835GHz, HE40 • 802.11a/n/ac/ax, 5.150GHz~5.350GHz, HE80/ HE160 • 802.11a/n/ac, 5.470GHz~5.725GHz, 5.725GHz~5.850GHz, HE80	• 802.11b/g/n/ax: 2.4GHz~2.483GHz • 802.11a/n/ac/ax: 5.150GHz~5.350GHz, 5.47GHz~5.725GHz, 5.725GHz~5.850GHz	• 802.11b/g/n/ac/ax: 2.4GHz~2.4835GHz • 802.11a/n/ac/ax: 5GHz: 5.150~5.350GHz, 5.725~5.850GHz
Spatial Streams	4 streams, MU-MIMO	4 streams, MU-MIMO	4 streams, MU-MIMO	10 streams, MU-MIMO	4 streams, MU-MIMO
Max Throughput	Up to 1.775Gbps • 2.4GHz: 574Mbps • 5GHz: 1.2Gbps	Up to 2.976 Gbps • 2.4GHz: 574Mbps • 5GHz: 2.402Gbps	Up to 2.976Gbps • 2.4GHz: 574Mbps • 5GHz: 2.402Gbps	Up to 6.817Gbps • 2.4 GHz: 1.15Gbps • 5.8 GHz: 0.867Gbps • 5.2 GHz: 4.8Gbps	Up to 2.4Gbps • 2.4GHz: 0.575Gbps / 5 GHz: 1.2Gbps • 5 GHz: 1.2Gbps
Modulation	• DSSS: DBPSK@1 Mbps, DQPSK@2 Mbps, and CCK@5.5/11 Mbps • OFDM: BPSK@6/9 Mbps, QPSK@12/18 Mbps, 16-QAM@24 Mbps, 64-QAM@48/54 Mbps • MIMO-OFDM: QPSK, 16QAM, 64QAM, 256QAM and 1024QAM • OFDMA	• DSSS: DBPSK@1 Mbps, DQPSK@2 Mbps, and CCK@5.5/11 Mbps • OFDM: BPSK@6/9 Mbps, QPSK@12/18 Mbps, 16-QAM@24 Mbps, 64-QAM@48/54 Mbps • MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM, 256QAM, and 1024QAM • OFDMA	• OFDM: BPSK@6/9 Mbps, QPSK@12/18 Mbps, 16-QAM@24 Mbps, 64-QAM@48/54 Mbps • DSSS: DBPSK@1 Mbps, DQPSK@2 Mbps, and CCK@5.5/11 Mbps • MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM, 256QAM and1024QAM • OFDMA	• OFDM: BPSK@6/9 Mbps, QPSK@12/18 Mbps, 16-QAM@24 Mbps, 64-QAM@48/54 Mbps • DSSS: DBPSK@1 Mbps, DQPSK@2 Mbps, and CCK@5.5/11 Mbps • MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM • OFDMA	• OFDM: BPSK@6/9 Mbps, QPSK@12/18 Mbps, 16-QAM@24 Mbps, 64-QAM@48/54 Mbps • DSSS: DBPSK@1 Mbps, DQPSK@2 Mbps, and CCK@5.5/11 Mbps • MIMO-OFDM: BPSK, QPSK, 16QAM , 64QAM and 256QAM • OFDM: BPSK@6/9 Mbps, QPSK@12/18 Mbps, 16-QAM@24 Mbps, 64-QAM@48/54 Mbps • DSSS: DBPSK@1 Mbps, DQPSK@2 Mbps, and CCK@5.5/11 Mbps • MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM
Receive Sensitivity	• 11a: -91dBm (1 Mbps), -90dBm (5 Mbps), -87dBm (11 Mbps) • 11b/g: -89dBm (6 Mbps), -82dBm (24 Mbps), -78dBm (36 Mbps), -72dBm (54 Mbps) • 11n: -85dBm@MCS0, -67dBm@MCS7, -67dBm@ MCS7 • 11ac: VHT20: -85dBm (MCS0), -62dBm (MCS8) • 11ac: VHT40: -82dBm (MCS0), -57dBm (MCS9) • 11ac: VHT80: -79dBm (MCS0), -53dBm (MCS9) • 11ax: HE80: -79dBm (MCS0), -53dBm (MCS9), -52dBm (MCS11)	• 802.11b: -91 dBm (1 Mbps), -90 dBm (5 Mbps), -87 dBm (11 Mbps) • 802.11a/g: -89 dBm (6 Mbps), -82 dBm (24 Mbps), -78 dBm (36 Mbps), -72 dBm (54 Mbps) • 802.11n: -85 dBm@MCS0, -67 dBm@MCS7 • 802.11ac: VHT20: -85 dBm (MCS0), -62 dBm (MCS8) • 802.11ac: VHT40: -82 dBm (MCS0), -57 dBm (MCS9) • 802.11ac: VHT80: -79 dBm (MCS0), -53 dBm (MCS9) • 802.11ax: HE80: -79 dBm (MCS0), -53 dBm (MCS9), -52 dBm (MCS11) • 802.11ax: HE160: -79 dBm (MCS0), -53 dBm (MCS9), -50 dBm (MCS11)	• 11b: -96 dBm (1 Mbps), -93dBm (5 Mbps), -89 dBm (11 Mbps) • 11a/g: -91 dBm (6 Mbps), -85 dBm (24 Mbps), -80 dBm (36 Mbps), -74 dBm (54 Mbps) • 11n: -90 dBm@MCS0, -70 dBm@MCS7, -89 dBm @MCS8, -68 dBm@MCS15 • 11ac: HT20: -88 dBm (MCS0), -63 dBm (MCS9) • 11ac: HT40: -85 dBm (MCS0), -60 dBm (MCS9) • 11ac: HT80: -82 dBm (MCS0), -57 dBm (MCS9) • 11ax: HE80: -82 dBm (MCS0), -57 dBm (MCS9), -52 dBm (MCS11) • 11ax: 160 MHz: -77 dBm (MCS0), -50 dBm(MCS11)	• 11b: –96 dBm (1 Mbps), –93 dBm (5 Mbps), –89 dBm (11 Mbps) • 11a/g: –91 dBm (6 Mbps), –85 dBm (24 Mbps), –80 dBm (36 Mbps), –74 dBm (54 Mbps) • 11n: –90 dBm@MCS0, –70 dBm@MCS7, –89 dBm@MCS8, –68 dBm@MCS15 • 11ac: HT20: –88 dBm (MCS0), –63 dBm (MCS9) • 11ac: HT40: –85 dBm (MCS0), –60 dBm (MCS9) • 11ac: HT80: –82 dBm (MCS0), –57 dBm (MCS9) • 11ax: HE80: –82 dBm (MCS0), –57 dBm (MCS9), –52 dBm (MCS11)	• 11b: -91dBm(1 Mbps), -88dBm(5 Mbps), -85dBm(11 Mbps) • 11a/g: -89dBm (6 Mbps), -80dBm (24 Mbps), -76dBm (36 Mbps), -71dBm (54 Mbps) • 11n: -83dBm@MCS0, -65dBm@MCS7, -83dBm@ MCS8, -65dBm@MCS15 • 11ac HT20: -83dBm (MCS0), -57dBm (MCS9) • 11ac HT40: -79dBm (MCS0), -57dBm (MCS9) • 11ac HT80: -76dBm (MCS0), -51dBm (MCS9) • 11ax HE80: -76dBm (MCS0), -49dBm (MCS11)

	AP 6WA | Wall Plate	**AP 6WB** | Wall Plate PoE Out	**AP 6SA** | Indoor Standard	**AP 6NA** | Indoor High-Density	**AP 6RA** | Outdoor
Antenna	Built-in low-radiation omnidirectional antenna • Antenna gain: 3.5dBi	Built-in smart antenna • Antenna gain: 3dBi	Built-in smart antenna • Antenna gain: 3dBi	Built-in smart antenna • Antenna gain: 3dBi	Built-in directional antenna • Loba Orientation: 60 degrees total • Antenna gain: 9dBi
Transmit Power	≤100mw(20dBm) (Country-specific) • 1dBm Adjustable Power	≤100mw(20dBm) (Country-specific) • 1dBm Adjustable Power	≤100mw(20dBm) (Country-specific) • 1dBm Adjustable Power	≤100mw(20dBm) (Country-specific) • 1dBm Adjustable Power	28dBm (Country-specific) • 1dBm Adjustable Power
Other	Bluetooth 5.0, iBeacon	Bluetooth 5.1, iBeacon	Bluetooth 5.1, iBeacon	Bluetooth 5.0, iBeacon	Bluetooth 5.0, iBeacon
Interfaces	• 1 x 10/100/1000BASE-T Ethernet uplink port (PoE/PoE+) • 4 x 10/100/1000BASE-T Ethernet LAN ports • Console port (micro USB) • Reset switch • LED	• 1 x 100/1000/2500BASE-T Ethernet uplink port (PoE/PoE+) • 4 x 10/100/1000BASE-T Ethernet LAN ports (inc. 1 PoE Out port – requires 802.3at) • Console port (micro USB) • Reset Switch • LED	• 1 x 10/100/1000BASE-T Ethernet uplink port (PoE/PoE+) • 1 x 2.5Gbps SFP port • 1 x console port (RJ45) • Reset Switch • LED	• 1 x 10/100/1000BASE-T Ethernet uplink port (PoE/PoE+) • 1 x 10/100/1000BASE-T Ethernet port • 1 x 10/100/1000BASE-T Ethernet port (reserved for future powered IoT modules) • 1 x USB 2.0 Type-A port • Console port (RJ45) • Reset switch • LED	• 1 x 10/100/1000BASE-T Ethernet uplink port (PoE/PoE+) • 1 x 1Gbps SFP port • Console port (RJ45) • Reset switch • LED
Hardware					
Power Supply	• PoE/PoE+ IEEE 802.3af/802.3at • DC 12V, 1.0A (optional adapter)	• PoE/PoE+ IEEE 802.3af/802.3at • DC 48V, 0.6A (optional adapter)	• PoE/PoE+ IEEE 802.3af/802.3at • DC 48V, 0.6A (optional adapter)	• PoE/PoE+ IEEE 802.3af/802.3at • DC 48V, 0.6A (optional adapter)	• PoE/PoE+ IEEE 802.3af/802.3at • DC 44-57V, lowest 0.35A (optional adapter)
Power Consumption	<10W	<25W	<12.95W	<25.5W	<12.95W
IP Rating	IP41	IP41	IP41	IP41	IP68 • Surge protection: common mode +/-9kV • Explosion Proof
Mounting	Indoor, structured cabling outlets in individual rooms • Optional universal mounting kit available for some countries	Indoor, structured cabling outlets in individual rooms • Universal mounting kit included • Built-in anti-theft lock	Indoor, wall or ceiling • Built-in anti-theft lock • Kensington lock	Indoor, wall or ceiling • Built-in anti-theft lock • Kensington lock	Outdoor, pole or Wall
Dimensions	116mm x 86mm x 40mm 3.38 in. x 4.57 in. x 1.57 in.	170 mm × 86 mm × 52 mm 6.69 in. x 3.38 in. x 2.05 in (including mounting bracket)	220 mm x 220 mm x 49 mm 8.66 in. x 8.66 in. x 1.93 in.	220mm x 220mm x 48.85mm 8.7 in. x 8.7 in. x 1.9 in.	251mm × 168mm × 64mm 9.88 in. x 6.61 in. x 2.52 in. (excluding mounting bracket)
Weight	0.37 Kg 0.82 lbs	0.3 Kg, 0.66 lbs (excluding bracket) 0.4 Kg, 0.88 lbs (including bracket)	≤0.6 Kg, 1.32 lbs (excluding bracket) ≤0.8 Kg, 1.76 lbs (including bracket)	≤1.3 Kg, 2.87 lbs (excluding bracket) ≤1.5 Kg, 3.31 lbs (including bracket)	<1.5 Kg 3.3 lbs
Operating Temperature	0°C~45°C, 14°F~113°F	0°C~40°C, 32°F~104°F	-10°C~50°C, 14°F~122°F	-10°C~50°C, 14°F~122°F	-40~65°C, -40°F~149°F
Storage Temperature	-40°C~70°C, -40°F~158°F	-40°C~70°C, -40°F~158°F	-40°C~70°C, -40°F~158°F	-40°C~70°C, -40°F~158°F	-40~65°C, -40°F~185°F
Operating Humidity	5%~95% RH (non-condensing)	5%~95% RH (non-condensing)	5%~95% RH (non-condensing)	5%~95% RH (non-condensing)	0%~100% RH (non-condensing)
Storage Humidity	5%~95% RH (non-condensing)	5%~95% RH (non-condensing)	5%~95% RH (non-condensing)	5%~95% RH (non-condensing)	0%~100% RH (non-condensing)
MTBF	250,000 hours	250,000 hours	250,000 hours	200,000 hours	250,000 hours

Software	AP 6WA | Wall Plate	AP 6WB | Wall Plate PoE Out	AP 6SA | Indoor Standard	AP 6NA | Indoor High-Density	AP 6RA | Outdoor
Maximum Clients per AP	1024	512	1024	1536	1024
BSSID Capacity	8 8 Virtual APs	16 16 Virtual APs	32 32 Virtual APs	32 48 Virtual APs	32 32 Virtual APs
SSID Parameters	SSID hiding, SSID individual configuration (authentication, encryption, VLAN attributes)				
Traffic Management	Intelligent routing, intelligent load balancing, intelligent device recognition, STA control (SSID/radio-based), bandwidth control (STA/SSID/AP-based speed control)				
Security	Data frame filtering (whitelist, static/dynamic blacklist), user isolation, rogue AP detection and countermeasure, dynamic ACL assignment, RADIUS, CPU Protection Policy (CPP), Network Foundation Protection Policy (NFPP), Wireless Intrusion Detection System (WIDS), Radius Security (RadSec)				
Data Encryption	WPA (TKIP), WPA2 (AES), WPA-PSK, WEP (64/128-bit), WPA3 (up to 128bit)				
Authentication	PSK, GPSK, PPSK, Web, PEAP, 802.1x, and Passpoint (Hotspot 2.0)				
Routing	IPv4/IPv6 (static IP address or DHCP), Multicast, IGMP Snooping				
Management	Controller, Telnet, SSH, TFTP, Web, SNMP (SNMPV1,V2c,V3), Syslog, Debug, FAT/FIT/MACC mode switching, APIs				
Mesh	Wi-Fi Mesh topology support. The following APs can be mixed in single hop link relationships between one root AP and several leaf APs: • AP 6WA, AP 6NA, AP 6RA • AP 6WB, AP 6SA				
Certifications					
Safety Standards	GB4943-2011, IEC60950-1, IEC60825-1		GB 4943.1-2011, IEC 62368-1		GB4943, EN/IEC 60950-1
EMC Standards	EN301 489, EN55032, EN55035		EN 300386, GB 19286-2003, GB 17618-1998		GB9254, EN301 489
Health Standards	EN 62311				