

Wireless Access Point 802.11ax, WiFi 6



- WLAN IEEE 802.11ax WiFi 6
- 2.4 GHz up to 600 MBit/s (WLANAP1800)
- 5 GHz up to 1200 MBit/s (WLANAP1800)
- 5 GHz up to 2400 MBit/s (WLANAP2400)
- Multi-user MIMO
- WiFi roaming according to IEEE 802.11k,v,r
- WPA3 security
- 4x 1000Base-T LAN, 1x 1000Base-T WAN

<https://www.wachendorff-prozesstechnik.de/en/WLANAP>

Description

Ultra-high-speed Wi-Fi 6 wireless LAN solution with environmentally friendly design

The WLAN Accesspoint 1800/2400 Industrial Dual Band 802.11ax 1800/2400Mbps is designed for operation in industrial environments with five 10/100/1000T Ethernet ports and a robust IP30 metal housing. The WLAN access point supports MU-MIMO, OFDMA, seamless roaming, beamforming and BSS coloring technology and offers a maximum wireless speed of 1200Mbps in the 5GHz band and 600Mbps in the 2.4GHz band. The maximum number of client users is up to 150 and, with the introduction of Wi-Fi 6 technology, ensures more secure and robust connectivity. As the WLAN access point can operate in a wide temperature range from -40 to 75 degrees Celsius, it can be used in almost any challenging environment. The WLAN access point can be mounted either on a DIN rail or on the wall to make efficient use of the space in the cabinet.

Super Power Dual Band WLAN solution

The WLAN access point, which uses the IEEE 802.11ax Wi-Fi 6 standard, offers high-speed transmission. The maximum wireless speed in the 2.4 GHz band is up to 600 Mbps (WLANAP1800) and in the 5 GHz band up to 1200 Mbps (WLANAP1800) / 2400 Mbps (WLANAP2400). Both the 2.4 GHz and 5 GHz wireless connections can be used simultaneously.

Advantages of MU-MIMO, OFDMA, seamless roaming, beamforming and BSS coloring

The WLAN access point can be installed in public areas such as hotspots, airports and conference rooms, as OFDMA, a multi-user variant of OFDM, enables the AP to communicate with several clients simultaneously (uplink and downlink) by assigning subsets of subcarriers (subcarriers), so-called resource units (RUs), to the individual clients. Using MU-MIMO and seamless roaming technologies provides a better Wi-Fi user experience and reduces the likelihood of users turning off Wi-Fi and putting more strain on the cellular network. Beamforming improves the Wi-Fi signal when you are far away from your router. The BSS color is a numeric identifier for the BSS. 802.11ax radios are able to use the BSS color identifier to distinguish between BSSs when other radios are transmitting on the same channel. These technologies can also solve Wi-Fi congestion issues in open workspaces and conference rooms. The WLAN access point offers higher throughput and the best coverage for up to 150 client users.

WPA3 Next Generation Security for your WLAN solution

WPA3 is the next generation of Wi-Fi security technology, offering the most advanced security protocol on the market. WPA3 makes your connection more secure by preventing hackers from cracking your password, no matter how easy it is. WPA3 also provides more reliable password-based authentication, so that the security of individual users can be better protected.

Ethernet:	4x 10/100/1000BASE-T RJ-45 socket LAN port, auto-negotiation, auto MDI/MDI-X. 1x 10/100/1000BASE-T RJ-45 socket WAN port, auto-negotiation, auto MDI/MDI-X. IEEE208.1Q VLAN SSID to VLAN mapping with up to 4 SSID*s
Network security:	TLS 1.1, TLS 1.2, TLS 1.3, SNMPV3
WLAN:	IEEE 802.11a/n/ax 5 GHz (2Tx2R for WLANAP1800, 4T4R for WLANAP2400) IEEE 802.11g/b/n/ax 2.4 GHz (2Tx2R) (WLANAP1800 only) Data rate at 2.4 GHz: up to 600 Mbps (WLANAP1800 only) Data rate at 5 GHz: up to 1200 Mbps (WLANAP1800), 2400 Mbps (WLANAP2400) Possible channel widths: 20 MHz, 40 MHz, 80 MHz Combined operation: 2.4 GHz and 5 GHz possible (WLANAP2400 only 5 GHz) Number of SSIDs: 8 (4x 2.4 GHz, 4x 5 GHz) Number of wireless clients: 150 (100 recommended) Wireless roaming: IEEE 802.11k, 802.11v, 802.11r
Operating modes:	Access point, gateway, repeater
Wireless security:	WPA2/WPA3 Personal (AES, TKIP, TKIP+AES) WPA/WPA2 Personal (AES, TKIP, TKIP+AES) WPA2 Enterprise WPA/WPA2 Enterprise Enable/Disable SSID Broadcast Wireless MAC address filtering
Configuration:	Web interface USB 3.0 interface SNMP v1, v2c Smart Discovery Utility NMS controller
Alarm inputs/outputs:	2x digital input 24V, max 10 mA 2x digital output open collector 24 VDC, 100 mA

Product details

Power supply:	9 VDC to 54 VDC, 1.8 A Max. 6.4 watts (without load at 54 VDC) Max. 10.8 watts (full load at 54 VDC)
Ambient conditions:	Operating temperature: -40 °C to +75 °C Storage temperature: -40 °C to +75 °C Relative humidity 5 to 95%rH (non-condensing)
Protection class:	IP30
Dimensions (WxHxD):	50 mm x 135 mm x 135 mm
Mounting type:	DIN profile rail, wall mounting
Weight:	773 g
Scope of delivery:	Device Installation instructions Antennas
Manufacturer:	PLANET Technology Corporation

Products Order no.

WLANAP1800	WLAN Access Point/Client IEEE802.11ax 2.4 GHz and 5 GHz WLAN
WLANAP2400	WLAN Access Point/Client IEEE802.11ax 5 GHz WLAN

Accessories Order no.

WLANANT20	Magnetic base antenna with SMA-R connector 2.4 GHz@2 dBi with 1.8 m cable
WLANANT22	Antenna with screw mounting and SMA-R connector 2.4 GHz@2 dBi, 2 m cable
WLANANT55	Magnetic base antenna with RP-SMA connector 2.4 GHz@5 dBi with 1.8 m cable
WLANANT90	Antenna for wall or mast mounting with RP-SMA connector 2.4 GHz@9 dBi w. 1.5 m cable
ECCAIRC01RPSMA	Extension cable WLAN antenna 1 meter
ECCAIRC03RPSMA	Extension cable WLAN antenna 3 meters
ECCAIRC05RPSMA	Extension cable WLAN antenna 5 meters
DRS4-24A	Power supply unit for DIN rail, 85 to 264 VAC, 24 VDC 4.2 A, screw terminal
CPNLRJ45	RJ45 to RJ45 panel connector / panel front IP 68
KABETH10	Patch cable, RJ45 UTP CCA, CAT5e white, 0.3 m
KABETH11	Patch cable, RJ45 UTP CCA, CAT5e white, 1 m
KABETH12	Patch cable, RJ45 UTP CCA, CAT5e white, 2 m



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