


Product Information Dragonfly Outdoor Wi-Fi 6 (802.11ax) Access Point - DAP646

Enterprise WLAN: Wi-Fi 6 access point: Dragonfly Outdoor Wi-Fi 6 (802.11ax) Access Point	
Name	Dragonfly Outdoor Wi-Fi 6 (802.11ax) Access Point
	
Delivery information	
Availability	available
Product description	
Description	Outdoor, dual radio, 5 GHz 802.11ax 4x4:4 and 2.4 GHz 802.11ax 2x2:2, integrated directional antenna; integrated BLE/Zigbee, scanning and security function
Port type and quantity	<ul style="list-style-type: none"> • 1x 10/100/1000/2500Mbps RJ45 port, Eth0, PoE PD (IEEE 802.3bt) • 1x 10/100/1000Mbps RJ45 port, Eth1, PoE PSE (IEEE 802.3at) • 1 x SFP slot 1Gbps • 1 x Reset button
Radio protocol	IEEE 802.11b; 802.11a/g/n/ac; 802.11ax; up to 2.975Gbps (2.402Gbps in 5GHz and 573Mbps in 2.4GHz) data rate
Type	DAP646
Order No.	942999312
Radio technology	
Antenna connector	Built-in 2x2:2 @ 2.4GHz, 4x4:4 @ 5GHz, four integrated 5GHz directional antennas for 4x4 MIMO with peak antenna gain 7.4dBi, two integrated 2.4GHz directional antennas for 2x2 MIMO with peak antenna gain 7.5dBi (H80° V80°)
Frequency band	<ul style="list-style-type: none"> • 2.400 to 2.4835 GHz • 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
Modulation	<ul style="list-style-type: none"> • 802.11b: BPSK, QPSK, CCK • 802.11a/g/n/ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM • 802.11n high-throughput (HT) support: HT 20/40 • 802.11ac very high throughput (VHT) support: VHT 20/40/80 • 802.11ax(HE): BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
Additional radio feature	BLE5/Zigbee (802.15.4), scanning and security function
Mechanical construction	
Dimensions (WxDxH)	243mm x 243mm x 85mm
Weight	2.5kg
Mounting	Pole/Wall mounting
Power requirement	
Operating voltage	Support Power over Ethernet (IEEE 802.3bt, 802.3at)
Power consumption	<ul style="list-style-type: none"> • 24W (802.3at POE in, Eth1 PSE disabled) • 46W (802.3bt Type3 POE in, Eth1 supports 802.3af PSE) • 64W (802.3bt Type4 PoE in, full functions, Eth1 supports 802.3at PSE)
Ambient conditions	
Operating temperature	-40°C...65°C
Storage/transport temperature	-40°C...85°C
Relative humidity(non-condensing)	0%...100%
Protection class	IP67
Wind resistance	up to 100MPH sustained winds; up to 165MPH wind gusts

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Software	
Software features	Auto channel selection; Auto transmit power control; Bandwidth control per SSID; L2 roaming; L3 roaming with DAC software; Band steering; Client smart load balance; NTP server client; Wireless MESH P2P/P2MP
Management	Internal User Database; Zero-touch provisioning (ZTP); System log report; SNMP Trap Notification with DAC software; Floor plan and heat map with DAC software
Security	Captive Portal; Radius Client; Wireless QoS; Client sticky avoidance; User behavior tracking; White / black list; ACL; Rogue AP location and containment; Wireless Attack Detection
Authentication & Encryption	<ul style="list-style-type: none"> • 802.11i, Wi-Fi Protected Access 2 (WPA2), WPA, WPA3 (WPA3-Personal, WPA3 -Enterprise) • 802.1X • Portal page authentication • Advanced Encryption Standard (AES), Temporal Key Integrity Protocol (TKIP)
Management software	DAC Software, Industrial HiVision
Compliance	
IEEE standard	<ul style="list-style-type: none"> • IEEE 802.11a/b/g/n/ac/ax • IEEE 802.11e WMM • IEEE 802.11h, 802.11i, 802.11e QoS • IEEE 802.11k Radio Resource Management • IEEE 802.11v BSS Transition Management • IEEE 802.11r Fast roaming
Basic standard	CE, FCC, UL
Safety	EN61131-2, EN62368-1, EN60950-22
Radio	EN 300 328 (2.4 GHz), EN 301 893 (5 GHz), EN 301 489-1, EN 301 489-17
Medical electrical equipment	EN 60601-1-1, EN 60601-1-2
RoHS	RoHS(EU) 2015/863) and RoHS(GB/T26572-2011) compliant
Wi-Fi Alliance	Wi-Fi 6 certified, Passpoint
Scope of delivery and accessories	
Scope of delivery	Safety instruction, Ethernet cable gland
Accessories to order separately	Mounting kit (AP-MNT-OUT), PoE injector, SFP module (only support HIT SFP module), SFP Gland

RF performance table				
Rate	Receive sensitivity (per chain)		Maximum transmit power (per chain)*	
	2.4 GHz	5 GHz	2.4 GHz	5 GHz
1 Mb/s	-99		22 dBm	
11 Mb/s	-89		22 dBm	
6 Mb/s	-93	-91	22 dBm	21 dBm
54 Mb/s	-76	-74	21 dBm	20 dBm
HT20 (MCS0/8)	-92	-90	22 dBm	21 dBm
HT20 (MCS7/15)	-74	-72	21 dBm	19 dBm
HT40 (MCS0/8)	-91	-88	22 dBm	21 dBm
HT40 (MCS7/15)	-74	-70	21 dBm	18 dBm
VHT20 (MCS0)	-92	-90	22 dBm	21 dBm
VHT20 (MCS8)	-70	-68	20 dBm	18 dBm
VHT40 (MCS0)	-91	-88	22 dBm	21 dBm
VHT40 (MCS9)	-68	-64	20 dBm	18 dBm
VHT80 (MCS0)		-86		21 dBm
VHT80 (MCS9)		-61		18 dBm
HE20 (MCS0)	-94	-92	22 dBm	21 dBm
HE20 (MCS11)	-63	-62	20 dBm	17 dBm
HE40 (MCS0)	-91	-89	22 dBm	21 dBm
HE40 (MCS11)	-62	-60	20 dBm	17 dBm
HE80 (MCS0)		-87		21 dBm
HE80 (MCS11)		-58		17 dBm

*Note: Maximum capability of the hardware provided (excluding antenna gain). Maximum transmit power is limited by local regulatory setting.

For more information please contact:

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