

Product: [DAP646-RW](#)

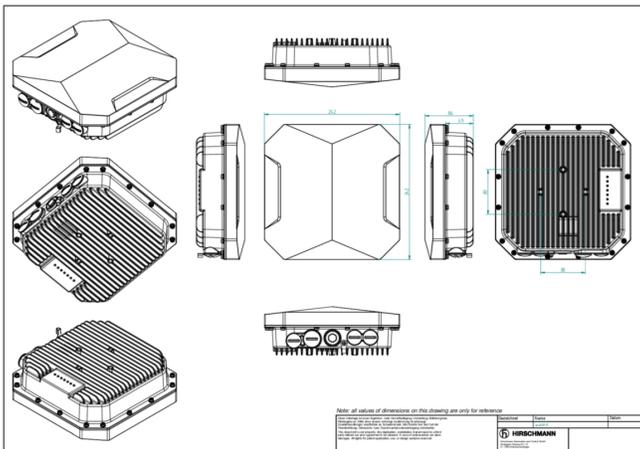
Dragonfly Outdoor Wi-Fi 6 (802.11ax) Access Point



Product Description

Dragonfly 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

Technical Drawing



Technical Specifications

Product description

Type:	DAP646
Name:	DAP646-RW
Part Number:	942999312
Port type and quantity:	1 x 10/100/1000/2500Mbps RJ45 port, Eth0, PoE PD (IEEE 802.3bt); 1 x 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; BLE5/Zigbee (802.15.4), scanning and security function

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:	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:	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
RF Optimization:	Receive sensitivity (per chain): 1Mb/s@2.4GHz=-99; 11Mb/s@2.4GHz=-89; 6Mb/s@2.4GHz=-93 & @5GHz=-91; 54Mb/s@2.4GHz=-76 & @5GHz=-74; HT20 (MCS0/8)@2.4GHz=-92 & @5GHz=-90; HT20 (MCS7/15)@2.4GHz=-74 & @5GHz=-72; HT40 (MCS0/8)@2.4GHz=-91 & @5GHz=-88; HT40 (MCS7/15)@2.4GHz=-74 & @5GHz=-70; VHT20 (MCS0)@2.4GHz=-92 & @5GHz=-90; VHT20 (MCS8)@2.4GHz=-70 & @5GHz=-68; VHT40 (MCS0)@2.4GHz=-91 & @5GHz=-88; VHT40 (MCS9)@2.4GHz=-68 & @5GHz=-64; VHT80 (MCS0)@5GHz=-86; VHT80 (MCS9)@5GHz=-61; HE20 (MCS0)@2.4GHz=-94 & @5GHz=-92; HE20 (MCS11)@2.4GHz=-63 & @5GHz=-62; HE40 (MCS0)@2.4GHz=-91 & @5GHz=-89; HE40 (MCS11)@2.4GHz=-62 & @5GHz=-60; HE80 (MCS0)@5GHz=-87; HE80 (MCS11)@5GHz=-58 Maximum transmit power (per chain)*: 1Mb/s@2.4GHz=22 dBm; 11Mb/s@2.4GHz=22 dBm & @5GHz=19 dBm; HT40 (MCS0/8)@2.4GHz=22 dBm & @5GHz=21 dBm; HT40 (MCS7/15)@2.4GHz=21 dBm & @5GHz=18 dBm; VHT20 (MCS0)@2.4GHz=22 dBm & @5GHz=21 dBm; VHT20 (MCS8)@2.4GHz=20 dBm & @5GHz=18 dBm; VHT40 (MCS0)@2.4GHz=22 dBm & @5GHz=21 dBm; VHT40 (MCS9)@2.4GHz=20 dBm & @5GHz=18 dBm; VHT80 (MCS0)@5GHz=21 dBm; VHT80 (MCS9)@5GHz=18 dBm; HE20 (MCS0)@2.4GHz=22 dBm & @5GHz=21 dBm; HE20 (MCS11)@2.4GHz=20 dBm & @5GHz=17 dBm; HE40 (MCS0)@2.4GHz=22 dBm & @5GHz=21 dBm; HE40 (MCS11)@2.4GHz=20 dBm & @5GHz=17 dBm; HE80 (MCS0)@5GHz=21 dBm; HE80 (MCS11)@5GHz=17 dBm *Note: Maximum capability of the hardware provided (excluding antenna gain). Maximum transmit power is limited by local regulatory setting

Power requirements

Operating Voltage:	Support Power over Ethernet (IEEE 802.3bt, 802.3at)
Power consumption:	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)

Security features

Authentication:	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)
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Software

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, Industrial HiVision
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
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

Ambient conditions

Operating temperature:	-40-65 °C
Storage/transport temperature:	-40°C to +85 °C
Relative humidity (non-condensing):	0 - 100 %
Wind load:	up to 100MPH sustained winds; up to 165MPH wind gusts

Mechanical construction

Width:	243 mm
Height:	85 mm
Depth:	243 mm
Weight:	2.5 kg
Mounting:	Pole/Wall Mount
Protection class:	IP67

Approvals

Safety of industrial control equipment:	EN 61131-2, EN 62368-1, EN 60950-22
FCC:	Yes
UL/cUL:	Yes
CE:	Yes
RoHS Compliant:	RoHS ((EU) 2015/863) and RoHS (GB/T26572-2011) compliant
Radio:	EN 300 328 (2.4 GHz), EN 301 893 (5 GHz), EN 302 502 (5.8 GHz), EN 301 489-1, EN 301 489-17

Scope of delivery and accessories

Accessories to Order Separately:	Mounting kit (AP-MNT-OUT), PoE injector, SFP module (only support HIT SFP module), SFP Gland
Scope of delivery:	Safety instruction, Ethernet cable gland

History

Update and Revision:	Revision Number: 0.10 Revision Date: 09-07-2023
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