

SmartAir DVW-4036H/4038H

High-performance, Dual-band 802.11ac Wi-Fi Access Points

Key features & Benefits

802.11ac Compliant Explicit Beamforming

Significantly reduces coverage cold spot and increases throughput to mobile devices incorporating 1x1, 2x2, 3x3 802.11ac WiFi devices. And it delivers a increase in Wi-Fi signal coverage minimizing the number of APs required to service any area

802.11ac LDPC and TxBF technologies

802.11ac LDPC and TxBF technologies are supported. With both technologies, tcp throughput is increased up to 200% more.

Flexible deployment options

Standalone or controller-based deployment

High Performance, High Power

DVW-4000 series can be applied to high performance, high density environment because it supports 802.11ac wireless standard and high RF power(up to 23dBm)

Learn More (Controller-based Only)

Smart Channel™ manages the 2.4-GHz and 5-GHz radio bands and ensures that APs stay clear of RF interference.

Smart Power™ manages RF output power of APs belonged to the specific AP Group. When coverage hole is detected, it increases output power of adjacent Aps.

Smart Access™ optimizes Wi-Fi client performance as users roam and RF conditions change. If a mobile device moves out of range of an AP or RF interference impedes performance, it automatically steers it to a better AP.

Smart Speed™ monitors and measures the throughput between controller and APs to make sure that enough bandwidth is guranteed between them.

Smart Path™ monitors the wired path between controller and APs by sending ICMP packets to detect the failure of wired network.



Product Overview

The DVW-4000 series is a high-performance 802.11ac and 802.11abgn indoor access point purpose built for high-density deployments. This access point is designed to operate in heavy-user and mission critical environments such as healthcare facilities, universities, conference centers, arenas, and stadiums.

This high-performance access point is equally adept at serving high-bandwidth video applications as well as low-latency voice applications. The DVW-4038H comes with an integrated three antenna for ease of installation. The DVW-4036H requires additional installation and includes three RP-SMA antenna connectors supporting wide-band(both 2.4GHz and 5GHz) antennas. Unique to this class of access point, the power efficient DVW-4000 series uses 802.3at Power over Ethernet (PoE) without reducing its performance nor degrading its enterprise-grade capabilities. An optional external power supply is available for deployments that do not support Power over Ethernet.

The DVW-4000 series are built on the newest Wi-Fi technology including 802.11ac, dynamic radio management, and spectrum analysis with interference classification, beam forming, self-forming and self-healing, security, role-based authentication, Authorization, and access control. The 3x3:3 platform is capable of delivering 1.75Gbps over-the-air-performance. The use of a dual core CPU and a network co-processor for offloading frame processing ensures that there are no bottlenecks in the data path when packets are processed through the slow path from the air-to-the wire.



Features

General

- ~ supports 2 radios(2.4GHz and 5GHz)
- ~ 3x3 MIMO implementation for high-performance
- ~ 3 spatial streams
- ~ Max link rate 600Mbps 2.4GHz radio
- ~ Max link rate 1.3Gbps 5GHz radio
- ~ 16 SSIDs per each radio

Radio Resource Management

- ~ Dynamic Channel Control/Selection
- ~ Automatic transmit power and channel control
- ~ Self-healing with coverage hole detection
- ~ Band steering with multiple steering modes
- ~ Load balancing of clients
- ~ Airtime fairness
- ~ Adaptive Noise Immunity
- ~ Analyzing RF Spectrum
- ~ Smart Mesh with indoor/outdoor Aps
- ~ Performance protection in congested RF environments
- ~ Mitigates co-channel interference with coordinated access
- ~ Mitigates adjacent channel interference with optimized receiver sensitivity
- ~ Efficient reuse of channels at shorter intervals
- ~ Mitigates non 802.11 interference without dedicated radios

Service and Networking

- ~ L2 fast roaming
 - Opportunistic Key Caching
 - PMK Key Caching
- ~ L3 Roaming
 - GRE tunnel between APs
- ~ Bridging or NAT for LAN/Wireless
- ~ DHCP Server/Client
- ~ VLAN assignment per SSID
 - Optionally, by filer-id of external RADIUS server
- ~ Q-in-Q tagging

Management and Configuration

- ~ Multiple user interface options :
 - Centralized management via SmartAir Controller
 - Built-in web-based management
 - Command line interface (CLI)
- ~ Remote firmware upgrade and configuration

Security, Authentication and Encryption

- ~ Stateful inspection firewall
 - TCP/UDP flooding
 - SYN flooding
 - ARP flooding
 - IP Spoofing
 - IP Sweeping
 - Port Scanning
 - Session Limit by source or destination
- ~ AP access control from remote device
- ~ ACL policy with IP address, port of source and destination
- ~ WPA-PSK / WPA2-PSK
- ~ IEEE 802.11i / WPA2 with passphrase (WPA2-Personal)
- ~ IEEE 802.1X (WPA2-Enterprise) and hardware-accelerated AES
- ~ EAP Types
 - EAP-TLS
 - EAP-TTLS/MSCHAPv2
 - PEAPv0/EAP-MSCHAPv2
 - PEAPv1/EAP-GTC
 - EAP-SIM
 - EAP-AKA/EAP-AKA Prime
 - EAP-FAST
- ~ TKIP/AES
- ~ High availability for authentication
 - When disconnecting with controller, AP try to authenticate RADIUS server directly for wireless stations

QoS

- ~ Wireless Multimedia Extensions(WME, subnet of IEEE 802.11e)
- ~ U-APSD/WMM Power Save
- ~ Prioritizes voice over data for both tagged and untagged traffic
- ~ Rule and role based QoS processing
- ~ QoS policy and Rate Limitation per group, station
 - DSCP
 - 802.1P
 - 802.1P/WMM

Regulatory & Certifications

- ~ KCC certified
- ~ CE Marked
- ~ Wi-Fi Alliance-certified 802.11a/b/g/n/ac



DAVOLINK contact-us

• Business inquiry

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DAVOLINK Overview

Name : DAVOLINK Inc.

Business Area : Broadband Convergence Solution

Product : VoIP G/W, Broadband Access G/W

Location : 864-7 Gwanyang-Dong Dongan-Gu Anyang-Si Gyeonggi-Do, KOREA

Web Site : <http://www.davolink.co.kr>

Foundation : 26, June, 2000

Employee : 51 persons



General Specifications

Physical Characteristics	
Physical Size	" 225 mm x 225 mm x 40 mm
Weight	" 580 g
LED	" Power (Blue/Red : Noraml/Booting, Alarm) " Internet (Blue : Link/Active) " WLAN (Blue : Active)

Power	
Power	" External Power Adaptor Input : 110-240V AC Output : 12V DC, 3A(DC-038 Type) " Power over Ethernet 802.3at(Type 1 & 2)
Consumption	" 24W(typical), 30W(Max)

Interfaces	
WAN port	" One 10/100/1000M base-T interfaces with POE+ (RJ-45 Tap down & Yellow color)
LAN port	" One 10/100/1000M base-T interfaces with auto MDI/MDI-X (RJ-45 Tap down & Black color)
USB port	" One USB 2.0 Host Port for AUX interface
WLAN	" Internal PCB ANT 3T3R : 2dBi PCB type (DVW-4038H) " External SMA ANT 3T3R : 5dBi SMA type (DVW-4036H)
Console port	" RS-232C interface for management, RJ-45

Environmental Conditions	
Operating temperature	" 0°C to 50°C
Storage temperature	" -20°C to 60°C
Operating Humidity	" 10% to 85% Non-Condensing
Storage Humidity	" 95%

Radio Specifications

Wireless Modulation	
802.11a	" BPSK, QPSK, 16QAM, 64QAM with OFDM
802.11b	" Direct-sequence spread-spectrum(DSSS)
802.11g	" DSSS and Orthogonal frequency-division multiplexing (OFDM)
802.11n	" BPSK, QPSK, 16QAM, 64QAM, 256QAM* with OFDM " High-throughput (HT) support: HT 20/40 " Packet aggregation: A-MPDU, A-MSDU " Advanced Features: LDPC, STBC and TxBF
802.11ac	" BPSK, QPSK, 16QAM, 64QAM, 256QAM with OFDM " Packet aggregation: A-MPDU, A-MSDU " Very High-Throughput (VHT): VHT20/40/80 " Advanced Features: LDPC, STBC, Maximum Likelihood (ML) Detection

Output Power	
2.4 GHz	" 802.11b : □ > 23.0dBm @ all rates " 802.11g : □ > 23.0dBm @ all rates " 802.11n HT20 / HT40: □ > 23.0dBm @ MCS0 ~ MCS6 □ > 22.0dBm @ MCS7
5 GHz	" 802.11a : □ > 23.0dBm @ all rates " 802.11n HT20 / HT40: □ > 23.0dBm @ MCS0 ~ MCS6 □ > 22.0dBm @ MCS7 " 802.11ac VHT20/40/80 : □ > 23.0dBm @ MCS0 ~ MCS6 > 22.0dBm @ MCS7 > 18.0dBm @ MCS8 > 17.0dBm @ MCS9

Receiver Sensitivity	
2.4 GHz	" 802.11b : □ -87dBm (min) @ 11Mbps □ -95dBm (min) @ 1Mbps " 802.11g : □ -91dBm (min) @ 6Mbps □ -74dBm (min) @ 54Mbps " 802.11n HT20 : □ -90dBm (min) @ MCS0 □ -70dBm (min) @ MCS7 □ -87dBm (min) @ MCS8 □ -67dBm (min) @ MCS15 " 802.11n HT40 : □ -87dBm (min) @ MCS0 □ -67dBm (min) @ MCS7 □ -84dBm (min) @ MCS8 □ -64dBm (min) @ MCS15
5 GHz	" 802.11a : □ -91dBm (min) @ 6Mbps □ -74dBm (min) @ 54Mbps " 802.11ac VHT20 : □ -68dBm (min) @ MCS8 □ -N/A@ MCS9 802.11ac VHT40 : □ -65dBm (min) @ MCS8 □ -62dBm (min) @ MCS9 " 802.11ac VHT80 : □ -62dBm (min) @ MCS8 □ -59dBm (min) @ MCS9

* Note 1 : Turbo-QAM can be enabled on 2.4GHz radio, but it was not enabled because heavy interference is in 2.4GHz radio and it make the performance degrade.

