

## PRODUCT BRIEF

Intel® Dual Band Wireless-AC 3168

3<sup>rd</sup> Gen 802.11ac, Dual Band, 1x1 Wi-Fi + Bluetooth® 4.2



# Intel® Dual Band Wireless-AC 3168



#### **Exceptional Wi-Fi. Exceptional Features. Exceptional Connected Experience**

The Intel® Dual Band Wireless-AC 3168 is Intel's 3<sup>rd</sup> generation 802.11ac, dual band, 1x1 Wi-Fi + Bluetooth® adapter. It's engineered to be faster¹, stronger¹, greener¹ than previous gen Intel 802.11ac 1x1 products with lower power in idle modes, Intel® Dynamic Regulatory Solution and complete Microsoft Windows 10\* support. Combined with Intel® Core™ processors and exceptional Intel wireless innovations, the Intel® Dual Band Wireless-AC 3168 dramatically reshapes your connected experience at home, work or on the go.

#### Experience the Intel Difference







More Speed Better Coverage Larger Capacity Delivers up to 3x faster Wi-Fi speeds (up to 433 Mbps²) than 802.11n, with up to 3x more bandwidth per stream for more users and devices³. Advanced optional 802.11ac specification features implemented that improve channel reliability resulting in better coverage and performance. Intel® Wireless-AC enables smoother streaming of higher resolution videos, fewer dropped connections and less congestion, and more speeds further away from the router.



Bluetooth® 4.2

802.11ac, Dual Band, 80MHz, 1x1

Dual mode Bluetooth\* 4.2 connects to the newest low energy Bluetooth\* products as well as your familiar devices, such as headsets, keyboard, mice and more.



Microsoft Windows 10\*

Full support for latest Microsoft Windows 10\* OS



Worldwide Regulatory Support Intel® Dynamic Regulatory Solution Delivers regulatory busting technology that enables one Intel® Wireless-AC adapter shipped to customers worldwide with the regulatory requirements of most countries in a single database on the Wi-Fi module. The Intel® Dual Band Wireless-AC 3168 detects its location and automatically configures the Wi-Fi to match it. Regulatory updates are easily managed during the product lifecycle so users can travel worldwide without compliance issues.



#### Intel® Dual Band Wireless-AC 3168 Technical Specifications

#### General

Dimensions (W x H x D) M.2 2230: 22 mm x 30 mm x 2.4 mm [1.5mm Max (Top Side)/ 0.1mm Max (Bottom Side)]

Weight M.2 2230: 2.4g

Radio ON/OFF Control Supported in both hardware and software

M.2: PCIe, USB Connector interface LED Output On/Off Operating Temperature (Adapter Shield) 0º to +80° C

**Humidity Non-Operating** 50% to 90% RH non-condensing (at temperatures of 25°C to 35°C)

Operating Systems Microsoft Windows 7\*, Microsoft Windows 8.1\*, Microsoft Windows 10\*, Linux\* (most features not

available on Linux)

Wi-Fi CERTIFIED\* a/b/g/n/ac, WMM\*, WMM-PS\*, WPA\*, WPA2\*, WPS2, Protected Management Frames, Wi-Fi

Direct\* for peer to peer device connections, Wi-Fi Miracast\* as Source. IEEE WLAN Standard IEEE 802.11a/b/g/n/ac, 802.11d, 802.11e, 802.11i, 802.11h, 802.11w Architecture Infrastructure and SoftAP; Supports simultaneous Client and SoftAP modes

Roaming<sup>4</sup> Supports seamless roaming between respective access points (802.11b, 802.11g, 802.11a/b/g, 802.11a/b/g/n, and 802.11ac)

Dual Mode Bluetooth® 4.2 BLE Bluetooth\*

Security<sup>5</sup>

Encryption

Wi-Fi Alliance

WPA and WPA2, 802.1X (EAP-TLS, TTLS, PEAP), EAP-SIM, EAP-AKA Authentication

**Authentication Protocols** PAP, CHAP, TLS, GTC, MS-CHAP\*, MS-CHAPv2

64-bit and 128-bit WEP, AES-CCMP

Wi-Fi Direct\* Encryption and Authentication WPA2, AES-CCMP

802.11w (WFA- Protected Management Frames) Management Frame Protection

Compliance

Regulatory For a list of country approvals, please contact your local Intel representatives.

**US Government** FIPS6.FISMA

UL, C-UL, CB (IEC 60950-1) **Product Safety** 

Product Name	Model Number	Version
Intel <sup>®</sup> Dual Band Wireless-AC 3168	3168NGW	802.11ac, 1x1, Bluetooth* 4.2, PCIe, USB, M.2 2230



## For more information on Intel® Wireless products, visit intel.com/wireless

- <sup>1</sup> Compared to Intel® Dual Band Wireless-AC 3160.
- <sup>2</sup> Based on the theoretical maximum bandwidth enabled by 1x1 802.11ac implementations. Actual wireless throughput and/or range will vary depending on your specific operating system, hardware and software configurations. Check with your PC manufacturer for details.
- <sup>3</sup> Compared to 802.11n 40MHz channels, 802.11ac 80MHz provides 3x more bandwidth per stream (Max data rate for 1x1 802.11n 40MHz channel is 150Mbps; Max data rate for 1x1 802.11ac 80MHz channel = 433Mbps).
- <sup>4</sup> Roaming is supported only within each respective band and mode of access points.
- 5 Some security solutions may not be supported by your PC's operating system and/or by your PC manufacturer. Check with your PC manufacturer for details on availability.
- <sup>6</sup> Microsoft Windows 7\* and Microsoft Windows 8.1\*, and Microsoft Windows 10\*.

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products.

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