



## 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 faster<sup>1</sup>, stronger<sup>1</sup>, greener<sup>1</sup> 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**

802.11ac, Dual Band, 80MHz, 1x1

Delivers up to 3x faster Wi-Fi speeds (up to 433 Mbps<sup>2</sup>) than 802.11n, with up to 3x more bandwidth per stream for more users and devices<sup>3</sup>. 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**

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.



An increase in data means the need for **greater Wi-Fi** capacity. Prepare for the future of Wi-Fi with **802.11ac**.

#IntelWireless

## 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
Connector interface	M,2: PCIe, USB
LED Output	On/Off
Operating Temperature (Adapter Shield)	0° 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 Alliance	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)
Bluetooth*	Dual Mode Bluetooth® 4.2 BLE

### Security<sup>5</sup>

Authentication	WPA and WPA2, 802.1X (EAP-TLS, TTLS, PEAP), EAP-SIM, EAP-AKA
Authentication Protocols	PAP, CHAP, TLS, GTC, MS-CHAP*, MS-CHAPv2
Encryption	64-bit and 128-bit WEP, AES-CCMP
Wi-Fi Direct* Encryption and Authentication	WPA2, AES-CCMP
Management Frame Protection	802.11w (WFA- Protected Management Frames)

### Compliance

Regulatory	For a list of country approvals, please contact your local Intel representatives.
US Government	FIPS <sup>6</sup> , FISMA
Product Safety	UL, C-UL, CB (IEC 60950-1)

Product Name	Model Number	Version
Intel® 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](http://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.

<sup>5</sup> 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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