

PRODUCT BRIEF Intel® Dual Band Wireless-AC 8265 4<sup>th</sup> Generation Intel 802.11ac, Dual Band, 2x2 Wi-Fi + Bluetooth\* 4.2



## Intel<sup>®</sup> Dual Band Wireless-AC 8265



## Ultra Wi-Fi. Ultra Features. Ultra Connected Experience

The Intel® Dual Band Wireless-AC 8265 adapter supports Bluetooth\* 4.2 and 2x2 11ac Wi-Fi delivering up to 867Mbps<sup>1</sup> including wave 2 features such as downlink MU-MIMO providing up to 3x increase in user speeds in dense deployments, supporting fast downloads and long battery life compared to legacy 11ac devices<sup>2</sup>. Combined with Intel® Core<sup>™</sup> processors and exceptional Intel wireless innovations, the Intel® Dual Band Wireless-AC 8265 dramatically reshapes your connected experience at home, work or on the go.

4 <sup>th</sup> Generation Intel 802.11ac Wireless					
802.11ac	Faster Speed Better Coverage Larger Capacity , Dual Band, 80MHz, 2x2, MU-MIMO	Delivers up to 3x faster Wi-Fi speeds (up to 867 Mbps) than 802.11n, with up to 3x more bandwidth per stream for more users and devices <sup>3</sup> . Downlink MU-MIMO allows an Access Point to simultaneously transmit data to multiple clients and can improve overall downlink network capacity by up to 3x <sup>2</sup> . Intel <sup>®</sup> Wireless-AC enables smoother streaming of higher resolution videos, fewer dropped connections and less congestion, and faster speed further away from the router.			
Bluetooth* 4.2		Dual mode Bluetooth* 4.2 enables BR/EDR-low energy devices to act as a hub and peripheral at the same time. Connects to the newest low energy Bluetooth* products as well as your familiar devices, such as headsets, keyboard, mice and more.			
Microsoft Windows 10* Ready		Full support for latest Microsoft Windows 10* OS.			
	M.2 2230 or M.2 1216 Form Factors	Multiple form-factors, including M.2 2230 and M.2 1216 modules enable system configuration and platform usages flexibility. The M.2 1216 form factor delivers 70% smaller footprint and lower profile optimized for thin-and-light designs <sup>4</sup> .			
Experience the Intel Difference					
<b>M</b>	Worldwide Regulatory Support Intel® Dynamic Regulatory Solution	Enables worldwide regulatory compliance on a single Intel® Wireless-AC adapter SKU. The Intel® Dual Band Wireless-AC 8265 detects its location and automatically optimizes the Wi-Fi settings to local regulatory requirements, simplifying travel experience and global enterprise procurement. Future regulatory changes are easily managed during the product lifecycle.			
Business-Class Wireless					
	<u>Intel<sup>±</sup> vPro<sup>™</sup> Technology</u> <sup>5</sup>	Supports Intel's hardware-based security and management features built into Intel® Core™ vPro™ processors and chipsets that enables IT to manage PCs virtually anywhere, anytime while reducing deployment costs, improving security and ROI.			
<b>6%</b> ≎ ⊒ ⊑	<u>Intel<sup>±</sup> Active Management</u> <u>Technology</u> <sup>6</sup>	Using integrated platform capabilities and popular third-party management and security applications, Intel® AMT allows IT or managed service providers to better discover, repair, and protect their networked computing assets. Intel® AMT is a feature of Intel® Core™ processors with Intel® vPro™ technology.			
<sup>o</sup>	Intel <sup>®</sup> PROSet/Wireless Software <sup>7</sup>	Includes advanced IT tools to improve security, reduce complexity and save IT time and money. Streamlines client deployments and allows remote management of wireless settings and profiles by IT managers.			

## Intel® Dual Band Wireless-AC 8265 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)]				
	M.2 1216: 12 mm x 16 mm x 1.8 mm				
Weight	M.2 2230: 2.6g				
	M.2 1216: 0.6g				
Antenna Diversity	Supported				
Radio ON/OFF Control	Supported				
Connector interface	M.2: PCIe, USB, or UART (M.2 1216 only)				
Operating Temperature (Adapter Shield)	0°C 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* (limited feature support)				
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, 802.11h, 802.11i, 802.11w; 802.11r, 802.11k, 802.11v pending				
	OS support; Fine Timing Measurement based on 802.11REVmc				
Roaming <sup>8</sup>	Supports seamless roaming between access points				
Bluetooth*	Dual Mode Bluetooth* 4.2, BLE				
Security <sup>9</sup>					
Authentication	WPA and WPA2, 802.1X (EAP-TLS, TTLS, PEAP, LEAP, EAP-FAST), EAP-SIM, EAP-AKA, EAP-AKA'				
Authentication Protocols	PAP, CHAP, TLS, GTC, MS-CHAP*, MS-CHAPv2				
Encryption	64-bit and 128-bit WEP, 128-bit AES-CCMP				
Wi-Fi Direct* Encryption and Authentication	WPA2-PSK, AES-CCMP				
Compliance					
Regulatory	For a list of country approvals, please contact your local Intel representatives.				
US Government	FIPS <sup>10</sup> ,FISMA				
Product Safety	UL, C-ÚL, CB (IEC 60950-1)				

Product Name	Model Number	Version
Intel <sup>®</sup> Dual Band Wireless-AC 8265	8265NGWH	802.11ac, 2x2, Bluetooth* 4.2, PCIe, USB, LTE Coexistence, eFEM, M.2 2230 HE
Intel <sup>®</sup> Dual Band Wireless-AC 8265	8265NGW	802.11ac, 2x2, Bluetooth* 4.2, PCIe, USB, M.2 2230 MS
Intel <sup>®</sup> Dual Band Wireless-AC 8265	8265D2W	802.11ac, 2x2, Bluetooth* 4.2, PCIe, LTE Coexistence, M.2 1216 SD



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

<sup>1</sup> Based on the theoretical maximum bandwidth enabled by 2x2 802.11ac implementations. Actual wireless throughput and/or range will vary depending on your specific operating system, hardware and software configurations. Check with your device manufacturer for details.

<sup>2</sup> 802.11ac downlink MU-MIMO technology allows concurrently serving multiple devices simultaneously, in turn increasing network capacity by up to 3x while improving per-user throughput. <sup>3</sup> Compared to 802.11n 40MHz channels, 802.11ac 80MHz provides 3x more bandwidth per stream (Max data rate for 2x2 802.11n 40MHz channel is 300Mbps, 150Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps per stream; Max data rate for 2x2 802.11n 40MHz channel is 867Mbps, 433Mbps, 433Mbps, 433Mbps, 433Mbps, 433Mbps, 433Mbps, 434Mbps, 434M

<sup>4</sup> Compared to the footprint of an M.2 2230 module. An M.2 1216 module is 192mm<sup>2</sup> (12mmx16mm), approximately 70% smaller than the footprint of a M.2 2230 module (22mmx30mm = 660mm<sup>2</sup>) <sup>5</sup> Intel<sup>®</sup> vPro<sup>™</sup> Technology is sophisticated and requires setup and activation. Availability of features and results will depend upon the setup and configuration of your hardware, software and IT environment. To learn more visit: <u>http://www.intel.com/technology/vpro</u>

<sup>6</sup>Requires activation and a system with a corporate network connection, an Intel<sup>®</sup> AMT-enabled chipset, network hardware and software. For notebooks, Intel<sup>®</sup> AMT may be unavailable or limited over a host OS-based VPN, when connecting wirelessly, on battery power, sleeping, hibernating or powered off. Results dependent upon hardware, setup & configuration. For more information, visit <u>http://www.intel.com/technology/platform-technology/intel-amt</u>

<sup>7</sup> Intel<sup>®</sup> PROSet/Wireless Software may not be supported by your device manufacturer. Check with your device manufacturer for details on availability.

<sup>8</sup> Roaming is supported only within each respective band and mode of access points.

<sup>9</sup> Some security solutions may not be supported by your device operating system and/or by your device manufacturer. Check with your device manufacturer for details on availability.

<sup>10</sup> Microsoft Windows 7\*, 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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