PRODUCT BRIEF

Intel® Tri-Band Wireless-AC 18265

WiGig (802.11ad) & 4th Gen 802.11ac, Dual Band, 2x2 Wi-Fi + Bluetooth® 4.2

Intel® Wireless Gigabit Antenna-M 10101R

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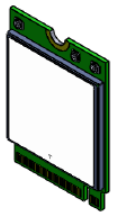

Intel® Tri-Band Wireless-AC 18265

Intel® Wireless Gigabit Antenna-M 10101R

Ultra Wi-Fi. Ultra Features. Ultra Connected Experience

The Intel® Tri-Band Wireless-AC 18265 delivers high-speed, 60 GHz WiGig (802.11ad) wireless docking connectivity for mobile client device (2 in 1, tablet, laptop) with up to 4.7 Gbps of bidirectional throughput. It's available in the smaller M.2 Type 2230 form factor optimized for thinner and lighter mobile device designs. Complemented with the Intel® Wireless Gigabit Sink-M 13100, it enables wire-equivalent user experience for wireless docking, peripherals access and device-to-device communications[1].

The Intel® Tri-Band Wireless-AC 18265 includes Intel® Dual Band Wireless-AC 8265 802.11ac, dual band, 2x2 Wi-Fi + Bluetooth* 4.2 adapter delivers up to 3x faster speeds (up to 867 Mbps[2]) and 3x more capacity[3] for less time waiting and more time doing. Combined with Intel ® Core™ 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.

Intel® Wireless Gigabit (802.11ad)	Benefits
Wireless Gigabit Docking (Client)	Allows wire-equivalent quality for up to two full HD displays, low-latency human interface (HID) devices, and multi-Gbps IO for on-desk productivity experience.
Wireless Access to Peripherials	Enables wire-free multi-Gbps connectivity for any USB 3.0 device, such as storage or HD camera that is WiGig-enabled or connected to a Wireless Gigabit dock station
Device to Device	Allows multi-Gbps connectivity between devices
WiGig Display Extension (WDE)	WiGig Wireless Display Extension, for visually-lossless, low latency, robust video and HD audio
WiGig Serial Extension (WSE)	WiGig Wireless Serial Extension, for efficient, native USB 3.0 transfers including Bulk and Isochronous
Client Dock Management	Dedicated, user-friendly Intel® Wireless Gigabit Dock Manager utility on the client to configure the dock settings (password protectable)
4th Gen Intel 802.11ac Wireless	
More Speed Better Coverage Larger Capacity **802.11ac, Dual Band, 80MHz, 2x2, MU-MIMO**	Delivers up to 3x faster Wi-Fi speeds (up to 867 Mbps[4])) than 802.11n, with up to 3x more bandwidth per stream for more users and devices.[5] 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[6]. 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 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.

[1] Intel has run user testing on a 6th Gen platform to compare the Wireless Docking performance to a wired configuration, the results show that users do not distinguish between the wired and wireless solutions (display acuity, USB responsiveness). System Configuration Details: 6th Generation Intel® Core™ M5-6Y54processor (2C4T, 1.1GHz/2.7GHz/2.4GHz; GT2 up to 900MHz), Memory: (2x2GB) LPDDR3-1600, HD: 240GB SSD, Display: 12" touchscreen 2560x1440, OS: Windows* 10 Pro.

[2] 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.

[3] 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.

[4] 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.

[5] 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.

[6] Theoretical MU-MIMO gains.

Microsoft Windows 10* Ready	Full support for latest Microsoft Windows 10* OS.
M.2 2230 Form Factors	M.2 2230 module enable system configuration and platform usages flexibility, has the same form factor as other connectivity modules.

Experience the Intel Difference

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

Intel® vPro™ Technology[7]	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.
Intel® Active Management Technology[8]	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.
Intel® PROSet/Wireless Software[9]	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® Tri-Band Wireless-AC 18265 Technical Specifications

General

Dimensions (H x W 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
Antenna Diversity	Supported
Radio ON/OFF Control	Supported
Connector interface	M.2: PCIe, USB, Interface to Intel® Wireless Gigabit-Antenna M10101 Module using X-FL (single coax cable to carry power, IF and control)
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* (limited feature support), Android
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[10]	Supports seamless roaming between respective access points
Bluetooth*	Dual Mode Bluetooth* 4.2, BLE

Security[11]

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-PSK, AES-CCMP

Compliance

Regulatory	For a list of country approvals, please contact your local Intel representatives.
US Government	FIPS[12] ,FISMA
Product Safety	UL, C-UL, CB (IEC 60950-1)

Intel® Wireless Gigabit Antenna-M 10101R Module Specifications

Dimensions (H x W x D)	7 mm × 19.3 mm × 1.8 mm
Weight	1g
Connector interface	X.FL
Operating Temperature (Adapter Shield)	0º to +80°C

[7] Intel® vPro™ 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: http://www.intel.com/technology/vpro

[8] Requires activation and a system with a corporate network connection, an Intel® AMT-enabled chipset, network hardware and software. For notebooks, Intel® 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 http://www.intel.com/technology/platform-technology/intel-amt

[9] Intel® PROSet/Wireless Software may not be supported by your device manufacturer. Check with your device manufacturer for details on availability.

[10] Roaming is supported only within each respective band and mode of access points.

[11] 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.

[12] Microsoft Windows 7*, Microsoft Windows 8.1* and Microsoft Windows 10*.

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

Product Name	Model Number	Version
Intel® Tri-Band Wireless-AC 18265	18265NGW	802.11ad, 802.11ac, 2x2, Bluetooth* 4.2, PCIe, USB, LTE Coexistence
Intel® Wireless Gigabit Antenna-M 10101R	10101RRFW	802.11ad radio module

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

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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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