Datasheet

HP Engage Flex Mini Retail System

An operations powerhouse that fits anywhere

Drive every facet of your business—from back-office operations to digital customer engagements, to point-of-sale—with the HP Engage Flex Mini. It packs big performance into an incredibly compact device and provides near endless configuration options, so you get a system tailored for your needs.



Petite yet powerful

- This mighty powerhouse is designed to deliver across your business without taking up valuable space. It offers up to a 10th Gen Intel® Core™ i9 processor[1], 64GB memory, PCIe NVMe storage and optional Intel® Optane™[2,3] for fast, seamless operations.

Endlessly configurable

- Design a system for your unique business operations with abundant options across storage, memory, and processor. Further customize with two configurable I/O ports to attach accessories and displays, and a choice of Windows 10 Pro or Windows 10 IoT[4].

Industry leading security and reliability

- Business interruptions are not an option. That's why the HP Engage Flex Mini was designed to pass rigorous military standard testing[5] and has security features built-in—protecting from the BIOS to the browser, above and below the OS.

Accelerate your edge solutions

- With up to an Intel® Core™ i9 processor[1] and 64GB memory[2], get all the computing power you need to run sensor-based Edge solutions[6] including inventory management, theft detection, promotion management, customer engagement and workforce management.
- Rest easy with a system that has a 36-month manufacturing lifecycle and is designed to pass 120,000 hours of HP Total Test Process[7]. Add an optional dust filter to extend lifespan.[2]
- Customize your device by adding an optional[2] 2nd flex port (USB-A or Serial) or 2nd RJ-45 network port to seamlessly connect to the peripherals you need—multiple displays, scanners, printers, and more.
- Seamlessly drive business operations and deliver dynamic experiences with a 10th Gen Intel® Core™ processor[1] that delivers powerful performance and productivity.
- The optional HP Engage Advanced Fanless Hub[2] connects with just one cable and provides numerous ports and I/O options to connect additional peripherals.
- HP's most advanced security features come standard including HP BIOSphere Gen4.[8]with automatic updates and security checks and HP Sure Start, HP Sure Run, HP Sure Click[9], and more.[10]
- Get a fast, reliable connection, even in dense wireless environments with Intel Wi-Fi 6[11] with Bluetooth® 5.2.
- Rest easy that your IT investment is supported by a three year onsite standard limited warranty.[12]
- Spread the word with demos, videos, and dynamic content with integrated Intel® graphics and DisplayPort™ support for up to three daisy-chained digital signage displays.

HP Engage Flex Mini Retail System Specifications Table





Available Operating Systems	Windows 10 Pro 64[1,28] Windows 10 IoT Enterprise 2019 LTSC 64[1] FreeDOS
Processor family	10th Generation Intel® Core™ i9 processor; 10th Generation Intel® Core™ i7 processor; 10th Generation Intel® Core™ i5 processor; 10th Generation Intel® Core™ i3 processor; Intel® Pentium® processor; Intel® Celeron® processor
Available Processors[8]	Intel® Core™ i3-10100T with Intel® UHD Graphics 630 (3.0 GHz base frequency, up to 3.8 GHz with Intel® Turbo Boost Technology, 6 MB L3 cache, 4 cores) Intel® Core™ i5-10500T with Intel® UHD Graphics 630 (2.3 GHz base frequency, up to 3.8 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 6 cores), supports Intel® vPro® Technology Intel® Core™ i9-10900T with Intel® UHD Graphics 630 (1.9 GHz base frequency, up to 4.6 GHz with Intel® Turbo Boost Technology, 20 MB L3 cache, 10 cores), supports Intel® vPro® Technology Intel® Pentium® Gold G6400T with Intel® UHD Graphics 610 (3.4 GHz base frequency, 4 MB L3 cache, 2 cores) Intel® Core™ i7-10700T with Intel® UHD Graphics 630 (2.0 GHz base frequency, up to 4.5 GHz with Intel® Turbo Boost Technology, 16 MB L3 cache, 8 cores), supports Intel® vPro® Technology Intel® Celeron® G5905T with Intel® UHD Graphics 610 (3.3 GHz base frequency, 4MB L3 cache, 2 cores)
Chipset	Intel® Q470
Form factor	Mini
Maximum memory	64 GB DDR4-2666 SDRAM; 64 GB DDR4-3200 SDRAM [25,26,27] Transfer rates up to 2666 MT/s for Celeron®, Pentium®, Intel® Core™ i3 and Intel® Core™ i5 processors. Transfer rates up to 2933 MT/s for Intel® Core™ i7 and i9 processors
Memory slots	2 SODIMM
Internal storage	500 GB up to 2 TB SATA HDD[3] 500 GB SATA SED Opal 2[3] 500 GB SATA HDD FIPS SED[3] 256 GB up to 512 GB PCIe® NVMe™ M.2 SSD[3] 128 GB up to 2 TB PCIe® NVMe™ TLC M.2 SSD[3] 256 GB up to 512 GB PCIe® NVMe™ SED Opal 2 TLC M.2 SSD[3] 256 GB up to 512 GB Intel® Optane™ Memory H10 with Solid State Storage[3,4]
Storage acceleration[29]	16 GB Intel® Optane™ memory H10
Available Graphics	Integrated: Intel® UHD Graphics 610; Intel® UHD Graphics 630 (Integrated graphics will depend on processor.)
Audio	Realtek ALC3205 codec, internal speaker, combo microphone/headphone jack
Expansion slots	1 M.2 2230; 2 M.2 2280 (1 M.2 slot for WLAN and 2 M.2 2280 slots for storage.)
Ports and Connectors	Front: 1 headphone/microphone combo; 1 SuperSpeed USB Type-A 5Gbps signaling rate (charging); 1 SuperSpeed USB Type-C® 10Gbps signaling rate; 1 SuperSpeed USB Type-A 10Gbps signaling rate Rear: 1 RJ-45; 2 SuperSpeed USB Type-A 5Gbps signaling rate; 2 DisplayPort™ 1.4; 2 SuperSpeed USB Type-A 10Gbps signaling rate
Optional Ports	Flex IO port 1 – choose one of the following options: 1 DisplayPort™ 1.4, 1 HDMI 2.0, 1 VGA, 1 serial, 1 SuperSpeed USB Type-C® 10Gbps signaling rate (100W USB Power Delivery, Alt Mode DisplayPort™), 2.5 Gbps NIC; Flex IO port 2 – choose one of the following options: 2 USB Type-A 480Mbps signaling rate or serial[24]
Available Keyboards	HP USB wired keyboard; HP Wireless Business Slim Keyboard; HP Wired Desktop 320K Keyboard; HP USB Premium Keyboard; HP Wireless Premium Keyboard; HP USB Business Slim SmartCard CCID Keyboard; HP USB and PS/2 washable keyboard
Available Pointing Devices	HP USB 1000 dpi laser mouse; HP USB and PS/2 washable mouse; HP USB Hardened Mouse; HP USB optical mouse; HP USB Premium Mouse; HP USB Fingerprint Mouse; HP Wired Desktop 320M Mouse
Communications[7,8]	Intel® I219LM GbE Intel® Wi-Fi 6 AX201 (2x2) and Bluetooth® 5.1 M.2 combo, non-vPro® Intel® Wi-Fi 6 AX201 (2x2) and Bluetooth® 5.1 M.2 combo, vPro®
Drive Bays	One 2.5" [5]
Environmental	Operating temperature: 10 to 35°C; Operating humidity: 10 to 90% RH
Software[9]	HP Support Assistant; HP Jumpstart; HP Noise Cancellation Software; HP Desktop Support Utilities; Buy Office (sold separately)
Security management[13,14,15,16,17,18,19,20,21]	Setup password (via BIOS); Trusted Platform Module TPM 2.0 Embedded Security Chip; DriveLock; HP Power On Authentication; SATA port disablement (via BIOS); Support for chassis padlocks and cable lock devices; HP Sure Sense; HP Sure Click; HP Secure Erase; HP Sure Recover Gen3; HP Sure Run Gen3; HP Client Security Manager Gen6; HP BIOsphere Gen6; HP Sure Start Gen6; HP DriveLock and Automatic DriveLock; HP Cloud Recovery; HP Management Integration Kit for Microsoft System Center Configuration Management Gen 4; HP Image Assistant Gen5
Management features	HP BIOS Config Utility (download); HP Client Catalog (download); HP Driver Packs (download); HP System Software Manager (download)[10,11,12]
Power	65 W external power adapter, up to 89% efficiency; 280 W external power adapter, up to 89% efficiency; 90 W external power adapter, up to 89% efficiency, active PFC
Dimensions	6.97 x 6.89 x 1.34 in; 17.7 x 17.5 x 3.4 cm
Weight	2.75 lb; 1.25 kg (Exact weight depends on configuration.)
Energy efficiency compliance[22]	ENERGY STAR® certified; EPEAT® 2019 registered where applicable
Sustainable impact specifications[23]	Low Halogen

HP Engage Flex Mini Retail System

Messaging Footnotes

[1] Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.
[2] Optional, configurable feature that must be configured at purchase.
[3] Intel® Optane™ memory system acceleration does not replace or increase the DRAM in your system. Available for HP commercial desktops and notebooks and for select HP workstations (HP Z240 Tower/SFF, Z2 Mini, ZBook Studio, 15 and 17 G5) and requires a SATA HDD, 7th Gen or higher Intel® Core™ processor or Intel ® Xeon® processor E3-1200 V6 product family or higher, BIOS version with Intel® Optane™ supported, Windows 10 version 1703 or higher, M.2 type 2280-S1-B-M connector on a PCH Remapped PCIe Controller and Lanes in a x2 or x4 configuration with B-M keys that meet NVMe™ Spec 1.1, and an Intel® Rapid Storage Technology (Intel® RST) 15.5 driver.
[4] Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com.
[5] MIL-STD-810G is not intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Accidental damage requires an optional HP Accidental Damage Protection Care Pack.
[6] Sensor-based Edge solutions sold separately.
[7] HP Total Test Process test results are not a guarantee of future performance under these test conditions. Accidental damage requires an optional HP Accidental Damage Protection Care Pack.
[8] HP BIOSphere Gen4 requires Intel® or AMD® 7th generation processors.
[9] HP Sure Click is only supported on Intel Core i3, i5 and i7 processors.
[10] HP Sure Click, Sure Run, Sure Recover & Sure Sense is supported on Win 10 Pro & Win 10 IoT Enterprise 2019 LTSC; but not on Win 10 IoT Enterprise 2016 LTSB.
[11] Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 (802.11ax) is backwards compatible with prior 802.11 specs. The specifications for Wi-Fi 6 are draft specifications and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11ax WLAN devices. Only available in countries where 802.11ax is supported.
[12] 3-year onsite limited warranty, depending on country.

Technical Specifications Footnotes

[1] Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com
[3] For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of disk is reserved for system recovery software.
[4] Intel® Optane™ memory system acceleration does not replace or increase the DRAM in your system. Requires 8th Gen or higher Intel® Core™ processor, BIOS version with Intel® Optane™ supported, Windows 10 64-bit, and an Intel® Rapid Storage Technology (Intel® RST) driver.
[5] The 2.5" SATA drive bay can be both HDD and SSD.
[6] Intel® Optane™ memory is sold separately. Intel® Optane™ memory system acceleration does not replace or increase the DRAM in your system. Available for HP commercial desktops and notebooks and for select HP workstations (HP Z240 Tower/SFF, Z2 Mini, ZBook Studio, 15 and 17 G5) and requires a SATA HDD, 7th Gen or higher Intel® Core™ processor or Intel ® Xeon® processor E3-1200 V6 product family or higher, BIOS version with Intel® Optane™ supported, Windows 10 version 1703 or higher, M.2 type 2280-S1-B-M connector on a PCH Remapped PCIe Controller and Lanes in a x2 or x4 configuration with B-M keys that meet NVMe™ Spec 1.1, and an Intel® Rapid Storage Technology (Intel® RST) 15.5 driver.
[7] Wireless access point and internet service required.
[8] For full Intel® vPro™ functionality, Windows, a vPro supported processor, vPro enabled chipset or higher and vPro enabled WLAN card are required. Some functionality, such as Intel Active management technology and Intel Virtualization technology, requires additional 3rd party software in order to run. Availability of future "virtual appliances" applications for Intel vPro technology is dependent on 3rd party software providers. Compatibility of this generation of Intel vPro technology-based hardware with future "virtual appliances" is yet to be determined.
[9] HP Support Assistant: Requires Windows and Internet access.
[10] HP Driver Packs: Not preinstalled, however available for download at http://www.hp.com/go/clientmanagement.
[11] HP Manageability Integration Kit can be downloaded from http://www.hp.com/go/clientmanagement.
[12] HP Cloud Recovery is available for HP Elite and Pro desktops and laptops PCs with Intel® or AMD processors and requires an open, wired network connection. Note: You must back up important files, data, photos, videos, etc. before use to avoid loss of data. Detail please refer to: https://support.hp.com/us-en/document/c05115630.
[13] HP BIOSphere Gen6 is available on select HP Pro and Elite PCs. Features may vary depending on the platform and configurations.
[14] Secure Erase for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88. "Clear" sanitation method. HP Secure Erase does not support platforms with Intel® Optane™.
[15] HP Sure Click requires Windows 10 Pro or Enterprise. See https://bit.ly/2PrLT6A_SureClick for complete details.
[16] HP Client Security Manager Gen6 requires Windows and is available on the select HP Elite and Pro PCs.
[17] HP Sure Start Gen6 is available on select HP PCs.
[18] HP Sure Recover Gen3 is available on select HP PCs and requires an open network connection. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.
[19] HP Sure Run Gen3 is available on select Windows 10 based HP Pro, Elite and Workstation PCs with select Intel® or AMD processors.
[20] HP Sure Sense requires Windows 10.
[21] HP Storage Drivelock does not work with Self Encrypting or Optane™ based storage.
[22] Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. Status varies by country. Visit www.epeat.net for more information.
[23] External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
[24] Ports are optional. Max of one Flex Port 1 can be configured, Serial port sold separately or as an optional feature. Max of one Flex Port 2 can be configured, and must be configured at time of purchase.
[25] For systems configured with more than 3 GB of memory and a 32-bit operating system, all memory may not be available due to system resource requirements. Addressing memory above 4 GB requires a 64-bit operating system. Memory modules support data transfer rates up to 2666 MT/s; actual data rate is determined by the system's configured processor. See processor specifications for supported memory data rate.
[26] All memory slots are customer accessible / upgradeable.
[27] Actual data rate is determined by both the system's configured processor and memory module installed.
[28] HP tested Windows 10, version 1809 on this platform. For testing information on newer versions of Windows 10, please see https://support.hp.com/document/c05195282
[29] Intel® Optane™ H10 memory system acceleration does not replace or increase the DRAM in your system. Requires 8th Gen or higher Intel® Core™ processor, BIOS version with Intel® Optane™ supported, Windows 10 64-bit, and an Intel® Rapid Storage Technology (Intel® RST) driver.

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