



# HP Engage Flex Pro Retail System

Do more in your store and beyond

Efficiently manage your retail business from the store floor to the back office with the HP Engage Flex Pro, our stable, secure, and highest-performing retail platform that delivers maximum flexibility for a range of deployments.



HP recommends Windows 10 Pro for business

- Windows 10 Pro<sup>1</sup>

## Build your best solution

- Configure the perfect fit for your users and environment, whether it's point of sale, video surveillance, processing/controlling, digital signage or OEM with flexible connectivity, graphics, and networking options and a suite of retail peripherals.<sup>2</sup>

## Poised to perform and expand with your business

- Tackle every retail challenge with a powerful 8th Gen Intel® processor<sup>3</sup> and Intel® Optane™ memory.<sup>4</sup> Adjust capacity as your needs change with endless storage options like an Intel® Optane™ SSD, SATA or M.2—up to five total drives per system.<sup>2</sup>

## Secure, manageable, and reliable out of the box

- Reduce the cost and complexity of managing your platforms and secure your critical assets with innovative, integrated, and proactive security and manageability features for your system and its data.

## Featuring

- Stick with an OS you know with your choice of Windows 10 Pro, Windows IoT or FreeDOS.
- Get hardware-enforced self-healing protection from HP Sure Start Gen4, manage your system across the OS with HP Manageability Integration Kit, maintain critical OS processes with HP Sure Run, and restore your image over a network with HP Sure Recover.
- Minimize downtime with a design that goes the distance. It passes HP's Total Test Process and has a steel chassis and gold-plated connectors that are tested to withstand temperatures up to 40° C. Extend lifespan with an optional dust filter.
- HP Device as a Service delivers the HP Engage Flex Pro as a complete solution of hardware, insightful analytics, and services for every phase of the device lifecycle—with one, easy, predictable price per device.
- Deploy quickly with HP Configuration Services. Plan ahead with a five-year lifecycle that lets you roll out on your schedule. Get the reassurance of a three-year worldwide limited warranty, and extend protection with optional HP Care services.

## HP Engage Flex Pro Retail System Specifications Table



Available Operating Systems	Windows 10 Pro 64 <sup>1</sup> Windows 10 IoT Enterprise 2019 LTSC 64 <sup>1</sup> Windows 10 IoT Enterprise 2016 LTSC 64 Android (image download) FreeDOS 2.0
Processor family <sup>3</sup>	8th Generation Intel® Core™ i5 + processor (Core™ i5 and Intel® Optane™ memory); 8th Generation Intel® Core™ i7 processor (i7 8700); 8th Generation Intel® Core™ i3 + processor (Core™ i3 and Intel® Optane™ memory); 8th Generation Intel® Core™ i5 processor (i5 8500, i5 8500T); Intel® Pentium® processor; Intel® Celeron® processor; 8th Generation Intel® Core™ i7 + processor (Core™ i7 and Intel® Optane™ memory)
Available Processors <sup>4,5,6,7</sup>	Intel® Core™ i3 8100 (Core™ i3 and 16 GB Intel® Optane™ memory) with Intel® UHD Graphics 630 (3.6 GHz, 6 MB cache, 4 cores) Intel® Core™ i7+ 8700 vPro™ (Core™ i7 and 16 GB Intel® Optane™ memory) with Intel® UHD Graphics 630 (3.2 GHz base frequency, up to 4.6 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores) Intel® Celeron® G4900 with Intel® UHD Graphics 610 (3.1 GHz, 2 MB cache, 2 cores) Intel® Core™ i3 8100T (Core™ i3 and 16 GB Intel® Optane™ memory) with Intel® UHD Graphics 630 (3.1 GHz, 6 MB cache, 4 cores) Intel® Pentium® Gold G5400 with Intel® UHD Graphics 610 (3.7 GHz, 4 MB cache, 2 cores) Intel® Core™ i5 8500 vPro™ with Intel® UHD Graphics 630 (3 GHz base frequency, up to 4.1 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores) Intel® Core™ i7 8700 vPro™ with Intel® UHD Graphics 630 (3.2 GHz base frequency, up to 4.6 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores) Intel® Core™ i5 8500T vPro™ with Intel® UHD Graphics 630 (2.1 GHz base frequency, up to 3.5 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores) Intel® Core™ i5+ 8500 vPro™ (Core™ i5 and 16 GB Intel® Optane™ memory) with Intel® UHD Graphics 630 (3 GHz base frequency, up to 4.1 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores) Intel® Core™ i5+ 8500T vPro™ (Core™ i5 and 16 GB Intel® Optane™ memory) with Intel® UHD Graphics 630 (2.1 GHz base frequency, up to 3.5 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores)
Chipset	Intel® Q370
Viewing angle	##displayviewangle##
Form factor	Small form factor
Maximum memory	64 GB DDR4-2666 SDRAM <sup>8,9</sup> Transfer rates up to 2666 MT/s.
Memory slots	4 DIMM
Internal storage	500 GB up to 2 TB 7200 rpm SATA <sup>10</sup> 128 GB up to 512 GB 5400 rpm SATA SSHD <sup>10</sup> 256 GB SATA SSD SED Opal 2 <sup>10</sup> 128 GB up to 1 TB M.2 SATA SSD <sup>10</sup>
Optical drive	Slim SATA DVD-ROM; Slim SATA DVD-Writer
Available Graphics	Integrated: Intel® UHD Graphics 630; Intel® UHD Graphics 610 Discrete: NVIDIA® Quadro® P400 (4 GB GDDR5 dedicated); AMD Radeon™ R7 430 Graphics (2 GB GDDR5 dedicated)
Audio	Conexant CX20632 codec, universal audio jack, headset and headphone front ports (3.5 mm), multi-streaming capable
Expansion slots	1 half-height PCIe x16 (x4); 2 full-height PCIe (x1); 1 half-height PCIe x16 (x16) <sup>18</sup>
Ports and Connectors	Rear: 1 headset connector; 1 RJ-45; 1 configurable video port; 1 USB 3.1 Gen 1 (charging); 2 configurable video ports; 1 DisplayPort™ 2.0 Front: 2 USB 3.1 Gen 1 <sup>11</sup> (Additional optional ports include up to 6 RS-232 (5/12V), up to 6 12V USB, 1 24V USB, 1 RJ-12 cash drawer.)
LAN <sup>12</sup> Network Interface <sup>12</sup>	Intel® I210-T1 PCIe® GbE Intel® I219-LM GbE
WLAN <sup>13</sup>	Intel® Dual Band Wireless-AC 9260 802.11ac (2x2) and Bluetooth® 5 M.2, vPro™
Drive Bays	One 5.25"; Two 3.5"; Two M.2
Environmental	Operating temperature: 10 to 40°C; Operating humidity: 20 to 85% RH
Available Software <sup>14</sup>	Buy Office; HP ePrint Driver; HP Recovery Manager; HP Support Assistant; Absolute Persistence module; HP Hotkey Support; HP Velocity; HP Wireless Wakeup; HP ePrint Driver + JetAdvantage
Security management <sup>15,16,17,18,19,20,21,22</sup>	Power-on password (via BIOS); Setup password (via BIOS); Trusted Platform Module TPM 2.0 Embedded Security Chip; USB enable/disable (via BIOS); Serial enable/disable (via BIOS); DriveLock; HP BIOSphere; HP Password Manager; HP Power On Authentication; Intel® Identity Protection Technology (Intel® IPT); RAID configurations; Removable media write/boot control; SATA port disablement (via BIOS); Support for chassis padlocks and cable lock devices; HP Client Security Suite Gen 4; HP Sure Start Gen 4; Solenoid lock and hood sensor; HP Sure Run; Parallel enable/disable (via BIOS); Front USB enable/disable (via BIOS); HP BIOSphere Gen4
Management features	HP BIOS Config Utility (download); HP Client Catalog (download); HP Driver Packs (download); HP System Software Manager (download); Update BIOS via Cloud or Network (BIOS feature); HP Management Integration Kit for Microsoft System Center Configuration Management Gen 2
Power <sup>23</sup>	250 W internal power adapter, up to 90% efficiency, active PFC
Dimensions	13.27 x 14.96 x 3.94 in; 33.7 x 38 x 10 cm
Weight	14.2 lb; 6.44 kg
Ergonomic features	##displaytiltswiv##
Energy efficiency compliance <sup>24</sup>	ENERGY STAR® certified and EPEAT® registered configurations available
Environmental specifications <sup>25</sup>	Low halogen

## HP Engage Flex Pro Retail System

### Messaging Footnotes

- <sup>1</sup> 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>.
- <sup>2</sup> Sold separately or as configurable add-on features.
- <sup>3</sup> Multi-Core 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.
- <sup>4</sup> Intel® Optane™ memory system acceleration does not replace or increase the DRAM in your system and requires configuration with an optional Intel® Core™ i5 (or 7) + processor.
- <sup>5</sup> HP Sure Start Gen4 is available on the HP Engage Flex Pro equipped with 8th generation Intel® processors.
- <sup>6</sup> HP Manageability Integration Kit can be downloaded from <http://www.hp.com/go/clientmanagement>.
- <sup>7</sup> HP Sure Run is available on the HP Engage Flex Pro equipped with 8th generation Intel® processors.
- <sup>8</sup> HP Sure Recover is available on the HP Engage Flex Pro with 8th generation Intel® processors and requires an open, wired network connection. Not available on platforms with multiple internal storage drives or Intel® Optane™. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.
- <sup>9</sup> HP Total Test Process testing is not a guarantee of future performance under these test conditions. Accidental damage requires an optional HP Accidental Damage Protection Care Pack.
- <sup>10</sup> Please contact your HP representative or authorized HP reseller for details. Device support may vary by country. Features vary among Standard, Enhanced, and Premium HP Device as a Service plans. HP services are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase. Customer may have additional statutory rights according to applicable local laws, and such rights are not in any way affected by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product.
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### Technical Specifications Footnotes

- <sup>1</sup> 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>.
- <sup>3</sup> NOTE: Your product does not support Windows 8 or Windows 7. In accordance with Microsoft's support policy, HP does not support the Windows® 8 or Windows 7 operating system on products configured with Intel® and AMD 7th generation and forward processors or provide any Windows® 8 or Windows 7 drivers on <http://www.support.hp.com>.
- <sup>4</sup> Multi-core 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.
- <sup>5</sup> Intel® Turbo Boost technology requires a PC with a processor with Intel Turbo Boost capability. Intel Turbo Boost performance varies depending on hardware, software and overall system configuration. See [www.intel.com/technology/turboboost](http://www.intel.com/technology/turboboost) for more information.
- <sup>6</sup> Intel® Optane™ memory system acceleration does not replace or increase the DRAM in your system and requires configuration with an optional Intel® Core™ i5 (or 7) + processor.
- <sup>7</sup> Some functionality of this technology, 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.
- <sup>8</sup> 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 2133 MT/s; actual data rate is determined by the system's configured processor. See processor specifications for supported memory data rate. All memory slots are customer accessible / upgradeable.
- <sup>9</sup> All memory slots are customer accessible / upgradeable.
- <sup>10</sup> For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 16 GB (for Windows 7) and 36 GB (for Windows 8.1/10) of system disk is reserved for the system recovery software.
- <sup>11</sup> (2) USB 3.1 Gen 1 (5 Gb/s signaling data rate. Actual throughput may vary); allows for wake from S4/S5 with keyboard/mouse when connected and enabled in BIOS.
- <sup>12</sup> Intel® I210-T1 PCIe® GbE: Sold separately or as an optional feature.
- <sup>13</sup> Wireless access point and internet service required. Availability of public wireless access points is limited. The specifications for the 802.11ac WLAN 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 802.11ac WLAN devices.
- <sup>14</sup> HP Sure Recover is available on the HP Engage Flex Pro with 8th generation Intel® processors and requires an open, wired network connection. Not available on platforms with multiple internal storage drives or Intel® Optane™. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.
- <sup>15</sup> HP BIOSphere Gen4 Requires Intel® 8th Gen processors. Features may vary depending on the platform and configurations.
- <sup>16</sup> HP Client Security Suite Gen 4 Requires Windows and Intel® 8th generation processors.
- <sup>17</sup> HP Password Manager Requires Internet Explorer or Chrome or FireFox. Some websites and applications may not be supported. User may need to enable or allow the add-on / extension in the internet browser.
- <sup>18</sup> HP Sure Start Gen4 is available on the HP Engage Flex Pro equipped with 8th generation Intel® processors.
- <sup>19</sup> Intel® Identity Protection Technology (Intel® IPT) Models configured with Intel® Core™ processors have the ability to utilize advanced security protection for online transactions. Intel® Identity Protection Technology (Intel® IPT), used in conjunction with participating web sites, provides double identity authentication by adding a hardware component in addition to the usual user name and password. Intel® Identity Protection Technology (Intel® IPT) is initialized through an HP Client Security module.
- <sup>20</sup> Firmware TPM is version 2.0. Hardware TPM is v1.2, which is a subset of the TPM 2.0 specification version v0.89 as implemented by Intel Platform Trust Technology (PTT).
- <sup>21</sup> RAID configuration is optional and does require a second hard drive.
- <sup>22</sup> HP Sure Run is available on HP Engage Flex Pro products equipped with 8th generation Intel® or AMD processors.
- <sup>23</sup> The TWR can support a single graphics card up to 75W. When configured with dual graphics cards support is limited to 35W for each.
- <sup>24</sup> EPEAT® registered where applicable. EPEAT registration varies by country. See [www.epeat.net](http://www.epeat.net) for registration status by country. See HP's 3rd party option store for solar energy accessory [www.hp.com/go/options](http://www.hp.com/go/options).
- <sup>25</sup> External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.

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