



HP Engage One Pro 15.6 G2 AiO System (BD2Y2PA)

Overview

Sleek design. Fast performance. Customizable experiences.

Elevate your customer experiences and power business operations. The HP Engage One Pro G2 combines a sleek yet durable design with powerful compute and is customizable for your specific business needs.

Sophisticated design meets versatile deployment.

The sleek HP Engage One Pro G2 is purposefully designed for custom deployments. Choose from three screen sizes, multiple operating systems, and a vast ecosystem of peripherals that attach flush to the screen keeping countertops clutter-free.

Durability you need. Security you can trust.

This system is built to endure. HP Engage One Pro G2 is backed by military standard testing and resists dust and liquid intrusion (IP44 rated)[3]. HP Wolf Security for Business creates a hardware-enforced, always-on defense against modern threats. [4]

Fast performance for exceptional experiences.

Enable fast, seamless customer transactions and interactions with up to an Intel® Core™ i7 processor[1], 64GB DDR5 memory, 8 TB NVME M.2 SSD storage, and WiFi 7[2]. Manage your system remotely with optional Intel® vPro™.

Sustainability in Action.

HP is innovating with purpose and intention to drive impactful, positive, lasting change. This device is crafted with at least 85% post-consumer recycled[5] plastic, comes in recycled packaging[6], and is ENERGY STAR® certified and EPEAT® Gold registered.

[1] 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.

[2] Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 7 (802.11BE) functionality requires compatible Windows 11 OS, compatible processor, and separately purchased Wi-Fi 7 router to support backwards compatibility with prior 802.11 specs. Available in countries where Wi-Fi 7 is supported. The specification for 802.11BE is a draft specification and is not final. If the final specification differs from the draft specification, it may affect the ability of the device to communicate with other 802.11BE devices.

[3] Liquid intrusion IP44 rating only applies to head unit. MIL-STD-810G testing 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 requires an optional HP Accidental Damage Protection Care Pack.

[4] HP Wolf Security for Business requires Windows 10 or 11 Pro and higher, includes various HP security features and is available on HP Pro, Elite, RPOS and Workstation products. See product details for included security features.

[5] Recycled plastic is expressed as a percentage of the total weight plastic. Post-consumer recycled is based on the definition set in the EPEAT standard for computers, IEEE 1680.1-2018 standard.

[6] 100% of HP paper-based packaging is from recycled or certified sustainable sources. HP paper and fiber based packaging for PCs, displays, home and office print, and supplies is reported by suppliers as recycled or certified, with a minimum of 97% by volume verified by HP. Packaging is the box that comes with the product and all paper-based materials inside the box. Packaging for personal systems accessories and spare parts is not included.

Specifications

Operating system	Windows 11 Pro
Processor family	Intel® Core™ i5 14th generation processor
Processor	Intel® Core™ i5-14500T (up to 4.8 GHz Max Turbo frequency, 24 MB L3 cache, 14 cores, 20 threads) ^[6,7]
Processor technology	Intel® vPro® Technology
Memory	8 GB DDR5-5600 MT/s (1 x 8 GB)
Memory Slots	2 SODIMM
Internal Storage	256 GB PCIe® NVMe™ M.2 SSD
Internal drive bays	Two M.2
Graphics	Integrated
Graphics (integrated)	Intel® UHD Graphics 770
Display	39.6 cm (15.6") diagonal, FHD (1920 x 1080), touch, IPS, anti-glare, 400 nits, 45% NTSC
Display	15.6" diagonal, FHD (1920 x 1080), touch, IPS, anti-glare, 400 nits, 45% NTSC ^[15,16]
Audio	Integrated HD audio with Realtek ALC3247 codec with standards internal speakers and stereo headphone jack, 2W
Dimensions (W x D x H)	15.2 x 1 x 15.2 cm (pro stand); 39.16 x 2.64 x 24.1 cm (head landscape); 39.16 x 24.1 x 2.64 cm (head portrait); 23.15 x 11 x 11 cm (advanced stand) (Stand only.)
Dimensions (W x D x H)	0.6 x 0.4 x 0.6 in (pro stand); 9.1 x 4.3 x 4.3 in (advanced stand); 15.4 x 1 x 9.5 in (head landscape); 15.4 x 1 x 9.5 in (head portrait) (Stand only.)
Weight	3.37 kg (15.6" display models); 0.06 kg (pro stand); 1.7 kg (advanced stand)
Weight	7.4 lb (15.6" display models); 1 lb (pro stand); 3.7 lb (advanced stand)
Ports	2 USB Type-A 5Gbps signaling rate (HP Sleep and Charge); 2 USB Type-A 5Gbps signaling rate; 1 audio-out; 1 USB Type-C® 10Gbps signaling rate (140W USB Power Delivery, DisplayPort™) ^[8]
Expansion slots	1 M.2 2230 ^[22]
Ports	1 security lock slot
Ports	1 USB Type-A 5Gbps signaling rate
Network interface	Intel® I219-LM GbE
Wireless	Intel® Wi-Fi 7 BE200 (2x2) and Bluetooth® 5.4 wireless card, non-vPro®
Power	280 W external power adapter, up to 89% efficiency

Sustainable impact specifications

Low halogen; 25% ITE-derived closed loop plastic; 75% post-consumer recycled plastic; 80% recycled aluminum in the rear plate; 15% recycle SGCC steel chassis; 50% ocean-bound plastic in fan enclosure

UPC number

198990891552

Additional specifications

Accessories	A2XQ3AV Engage One Pro AiO RJ45 Extender Cable; A2XQ4AV HP Engage Indicator Light; A2XU2AV HP DIB EngageOnePro 6.6 Display; A40ZCAV HP Engage 10 inch Attached Display; A40ZDAV HP Engage 10 White Display; A40ZFAV HP Engage 10t Attached Display; A40ZGAV HP Engage 10t White Display; A2XR9AV HP Engage One Pro Integrated MSR; A2XU6AV HP Engage One Pro Integrated MSR White; A2XT9AV HP Adv Fan Attach Port Replicator; A2XU3AV HP Engage 2x20 Black Attached Display; A2XU4AV HP Engage One Pro FingerPrint Reader; A2XV2AV HP USB to Serial Port Adapter; A2XW2AV HP 6.6w Attached Display; A2XW3AV HP Engage 6.6 Attached Display
Barcode reader	Optional HP Engage One Pro Integrated Barcode Scanner
Bluetooth version	Bluetooth® 5.4
Color gamut	45% NTSC
Display brightness	400
Display brightness uom	nits
Display panel technology	IPS
Display resolution (pixels)	1920 x 1080
Display resolution standard	FHD
Display size (diagonal) uom	"
Display size (diagonal, imperial)	15.6
Display size (diagonal, metric)	39.6
Display size (diagonal, metric) uom	cm
Display surface treatment	Anti-glare
Display touchscreen type	Touch screen
External I/O ports footnote number	[9]
External I/O ports footnote number	[10]
I/O Port location	Side
I/O Port location	Internal
I/O Port location	Display head
Magnetic stripe reader	Optional integrated magnetic stripe reader
Manageability Features 1	Intel® vPro® with AMT 11.0
Manageability Features 2	TPM 2.0
Manageability Features 3	HP System Software Manager (SSM)
Manageability Features 4	HP Image Assistant
Manageability Features 5	HP Client Security Manager

Manageability Features footnote number 5	[17]
Memory layout (slots & size)	1 x 8 GB
Memory module type	SODIMM
Memory size	8
Memory size uom	GB
Memory speed	5600
Memory speed uom	MT/s
Memory type	DDR5
Number of memory slots	1
Operating humidity range	20 to 85% RH
Operating temperature range	10 to 40°C
Operating temperature range	50 to 104°F
Processor Brand	Intel®
Processor cache	24 MB L3
Processor core	14
Processor family	Core™ i5
Processor generation	14th Generation
Processor maximum frequency	4.8
Processor maximum frequency uom	GHz
Processor model	14500T
Processor threads	20
Security management	HP Platform Certificate
Security management	HP Sure Start
Security management	Secured-core PC capable
Security management	Trusted Platform Module TPM 2.0 Embedded Security Chip shipped with Windows 10 (Common Criteria EAL4+ Certified)(FIPS 140-2 Level 2 Certified)
Security management	HP Sure Admin
Security management	HP BIOSphere Gen6
Security management	Seamless Firmware Update Service
Security management	Windows Hello Enhanced Sign-in Security (ESS) Enable
Security management	HP Sure Run Gen6
Security management	HP Tamper Lock
Security management	Absolute Persistence Module
Security management	HP Client Security Manager Gen7

Security management	HP Secure Erase
Security management	HP Sure Click
Security management	HP Sure Sense
Security management footnote number	[23]
Security management footnote number	[27]
Security management footnote number	[24]
Security management footnote number	[30]
Security management footnote number	[19]
Security management footnote number	[29]
Security management footnote number	[25]
Software included	HP Desktop Support Utilities
Software included	HP Support Assistant
Software included	Touchpoint Customizer for Commercial
Software included	HP Notifications
Software included	HSA Fusion for Commercial
Software included	HSA Telemetry for Commercial
Software included	HP QuickDrop
Software included	HP PC Hardware Diagnostics UEFI
Software included	myHP
Software included	HP Connection Optimizer
Software included	HP Privacy Settings
Software included	HP PC Hardware Diagnostics Windows
Software included footnote number	[21]
Software included footnote number	[28]
Software included footnote number	[20]
Standard memory note	Transfer rates up to 5600 MT/s.
Storage capacity	256
Storage capacity uom 01	GB
Storage form factor 01	M.2
Storage interface 01	PCIe®

Storage interface protocol 01	NVMe™
Storage type	SSD
Storage type 01	SSD
UNSPSC code	43211505
Wireless Model	BE200
Wireless antenna	2x2
Wireless standard	Wi-Fi 7
Wireless supplier	Intel®
vPro enabled	non-vPro®

[6] 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.

[7] Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See <http://www.intel.com/technology/turboboost/> for more information.

[8] HP 140W port only compatible with the 140W cable included with the product. Cable required for the HP Engage One Pro to operate.

[15] Actual brightness will be lower with touch screen.

[16] For further details please refer to Quick Specs document.

[22] Wireless cards are optional or add-on features and requires separately purchased wireless access point and internet service. Availability of public wireless access points 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.

Accessories

Point of Sales System Options

★ : Recommended

POS Display Accessories

HP Engage 10 HD No Stand + VESA Mount Monitor	3F1W8AA
HP Engage 10t HD No Stand + VESA Mount Monitor	3F1W9AA
HP Engage 2x20 Customer Facing Display	6K552AA
HP Engage One 10.1-inch Display	1XD80A7
HP Engage One 10.1-inch Display	1XD80AA
HP Engage One 10.1-inch Display	1XD81A7
HP Engage One 10.1-inch Touch Display	1XD81AA
HP Engage One W 10.1-inch Display	3FH66A8
HP Engage One W 10.1-inch Display	3FH66AA
HP Engage One W 10.1-inch Touch Display	3FH67A8
HP Engage One W 10.1-inch Touch Display	3FH67AA

Disclaimer — Copyright

© Copyright 2025 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.