

HP EliteOne 870 27 inch G9 All-in-One Desktop PC specifications

Learn about the features and specifications of the HP EliteOne 870 27 inch G9 All-in-One Desktop PC.



Product details

Learn about the HP EliteOne 870 27 inch G9 All-in-One Desktop PC hardware and software. Computer features and components vary depending on the custom configuration.

OPERATING SYSTEMS

Feature	Description
Preinstalled (Windows)	Windows 11 Pro Windows 11 Pro Education Windows 11 Pro (Windows 11 Enterprise or Windows 10 Enterprise available with a Volume Licensing Agreement) Windows 11 Home Windows 11 Home Single Language NOTE: HP recommends Windows 11 Pro for Business. NOTE: Not all features are available in all editions or versions of Windows. Systems might require upgraded and/or separately purchased hardware, drivers, software, or BIOS update to take full advantage of Windows functionality. Windows 10 automatic updates are always on. ISP fees and additional requirements might apply over time for updates.
Preinstalled (other)	FreeDOS 1.2

NOTE: In accordance with Microsoft support policy, this product does not support Windows 8 or Windows 7. HP does not support the Windows 8 or Windows 7 operating system on products configured with Intel and AMD 7th generation or later processors, or provide any Windows 8 or Windows 7 drivers.

PROCESSORS

Feature	Description
Intel Core i9-14900 Processor	2.0 GHz Performance-core base frequency, up to 5.4 GHz Performance-core Max Turbo Frequency 36 MB L3 cache and 24 cores Supports Intel vPro Technology
Intel Core i7-14700 Processor	2.1 GHz Performance-core base frequency, up to 5.3 GHz Performance-core Max Turbo Frequency 33 MB L3 cache and 20 cores Supports Intel vPro Technology
Intel Core i5-14500 Processor	2.6 GHz Performance-core base frequency, up to 5.0 GHz Performance-core Max Turbo Frequency 24 MB L3 cache and 14 cores Supports Intel vPro Technology
Intel Core i3-14100 Processor	3.5 GHz Performance-core base frequency, up to 4.7 GHz Performance-core Max Turbo Frequency 12 MB L3 cache and 4 cores
Intel Core i9-13900 Processor	2.0 GHz Performance-core base frequency, up to 5.2 GHz Performance-core Max Turbo Frequency 36 MB L3 cache and 24 cores Supports Intel vPro Technology
Intel Core i7-13700 Processor	2.1 GHz Performance-core base frequency, up to 5.1 GHz Performance-core Max Turbo Frequency 30 MB L3 cache and 16 cores Supports Intel vPro Technology
Intel Core i5-13600 Processor	2.7 GHz Performance-core base frequency, up to 5.0 GHz Performance-core Max Turbo Frequency 24 MB L3 cache and 14 cores Supports Intel vPro Technology
Intel Core i5-13500 Processor	2.5 GHz Performance-core base frequency, up to 4.8 GHz Performance-core Max Turbo Frequency 24 MB L3 cache and 14 cores Supports Intel vPro Technology
Intel Core i5-13400 Processor	2.5 GHz Performance-core base frequency, up to 4.6 GHz Performance-core Max Turbo Frequency 20 MB L3 cache and 10 cores

Feature	Description
Intel Core i3-13100 Processor	3.4 GHz Performance-core base frequency, up to 4.5 GHz Performance-core Max Turbo Frequency 12 MB L3 cache and 4 cores
Intel Core i9-12900 Processor	2.4 GHz base frequency, up to 5.1 GHz frequency with Intel Turbo Boost Technology 30 MB L3 cache and 16 cores Supports Intel vPro Technology
Intel Core i7-12700 Processor	2.1 GHz base frequency, up to 4.9 GHz frequency with Intel Turbo Boost Technology 25 MB L3 cache and 12 cores Supports Intel vPro Technology
Intel Core i5-12600 Processor	3.3 GHz base frequency, up to 4.8 GHz frequency with Intel Turbo Boost Technology 18 MB L3 cache and 6 cores Supports Intel vPro Technology
Intel Core i5-12500 Processor	3.0 GHz base frequency, up to 4.6 GHz frequency with Intel Turbo Boost Technology 18 MB L3 cache and 6 cores Supports Intel vPro Technology
Intel Core i5-12400 Processor	2.5 GHz base frequency, up to 4.4 GHz frequency with Intel Turbo Boost Technology 18 MB L3 cache and 6 cores
Intel Core i3-12300 Processor	3.5 GHz base frequency, up to 4.4 GHz frequency with Intel Turbo Boost Technology 12 MB L3 cache and 4 cores
Intel Core i3-12100 Processor	3.3 GHz base frequency, up to 4.3 GHz frequency with Intel Turbo Boost Technology 12 MB L3 cache and 4 cores
Chipset	Intel Q670

NOTE: Multicore is designed to improve the performance of certain software products. You might not necessarily benefit from the use of this technology. Performance and clock frequency vary depending on the application workload and hardware and software configuration. Intel numbering is not a measurement of higher performance.

MEMORY

Feature	Description
Standard	(2) SODIMM slots DDR5-4800 SODIMM (transfer rates up to 4800 MT/s) DDR5-5600 SODIMM (transfer rates up to 5600 MT/s) NOTE: Slots are accessible or upgradeable.

Feature	Description
Maximum	64 GB
Configurations	8 GB (1 x 8 GB) 16 GB (2 x 8 GB) 16 GB (1 x 16 GB) 32 GB (2 x 16 GB) 32 GB (1 x 32 GB) 64 GB (2 x 32 GB)

NOTE: Due to the nonindustry standard nature of some third-party memory modules, we recommend HP branded memory to ensure compatibility. Mixing memory speeds causes the system to perform at the lower memory speed.

GRAPHICS

Feature	Description
Integrated	Intel UHD Graphics 730 Intel UHD Graphics 770 NOTE: Dependent on processor model. NOTE: View high definition images with High-definition (HD) content.
Optional discrete graphics	NVIDIA GeForce RTX 3050 Ti 4 GB Graphics Card
Adapters and cables	HP DisplayPort Cable HP DisplayPort to DVI-D Adapter HP DisplayPort to HDMI True 4K Adapter HP DisplayPort to VGA Adapter HP USB to Serial Port Adapter HP USB-C to HDMI Adapter HP USB-C to DisplayPort Adapter HP HDMI Standard Cable Kit (HDMI)

DISPLAY PANEL

Feature	Description
Panel	68.58 cm (27.0 in) diagonal, IPS, widescreen WLED, backlit, antiglare, LCD
Type	Touchscreen Nonouchscreen

Feature	Description
Resolution options	(1920 x 1080) nontouchscreen (2560 x 1440) Touchscreen/nontouchscreen
Brightness	250 nits for (1920 x 1080) display 350 nits for (2560 x 1440) display NOTE: Actual brightness might be lower for touchscreen.
Refresh rate	60 Hz
Viewing angle (H x V)	178° x 178°

STORAGE/DRIVES

Feature	Description
Primary M.2 Solid-State Drive storage	256 GB M.2 2280 PCIe NVMe SSD 512 GB M.2 2280 PCIe NVMe SSD 256 GB M.2 2280 PCIe NVMe TLC SSD 512 GB M.2 2280 PCIe NVMe TLC SSD 1 TB M.2 2280 PCIe NVMe TLC SSD 2 TB M.2 2280 PCIe NVMe TLC SSD 256 GB M.2 2280 PCIe NVMe Self-Encrypted OPAL2 TLC SSD 512 GB M.2 2280 PCIe NVMe Self-Encrypted OPAL2 TLC SSD
Media Card Reader	SD 4.0 with 5-in-1 Interface (supports SD, SDxC, SDHC, UHS-I, UHS-II)

NOTE: For hard drives and solid-state drives, GB = 1 billion bytes and TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

NETWORKING/COMMUNICATION

Feature	Description
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Feature	Description
Wireless LAN (WLAN)	Intel Wi-Fi 7 BE200 and Bluetooth 5.4 wireless card (Intel vPro) Intel Wi-Fi 7 BE200 and Bluetooth 5.4 wireless card (non-vPro) NOTE: Not available in all countries/regions. Intel Wi-Fi 6E AX211 802.11ax (2x2) and Bluetooth 5.3 wireless card (Intel vPro, supporting gigabit data rate) Intel Wi-Fi 6E AX211 802.11ax (2x2) and Bluetooth 5.3 wireless card (non-vPro, supporting gigabit data rate) Realtek RTL8852BE 802.11ax (2x2) Wi-Fi 6 and Bluetooth 5.3 wireless card NOTE: Wi-Fi 6 is backwards compatible with prior 802.11 specs. You require a wireless access point and internet service. Limited public wireless access points are available. The specifications for the 802.11 WLAN are draft specifications and are not final. If the final specifications differ from the draft specifications, it might affect the ability of the notebook to communicate with other 802.11 WLAN devices.
Ethernet (RJ-45)	Intel I219-LM 1 Gigabit Network Connection LOM (vPro)

PORTS/SLOTS

Feature	Description
Side ports	(1) USB 3.2 Gen 2 Type-A 10 Gbps signaling rate port (1) USB 3.2 Gen 2x2 Type-C 20 Gbps signaling rate port (1) Universal audio jack with CTIA headset support
Rear ports	(2) USB 3.2 Gen 1 Type-A 5 Gbps signaling rate ports (2) USB 3.2 Gen 2 Type-A 10 Gbps signaling rate ports (1) USB 3.2 Gen 2 Type-C 10 Gbps port (alt mode DisplayPort v1.4 and 15 W output) (1) DisplayPort 1.4a port (1) HDMI input port (1) RJ-45 (network) jack (1) DC input power port
Slots	(1) M.2 PCIe 2230/2280 (for WLAN or storage) (2) M.2 PCIe 2280 (for NVMe SSD storage) NOTE: One is attached to CPU PCIe Gen 4.0 and two are attached to PCH PCIe Gen 3.0.

AUDIO/MULTIMEDIA

Feature	Description
Audio	Integrated Realtek ALC3274

Feature	Description
Internal speaker amplifier	5 W per channel class D stereo amplifier for the internal speaker only

KEYBOARD/MOUSE

Feature	Description
Keyboard	HP Wired Desktop 320K Keyboard HP USB Business Slim Wired SmartCard CCID Keyboard HP 125 Wired Keyboard HP 125 Anti-Microbial Wired Keyboard (China only)
Mouse	HP Wired 320M Mouse HP Wired 125 Mouse HP Wired 128 Laser Mouse HP Wired 125 Antimicrobial Mouse (China only)
Keyboard and Mouse combo	HP 655 Wireless Keyboard and Mouse Combo

SOFTWARE/SECURITY

Feature	Description
BIOS	HP BIOSphere Gen6 (available on select platforms) HP DriveLock and HP Automatic DriveLock BIOS Update via Network HP Secure Erase (methods outlined in the National Institute of Standards and Technology Special Publication 800-88) Absolute Persistence Module NOTE: Activate Absolute agent firmware module by purchasing a licensed subscription. Purchase subscriptions for terms ranging multiple years. Check with Absolute for availability and warranty outside the U.S. Certain conditions apply.
Communication/connectivity	HP Connection Optimizer

Feature	Description
Software	HP Easy Clean HP QuickDrop HP PC Hardware Diagnostics UEFI HP Desktop Support Utilities HP Privacy Settings HP Setup Integrated OOBES HP Support Assistant HSA Fusion for Commercial HSA Telemetry for Commercial Touchpoint Customizer for Commercial myHP HP Notifications HP Connection Optimizer HP Smart Support Buy Microsoft Office (sold separately) Miro
Manageability	HP Connect for Microsoft Endpoint Manager HP Image Assistant Gen5 (available for download) HP Manageability Integration Kit (available for download) HP Client Management Script Library (available for download) HP Patch Assistant (available for download) HP Driver Packs (available for download) HP Cloud Recovery HP Client Catalog (available for download)
Security	HP Wolf Security for Business HP Sure Click HP Sure Sense HP Sure Run HP Sure Recover HP Sure Start HP Tamper Lock HP Sure Admin HP Client Security Manager
Other standard security features	Support for chassis padlocks and cable lock devices

POWER

Feature	Description
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Feature	Description
80 PLUS Platinum	240 W, active PFC 280 W, active PFC 80 PLUS Platinum 90/92/89% efficient at 20/50/100% load (115 V) 91/93/90% efficient at 20/50/100% load (230 V)

PHYSICAL SPECIFICATIONS

Feature	Description
System weight (unboxed; with stand)	With Touch panel 18.41 kg (29.54 lb) Without Touch panel 10.88 kg (23.98 lb) NOTE: Weight varies by configuration and components.
Panel dimensions (with stand)	614 x 247 x 599.5 mm (24.17 x 9.72 x 23.60 in)