



# HP Zhan60 G1 21.5-inch FHD Non-Touch GPU All-in-One Business PC

The HP AiO is a sound investment that can be quickly deployed into demanding environments with a new micro-edge, anti-glare display, strong security, and comprehensive manageability features.



HP recommends Windows 10 Pro.

- Windows 10 Pro<sup>1</sup>
- Intel® Core™ processors<sup>2</sup>

## Sleek, modern design

- Featuring extensive cable management and a sleek design, this AiO suits the front desk or an owner's office. The micro-edge, anti-glare 21.5-inch diagonal IPS display provides plenty of workspace.

## Powerful options

- Get high-performance and expansion with 8th Gen Intel® Core™ processors<sup>2</sup> and optional features like Intel® Optane™ memory<sup>3</sup>, discrete graphics<sup>4</sup>, USB Type-C™, and a configurable I/O port<sup>5</sup>.

## Built on a secure foundation

- Protect your PC against the evolving malware threats of the future, with our self-healing, hardware-enforced, and manageable security solutions. From the BIOS to the browser HP Sure Start Gen4<sup>6</sup> and HP Sure Click<sup>7</sup> help secure your PC.

## Effective collaboration

- Communicate naturally with your PC using Cortana on Windows 10 Pro<sup>1</sup> and collaborate with others using Skype for Business™<sup>8</sup>, HP Noise Cancellation, and an optional IR camera<sup>9</sup>.

## Featuring

- Power through your day with Windows 10 Pro with built-in security, collaboration, and connectivity.
- Maximize the life of your PC as your business requirements change with options that let you expand on your own schedule, including M.2 drives, SATA drives, and up to 32GB of DDR4 memory.
- Protect the firmware that antivirus can't reach! The hardware-enforced self-healing protection offered by HP Sure Start Gen4 automatically recovers the BIOS from malware, rootkits, or corruption.
- Help protect your PC from websites, attachments, malware, ransomware, and viruses with hardware-enforced security from HP Sure Click.
- Keep productivity high and downtime low with HP BIOSphere Gen4 firmware-level automation. Your PCs have extra protection thanks to automatic updates and security checks.
- The HP Manageability Integration Kit Gen2 helps speed up image creation and management of hardware, BIOS, and security through Microsoft System Center Configuration Manager.
- HP Client Security Manager Gen4 features HP Multi-Factor Authenticate Gen2, HP Device Access Manager, HP SpareKey, and HP Password Manager. These tools work to keep data out of reach and defend against theft, attacks, and unauthorized users.
- Improve the quality and security of custom Windows images with HP Image Assistant Gen3 which assists ITDMs with image creation, identifies problems, and provides recommendations and remediation.

# HP Zhan60 G1 21.5-inch FHD Non-Touch GPU All-in-One Business PC Specifications Table



<b>Form Factor</b>	All-in-one
<b>Available Operating System</b>	Windows 10 Pro 64 – HP recommends Windows 10 Pro. <sup>1</sup> Windows 10 Pro 64 (National Academic only) <sup>1,13</sup> Windows 10 Home 64 <sup>1</sup> Windows 10 Home Single Language 64 <sup>1</sup> FreeDOS 2.0
<b>Processor Family</b> <sup>14,38</sup>	8th Generation Intel® Core™ i7 + processor (Core™ i7 and Intel® Optane™ memory); 8th Generation Intel® Core™ i5 + processor (Core™ i5 and Intel® Optane™ memory); 8th Generation Intel® Core™ i7 processor (i7-8700, i7-8700T); 8th Generation Intel® Core™ i5 processor (i5-8500, i5-8500T, i5-8600, i5-8600T); 8th Generation Intel® Core™ i3 processor (i3-8100, i3-8100T, i3-8300, i3-8300T); Intel® Pentium® processor (G5400, G5400T, G5500, G5500T, G5600 are Windows 10 only); Intel® Celeron® processor (G4900, G4900T are Windows 10 only)
<b>Available Processors</b> <sup>19,20</sup>	Intel® Core™ i7-8700 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™ i3-8100 with Intel® UHD Graphics 630 (3.6 GHz, 6 MB cache, 4 cores); Intel® Celeron® G4900 with Intel® UHD Graphics 610 (3.1 GHz, 2 MB cache, 2 cores); Intel® Core™ i5-8500 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® Pentium® Gold G5400 with Intel® UHD Graphics 610 (3.7 GHz, 4 MB cache, 2 cores); Intel® Core™ i7 + 8700 (3.2 GHz base frequency, up to 4.6 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores); Intel® Core™ i7-8700T with Intel® UHD Graphics 630 (2.4 GHz base frequency, up to 4 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores); Intel® Core™ i5-8600 with Intel® UHD Graphics 630 (3.1 GHz base frequency, up to 4.3 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores); Intel® Core™ i5+ 8600 (3.1 GHz base frequency, up to 4.3 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores); Intel® Core™ i5-8600T with Intel® UHD Graphics 630 (2.3 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores); Intel® Core™ i5+ 8500 (3 GHz base frequency, up to 4.1 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores); Intel® Core™ i5-8500T 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+ 8500T (2.1 GHz base frequency, up to 3.5 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores); Intel® Core™ i3-8300 with Intel® UHD Graphics 630 (3.7 GHz, 8 MB cache, 4 cores); Intel® Core™ i3-8300T with Intel® UHD Graphics 630 (3.2 GHz, 8 MB cache, 4 cores); Intel® Core™ i3-8100T with Intel® UHD Graphics 630 (3.1 GHz, 6 MB cache, 4 cores); Intel® Pentium® Gold G5600 with Intel® UHD Graphics 630 (3.9 GHz, 4 MB cache, 2 cores); Intel® Pentium® Gold G5500T with Intel® UHD Graphics 630 (3.2 GHz, 4 MB cache, 2 cores); Intel® Pentium® Gold G5400T with Intel® UHD Graphics 610 (3.1 GHz, 4 MB cache, 2 cores); Intel® Celeron® G4900T with Intel® UHD Graphics 610 (2.9 GHz, 2 MB cache, 2 cores); Intel® Pentium® Gold G5500 with Intel® UHD Graphics 630 (3.8 GHz, 4 MB cache, 2 cores)
<b>Chipset</b>	Intel® Q370
<b>Maximum Memory</b>	32 GB DDR4-2666 SDRAM <sup>3,4</sup> Transfer rates up to 2666 MT/s.
<b>Memory Slots</b>	2 SODIMM
<b>Internal Storage</b>	500 GB up to 2 TB SATA HDD <sup>2</sup> up to 500 GB 7200 rpm SATA SED Opal 2 HDD <sup>2</sup> up to 500 GB 7200 rpm SATA SED FIPS HDD <sup>2</sup> 500 GB up to 2 TB 5400 rpm SATA SSHD <sup>2</sup> 256 GB up to 512 GB SATA SSD <sup>2</sup> 256 GB up to 512 GB SATA SED Opal 2 TLC SSD <sup>2</sup> 256 GB up to 512 GB SATA SED FIPS SSD <sup>2</sup> 128 GB up to 512 GB PCIe® NVMe™ M.2 SSD <sup>2</sup> 256 GB up to 512 GB PCIe® NVMe™ SED Opal 2 TLC M.2 SSD <sup>2</sup>
<b>Additional storage</b>	1 SD media card reader
<b>Optical Drive</b>	HP 9.5 mm Slim DVD-Writer; HP 9.5 mm Slim DVD-ROM; HP 9.5 mm Slim Blu-ray writer <sup>16</sup>
<b>Display</b>	21.5" diagonal FHD IPS widescreen LCD anti-glare WLED-backlit (1920 x 1080)
<b>Available Graphics</b>	Discrete: AMD Radeon™ 530 Graphics (2 GB GDDR5 dedicated)
<b>Audio</b>	C Conexant CX3601 codec, 2 W internal stereo speaker, headset and headphone side port (3.5 mm), multi-streaming capable
<b>Expansion Slots</b>	1 M.2 2230; 1 M.2 2230/2280 (1 M.2 2230 slot for WLAN and 1 M.2 2230/2280 slot for storage.)
<b>Ports and Connectors</b>	Side: 1 headphone/microphone combo; 2 USB 3.1 Gen 1; 1 USB 2.0 Type-C™ <sup>18</sup> Rear: 1 DisplayPort™ 1.2; 1 power connector; 1 RJ-45; 2 USB 3.1 Gen 1 Optional: 1 DisplayPort™ 1.2; 1 serial; 1 HDMI 2.0 <sup>21</sup>
<b>Input Devices</b>	HP USB Conferencing Keyboard; HP USB Value Keyboard and Mouse Combo; HP USB Wired Keyboard; USB Business Slim Standalone Wired Keyboard; HP USB Collaboration Wired Keyboard; HP Wireless Collaboration Keyboard <sup>6</sup> HP USB 1000 dpi Laser Mouse; HP USB Mouse; HP USB Optical Mouse; HP USB Premium Mouse <sup>6</sup>
<b>Communications</b>	LAN: Intel® I219LM GbE WLAN: Realtek RTL8822BE-CG 802.11a/b/g/n/ac (2x2) with Bluetooth® 4.2 M.2 PCIe®; Intel® Dual Band Wireless-AC 9560 802.11ac (2x2) and Bluetooth® 5 M.2 PCIe®, non-vPro™; Realtek RTL8821CE-CG 802.11a/b/g/n/ac (1x1) with Bluetooth® M.2 PCIe®; Intel® Dual Band Wireless-AC 9560 802.11ac (2x2) and Bluetooth® 5 M.2 PCIe®, vPro™ <sup>5</sup>
<b>Drive Bays</b>	One 2.5" HDD
<b>Camera</b>	1 MP HD webcam with integrated dual array digital microphone, maximum resolution of 1280 x 720; 2 MP full HD webcam and IR sense (front) and 2 MP webcam (rear), maximum resolution of 1920 x 1080; 2 MP full HD webcam with integrated dual array digital microphone, maximum resolution of 1920 x 1080 <sup>17</sup>
<b>Available Software</b>	Absolute Persistence module; HP Device Access Manager; HP ePrint Driver + JetAdvantage; HP Hotkey Support; HP Jumpstart; HP Noise Cancellation Software; HP PhoneWise; HP Recovery Manager; HP Secure Erase; HP Support Assistant; HP Sure Click; HP Velocity; Microsoft Defender; Native Miracast Support; Skype for Business Certified; HP Wireless Wakeup; Buy Office (sold separately); HP WorkWise 9,22,23,24,25,26,27,28,29,30,31
<b>Security Management</b>	DriveLock; Hood sensor; HP BIOSphere; HP Credential Manager; HP Password Manager; HP Power On Authentication; HP Spare Key; Intel® Identity Protection Technology (Intel® IPT); Intrusion detector; Power-on password (via BIOS); Removable media write/boot control; SATA port disablement (via BIOS); Setup password (via BIOS); USB enable/disable (via BIOS); HP Sure Start Gen 4; Master Boot Record Security; HP Client Security Suite Gen 4; Pre-boot Authentication; Serial enable/disable (via BIOS); Trusted Platform Module TPM 2.0 Embedded Security Chip shipped with Windows 10 (Common Criteria EAL4+ Certified)(FIPS 140-2 Level 2 Certified); Support for table lock; Support for chassis padlocks devices <sup>7,15,34,35,36,37</sup>
<b>Management Features</b>	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); Ivanti Management Suite; HP Management Integration Kit for Microsoft System Center Configuration Management Gen 2 <sup>10,32,33</sup>
<b>Power</b>	90 W external power adapter, up to 89% efficiency, active PFC; 120 W external power adapter, up to 89% efficiency, active PFC
<b>Dimensions</b>	48.91 x 20.85 x 36.37 cm (With adjustable height stand.)
<b>Weight</b>	5.78 kg (Lowest weight configuration with adjustable height stand. Weight will vary by configuration.)
<b>Environmental</b>	Low halogen <sup>12</sup>
<b>Energy Efficiency Compliance</b>	ENERGY STAR® certified; EPEAT® Gold <sup>11</sup>

## HP Zhan60 G1 21.5-inch FHD Non-Touch GPU All-in-One Business PC

### Recommended Accessories and Services

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#### HP Wireless Slim Business Keyboard



Enjoy easy data entry and wireless connectivity with the HP Wireless Business Slim Keyboard, designed to complement the 2015 class of HP Business PCs.  
**Product number: N3R88AA**

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#### HP Master Keyed Cable Lock 10mm



Help keep your notebook safe in the office and high-traffic areas by tethering it to a secure surface with the HP Master Keyed Cable Lock 10mm, designed specifically for ultra-thin profile notebooks.  
**Product number: T1A63AA**

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#### HP 3-year Next Business Day Onsite Optional Customer Self Repair Desktop/Workstation Only Hardware Service



Receive 3 years of next business day onsite repair from an HP-qualified technician for your computing device, if the issue cannot be solved remotely. For more information on Care Pack services, please visit [www.hp.com/go/cpc](http://www.hp.com/go/cpc).  
**Product number: UE379E**

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## 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> 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>3</sup> Intel® Optane™ memory system acceleration does not replace or increase the DRAM in your system and requires configuration with an optional Intel® Core™ i(5 or 7)+ processor.
- <sup>4</sup> Discrete graphics option must be selected at time of purchase and can only be configured at the factory.
- <sup>5</sup> I/O port option must be selected at the time of purchase and can only be configured at the factory.
- <sup>6</sup> HP Sure Start Gen4 is available on HP Elite and HP Pro 600 products equipped with 8th generation Intel® or AMD processors.
- <sup>7</sup> HP Sure Click is available on select HP platforms and supports Microsoft® Internet Explorer, Google Chrome™, and Chromium™. Supported attachments include Microsoft Office (Word, Excel, PowerPoint) and PDF files in read only mode. Check <http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-0922ENW> for all compatible platforms as they become available.
- <sup>8</sup> Skype for Business subscription required.
- <sup>9</sup> Sold separately or as an optional feature.
- <sup>10</sup> Available on HP Elite and Pro platforms with 8th Gen Intel® or AMD processors. Features may vary by platform and configuration.

## 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>2</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>3</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.
- <sup>4</sup> All memory slots are customer accessible / upgradeable.
- <sup>5</sup> Wireless access point and internet service required.
- <sup>6</sup> Availability may vary by country.
- <sup>7</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>8</sup> Absolute Persistence module: is shipped turned off, and will be activated when customers activate a purchased subscription. Subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the U.S. The Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit: <http://www.absolute.com/company/legal/agreements/computrace-agreement>. Data Delete is an optional service provided by Absolute Software. If utilized, the Recovery Guarantee is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either obtain a PIN or purchase one or more RSA SecurID tokens from Absolute Software.
- <sup>10</sup> HP Driver Packs: not preinstalled, however available for download at <http://www.hp.com/go/clientmanagement>.
- <sup>11</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 at [www.hp.com/go/options](http://www.hp.com/go/options).
- <sup>12</sup> External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
- <sup>13</sup> Some devices for academic use will automatically be updated to Windows 10 Pro Education with the Windows 10 Anniversary Update. Features vary; see <https://aka.ms/ProEducation> for Windows 10 Pro Education feature information.
- <sup>14</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>15</sup> Intrusion detector: Sold separately or as an optional feature.
- <sup>16</sup> Non-internal bay. Must be configured at time of purchase.
- <sup>17</sup> Sold separately or as an optional feature.
- <sup>18</sup> (1) USB 2.0 Type-C™ and (2) USB 3.1 Gen 1: 5 Gbit/s data speed, upgradeable to USB 3.1 Gen 2 port (10 Gbit/s data speed) if configured with additional video port and/or Intel® vPro™.
- <sup>19</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>20</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>21</sup> (1) configurable port: choice of DisplayPort™ 1.2, HDMI™ 2.0, or serial, sold separately or as an optional feature.
- <sup>22</sup> Native Miracast Support: is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming.
- <sup>23</sup> HP ePrint Driver + JetAdvantage: requires an Internet connection to HP web-enabled printer and HP ePrint account registration (for a list of eligible printers, supported documents and image types and other HP ePrint details, see [www.hp.com/go/eprintcenter](http://www.hp.com/go/eprintcenter)). Print times and connection speeds may vary.
- <sup>24</sup> HP Support Assistant: requires Windows and Internet access.
- <sup>25</sup> HP PhoneWise Client may not be available with HP Workwise. For supported platforms and HP PhoneWise system requirements see [www.hp.com/go/HPPhoneWise](http://www.hp.com/go/HPPhoneWise).
- <sup>26</sup> HP WorkWise smartphone app is available as a free download on the Google Play. As of September 2017, HP WorkWise will no longer support iOS or iPhone® devices.
- <sup>27</sup> Microsoft Defender Opt in and internet connection required for updates.
- <sup>28</sup> HP Sure Click: is available on select HP platforms and supports Microsoft® Internet Explorer and Chromium™. Check <http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-0922ENW> for all compatible platforms as they become available.
- <sup>29</sup> HP Secure Erase: for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88. Supported on Elite platforms with BIOS version F.03 or higher.
- <sup>30</sup> Skype for Business Certified: Sold separately or as an optional feature.
- <sup>31</sup> HP Velocity: Availability may vary by country.
- <sup>32</sup> HP Management Integration Kit for Microsoft System Center Configuration Management Gen 2: can be downloaded from <http://www8.hp.com/us/en/ads/clientmanagement/overview.html>.
- <sup>33</sup> Ivanti Management Suite: subscription required.
- <sup>34</sup> HP BIOSphere Gen4: features may vary depending on the PC platform and configurations requires 8th Gen Intel® processors.
- <sup>35</sup> HP Client Security Suite Gen 4: requires Windows and Intel® or AMD 8th generation processors.
- <sup>36</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>37</sup> HP Sure Start Gen 4: is available on HP ProDesk & ProOne products equipped with Intel® 8th generation processors.
- <sup>38</sup> Intel® Optane™ memory system acceleration does not replace or increase the DRAM in your system and requires configuration with an optional Intel® Core™ i(5 or 7)+ processor.

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