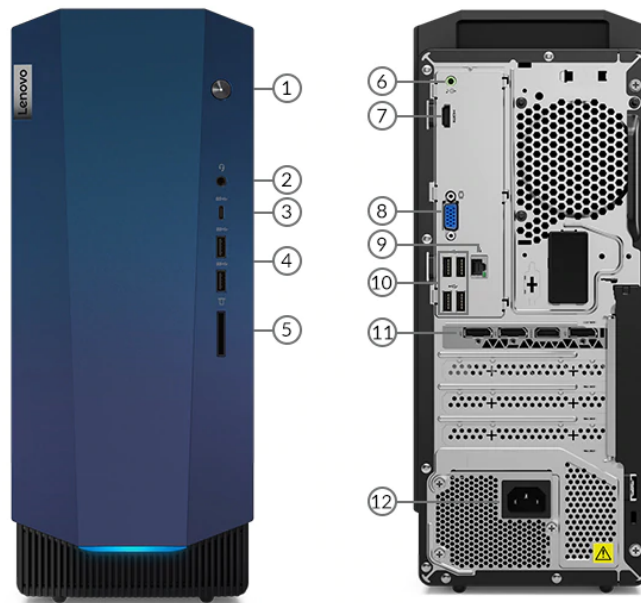


OVERVIEW



1. Power button	7. HDMI 1.4b
2. Headphone / microphone combo jack (3.5mm)	8. VGA
3. USB-C 3.2 Gen 1	9. Ethernet (RJ-45)
4. 2x USB 3.2 Gen 1	10. 4x USB 2.0
5. Card reader	11. Optional ports on expansion cards
6. Line-out (3.5mm)	12. Power connector

Notes:

- The onboard video ports VGA and HDMI are disabled on the models with discrete graphics

PERFORMANCE

Processor

Processor Family

10th Generation Intel® Core™ i3 / i5 / i7 Processor

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i3-10100	4	8	3.6GHz	4.3GHz	6MB	DDR4-2666	Intel UHD Graphics 630
Core i5-10400	6	12	2.9GHz	4.3GHz	12MB	DDR4-2666	Intel UHD Graphics 630
Core i5-10400F	6	12	2.9GHz	4.3GHz	12MB	DDR4-2666	-
Core i7-10700	8	16	2.9GHz	4.8GHz	16MB	DDR4-2933	Intel UHD Graphics 630
Core i7-10700F	8	16	2.9GHz	4.8GHz	16MB	DDR4-2933	-

Operating System

Operating System^[1]

- Windows® 10 Home 64
- Windows 10 Home 64 Single Language
- No operating system

Notes:

- 1.1: Some features may not be supported on the system with Linux preload, including but not limited to Intel RST RAID, Human Presence Detection, etc.

Graphics

Graphics**^[1]

Graphics	Type	Memory	Connector	Max Resolution	Key Features
Intel UHD graphics 630	Integrated	Shared	1x HDMI® 1.4b, 1x VGA	4096x2160@24Hz(HDMI), 2048x1536@50Hz(VGA)	DirectX® 12
AMD Radeon™ RX 5500	Discrete	4GB GDDR6	1x HDMI 2.0, 3x DP 1.4	4096x2160@60Hz(HDMI), 7680x4320@60Hz(DP)	DirectX 12
NVIDIA® GeForce GTX 1650 SUPER	Discrete	4GB GDDR6	1x HDMI 2.0b, 2x DP 1.4	7680x4320 @60Hz(DP)	DirectX 12
NVIDIA GeForce GTX 1660 SUPER	Discrete	6GB GDDR6	1x DVI, 1x HDMI 2.0b, 1x DP 1.4	7680x4320@60Hz(DP)	DirectX 12
NVIDIA GeForce RTX™ 2060 CD	Discrete	6GB GDDR6	1x HDMI 2.0b, 3x DP 1.4	4096x2160@60Hz(HDMI), 7680x4320@60Hz with DSC(DP)	DirectX 12

Notes:

- 1.1: The information of integrated graphics are not applicable for the models without integrated graphics (for the details, please refer to processor section)

Monitor Support

Monitor Support

Supports up to 2 independent displays via onboard ports (VGA and HDMI), more displays support via discrete graphics

Chipset

Chipset

Intel B460 chipset

Memory

Max Memory^[1]

Up to 32GB DDR4-2933

Memory Slots

Two DDR4 UDIMM slots, dual-channel capable

Memory Type^[2]

DDR4-2933

Memory Protection

Non-ECC

Notes:

- 1 :The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.
- 2 :Installed memory is actually 2933MHz, but may run at 2666MHz or 2933MHz depending on the memory support capability of processor

Storage

Storage Support^[1]

Up to two drives, 1x 3.5" HDD + 1x M.2 SSD

- 3.5" HDD up to 2TB
- M.2 SSD up to 1TB
- Optional Intel Optane™ Memory Integrated with SSD, M.2

Storage Type^{***}

Disk Type	Interface	RPM	Security
3.5" SATA HDD	SATA 6Gb/s	7.2K	-
M.2 2242 SSD	PCIe® NVMe®	-	-
M.2 2280 SSD	PCIe NVMe	-	-
Intel Optane Memory with Solid State Storage, M.2 2280	PCIe NVMe, PCIe 3.0 x4	-	-

RAID

No support

Notes:

- 1 :The storage capacity supported is based on the test results with current Lenovo storage offerings. The system may support larger storage as the technology develops.

Removable Storage

Optical

None

Card Reader

- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC222-CG codec

Speakers

No speakers

Power Supply

Power Supply^{**}

Power	Type	Efficiency	Key Features
260W	Fixed	85%	100-240V, 50-60Hz
310W	Fixed	92%	100-240V, 50-60Hz
380W	Fixed	92%	100-240V, 50-60Hz

DESIGN

Input Device

Keyboard

- Lenovo Calliope Keyboard (USB connector), black
- No keyboard

Mouse

- Lenovo Calliope Mouse (USB connector), black
- No mouse

Mechanical**Form Factor**

Tower (13.6L)

Dimensions (WxDxH)^[1]

145 x 292.2 x 365 mm (5.71 x 11.5 x 14.37 inches)

Packaging Dimensions (WxDxH)

240 x 395 x 530 mm (9.45 x 15.55 x 20.87 inches)

Weight^[2]

5.8 kg (12.79 lbs)

Packaging Weight

All models: 15.5 kg (34.17 lbs)

Case Color

Raven black

Bays

1x 3.5" disk bay

Expansion Slots

- One PCIe 3.0 x1, full height
- One PCIe 3.0 x16, full height
- Two M.2 slots (one for WLAN, one for SSD)

Cooling System (Fan & Cooler)

- (Optional) 1x front system fan, 1x rear system fan
- (Optional) 1x rear system fan

Notes:

- 1.1: The system dimensions may vary depending on configurations.
- 2.2: The system weight is approximate and based on results in Lenovo lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY**Network****Onboard Ethernet**

Gigabit Ethernet, 1x RJ-45

WLAN + Bluetooth[®]^[1]**

- 802.11ac 2x2 Wi-Fi[®] + Bluetooth 5.0, M.2 card
- Wi-Fi 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.0, M.2 card
- No WLAN and Bluetooth

Notes:

- 1.1: Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports^[1]**Front Ports**

- 2x USB 3.2 Gen 1
- 1x USB-C[®] 3.2 Gen 1 (support data transfer and 5V@3A charging)
- 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports

1x card reader

Rear Ports^[2]

- 1x HDMI 1.4b
- 1x VGA
- 4x USB 2.0
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

Notes:

- 1.1: The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s
- 2.2: For video ports on discrete graphics, please see graphics section

SECURITY & PRIVACY

Security

BIOS Security

- Administrator password
- Power-on password
- Hard disk password

SERVICE

Warranty^[1]

Base Warranty**

- 1-year courier or carry-in service
- 1-year mail-in service
- 1-year limited onsite service
- 2-year courier or carry-in service
- OB

Notes:

- 1.1: The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to <https://smartfind.lenovo.com/>. To learn more details of warranty policy, please access <https://pcsupport.lenovo.com/warranty>.

ENVIRONMENTAL

Operating Environment

Temperature

Storage: -40°C (-40°F) to 60°C (140°F)

Humidity

- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude

- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications^[1]

Green Certifications

- (Optional) ENERGY STAR® 8.0
- ErP Lot 3

- RoHS compliant

Notes:

- 1.1: The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration.
- Feature with ** means that only one offering listed under the feature is configured on selected models.
 - Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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