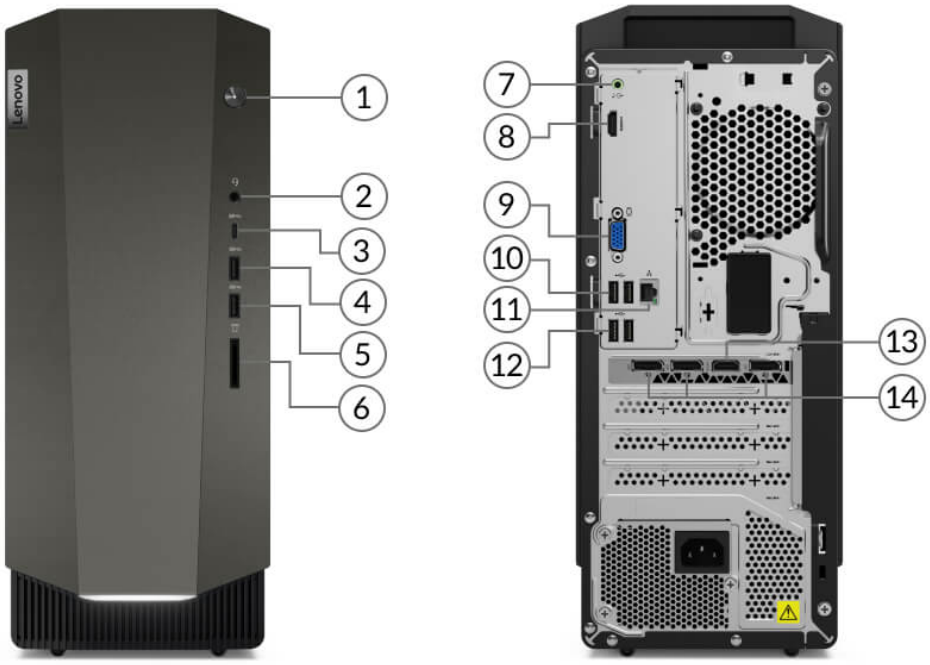
OVERVIEW



1. Power button	8. HDMI 1.4b
2. Headphone / microphone combo jack (3.5mm)	9. VGA
3. USB-C 3.2 Gen 1	10. 2x USB 2.0
4. USB 3.2 Gen 1	11. Ethernet (RJ-45)
5. USB 3.2 Gen 1	12. 2x USB 2.0
6. Card reader *	13. Optional ports on expansion cards
7. Line-out (3.5mm)	14. Optional ports on expansion cards

Notes:

- Ports with * are only available on selected models

PERFORMANCE

Processor

Processor Family

10th Generation Intel® Core™ i5 / i7 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
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

- Windows® 10 Home 64
- Windows 10 Pro 64

Graphics

Graphics[1]

Graphics	Type	Memory	Connector	Max Resolution	Key Features
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. 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]

- DDR4-2666
- 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 2666MHz or 2933MHz, but may run at 2666MHz or 2933MHz depending on the memory support capability of processor

Storage

Storage Support

Up to 2 drives, 1x 3.5" HDD + 1x M.2 SSD
• 3.5" HDD up to 1TB
• M.2 SSD up to 512GB

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	-	-

RAID

No support

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

Power Supply

Power Supply

Power	Type	Efficiency	Key Features
310W	Fixed	92%	100V - 240V
380W	Fixed	92%	100V - 240V

DESIGN

Input Device

Keyboard

Lenovo Calliope Keyboard (USB connector), black

Mouse

Lenovo Calliope Mouse (USB connector), black

Mechanical

Form Factor

Tower (13.6L)

Dimensions (WxDxH)

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

Weight

5.8 kg (12.79 lbs)

Case Color

Raven black

Bays

- 1x 2.5″ disk bay
- 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

CONNECTIVITY

Network

Onboard Ethernet

Gigabit Ethernet, 1x RJ45

WLAN + Bluetooth®

- 802.11ac 2x2 Wi-Fi + Bluetooth 5.0, M.2 Card
- 802.11ax 2x2 Wi-Fi + Bluetooth 5.0, M.2 Card

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]

- 4x USB 2.0
- 1x VGA
- 1x HDMI 1.4b
- 1x Ethernet (RJ-45)
- 1x headphone / microphone combo jack (3.5mm)

Notes:

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, formely USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
   USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formely USB 3.1 Gen 2): 10 Gbit/s;
   USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
   Thunderbolt™ 3: 40 Gbit/s;
   FireWire 400: 400 Mbit/s;
   FireWire 800: 800 Mbit/s
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

Base Warranty

- 1-year mail-in service

- 1-year depot service
- 2-year depot service

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: -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: -15.2 m (-50 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

Green Certifications

- ENERGY STAR® 8.0 (on some models)
- ErP Lot 3
- RoHS compliant











