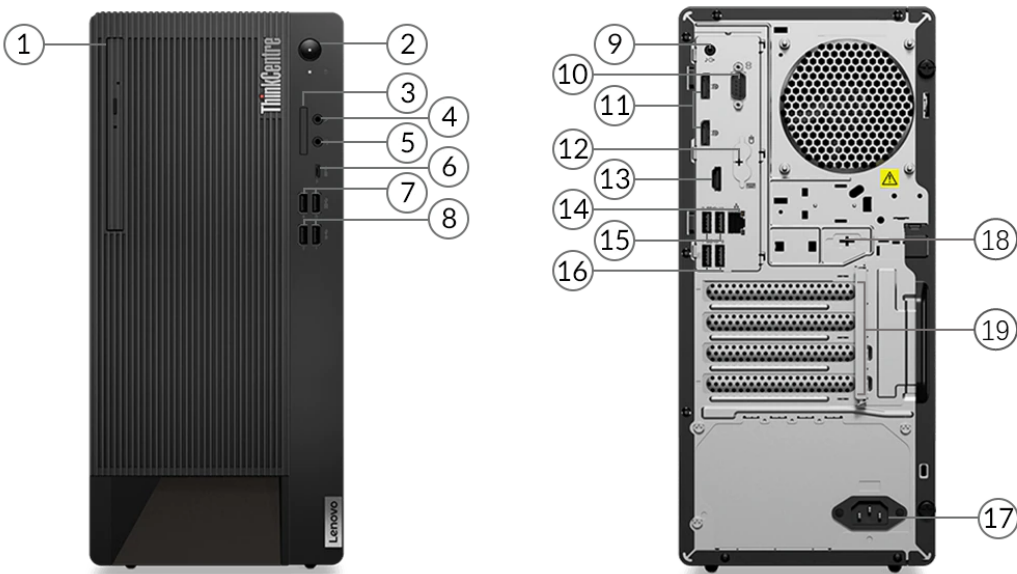


OVERVIEW



| | |
|--|---|
| 1. Optical drive * | 11. 2x DisplayPort |
| 2. Power button | 12. 2x PS/2 ports (keyboard / mouse) * |
| 3. Card reader * | 13. Optional Video Port (HDMI / DP / USB-C) * |
| 4. Microphone (3.5mm) | 14. Ethernet (RJ-45) |
| 5. Headphone / microphone combo jack (3.5mm) | 15. 2x USB 3.2 Gen 1 |
| 6. USB-C 3.2 Gen 1 | 16. 2x USB 3.2 Gen 1 |
| 7. 2x USB 3.2 Gen 1 | 17. Power connector |
| 8. 2x USB 3.2 Gen 2 | 18. Serial * |
| 9. Line-out (3.5mm) | 19. Optional ports on expansion cards * |
| 10. Serial | |

- Notes:
- Items with * are only available on selected models

PERFORMANCE

Processor

Processor Family

Intel® Celeron®, Intel Pentium®, or 10th Generation Intel Core™ i3 / i5 / i7 / i9 Processor

Processor**

| Processor Name | Cores | Threads | Base Frequency | Max Frequency | Cache | Memory Support | Processor Graphics |
|--------------------|-------|---------|----------------|------------------------|-------|----------------|------------------------|
| Celeron G5900 | 2 | 2 | 3.4GHz | - | 2MB | DDR4-2666 | Intel UHD Graphics 610 |
| Celeron G5905 | 2 | 2 | 3.5GHz | - | 4MB | DDR4-2666 | Intel UHD Graphics 610 |
| Celeron G5920 | 2 | 2 | 3.5GHz | - | 2MB | DDR4-2666 | Intel UHD Graphics 610 |
| Celeron G5925 | 2 | 2 | 3.6GHz | - | 4MB | DDR4-2666 | Intel UHD Graphics 610 |
| Pentium Gold G6400 | 2 | 4 | 4.0GHz | - | 4MB | DDR4-2666 | Intel UHD Graphics 610 |
| Pentium Gold G6500 | 2 | 4 | 4.1GHz | - | 4MB | DDR4-2666 | Intel UHD Graphics 630 |
| Pentium Gold G6600 | 2 | 4 | 4.2GHz | - | 4MB | DDR4-2666 | Intel UHD Graphics 630 |
| Core i3-10100 | 4 | 8 | 3.6GHz | 4.3GHz ^[1] | 6MB | DDR4-2666 | Intel UHD Graphics 630 |
| Core i3-10300 | 4 | 8 | 3.7GHz | 4.4GHz ^[2] | 8MB | DDR4-2666 | Intel UHD Graphics 630 |
| Core i3-10320 | 4 | 8 | 3.8GHz | 4.6GHz ^[3] | 8MB | DDR4-2666 | Intel UHD Graphics 630 |
| Core i5-10400 | 6 | 12 | 2.9GHz | 4.3GHz ^[4] | 12MB | DDR4-2666 | Intel UHD Graphics 630 |
| Core i5-10400F | 6 | 12 | 2.9GHz | 4.3GHz ^[5] | 12MB | DDR4-2666 | - |
| Core i5-10500 | 6 | 12 | 3.1GHz | 4.5GHz ^[6] | 12MB | DDR4-2666 | Intel UHD Graphics 630 |
| Core i5-10600 | 6 | 12 | 3.3GHz | 4.8GHz ^[7] | 12MB | DDR4-2666 | Intel UHD Graphics 630 |
| Core i7-10700 | 8 | 16 | 2.9GHz | 4.8GHz ^[8] | 16MB | DDR4-2933 | Intel UHD Graphics 630 |
| Core i7-10700F | 8 | 16 | 2.9GHz | 4.8GHz ^[9] | 16MB | DDR4-2933 | - |
| Core i9-10900 | 10 | 20 | 2.8GHz | 5.2GHz ^[10] | 20MB | DDR4-2933 | Intel UHD Graphics 630 |
| Core i9-10900F | 10 | 20 | 2.8GHz | 5.2GHz ^[11] | 20MB | DDR4-2933 | - |

Notes:

[1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11] Intel Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see <http://www.intel.com/technology/turboboost/> for more information.

Operating System

Operating System**

- Ubuntu Linux^[1]
- Windows® 10 Home 64
- Windows 10 Home 64 Single Language
- Windows 10 IoT Enterprise
- Windows 10 Pro 64
- Windows 11 DG Windows 10 Pro 64
- Windows 11 Home
- Windows 11 Home Single Language
- Windows 11 Pro
- No operating system

Notes:

[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 610 | Integrated | Shared | 2x DP, 1x optional video port (HDMI® / 3rd DP / USB-C®) | 4096x2160@24Hz(onboard HDMI), 4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C) | DirectX® 12 |
| Intel UHD graphics 630 | Integrated | Shared | 2x DP, 1x optional video port (HDMI / 3rd DP / USB-C) | 4096x2160@24Hz(onboard HDMI), 4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C) | DirectX 12 |
| AMD Radeon™ 520 | Discrete | 2GB GDDR5 | 2x DP 1.2 | 4096x2160@60Hz(DP) | DirectX 12 |
| NVIDIA® GeForce GT 730 | Discrete | 2GB GDDR5 | 1x VGA, 1x HDMI 1.4 | 2048x1536@75Hz(VGA), 3840x2160@30Hz(HDMI) | DirectX 12 |
| AMD Radeon RX 550X | Discrete | 4GB GDDR5 | 1x HDMI 2.0, 1x VGA, 1x DP 1.4 | 4096x2160@60Hz(HDMI), 2048x1536@85Hz(VGA), 3840x2160@60Hz(DP) | DirectX 12 |
| NVIDIA GeForce GTX 1660 SUPER | Discrete | 6GB GDDR6 | 1x HDMI 2.0b, 1x DP 1.4, 1x DVI-D | 4096x2160@60Hz(HDMI), 7680x4320@60Hz with DSC(DP), 2560x1600@60Hz(DVI-D) | DirectX 12, PCIe® 3.0 x16, 125 watts, occupies two slots |
| NVIDIA GeForce RTX™ 2060 | Discrete | 6GB GDDR6 | 1x HDMI 3x DP | 4096x2160@60Hz(HDMI), 7680x4320@60Hz with DSC(DP) | DirectX 12, PCIe 3.0 x16, 125 watts |

Notes:

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

Monitor Support

Monitor Support^[1]

Supports up to 3 independent displays via onboard ports (2x DisplayPort™ and 1x optional port [HDMI / 3rd DP / USB-C]), more displays support via discrete graphics

Notes:

[1] Onboard video ports are only available for the models with integrated graphics.

Chipset

Chipset

Intel Q470 chipset

Memory

Max Memory^[1]

Up to 128GB DDR4-2933

Memory Slots

Four DDR4 DIMM slots, dual-channel capable

Memory Type**

- DDR4-2666
- DDR4-2933

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support^[1]

Up to five drives, 2x 2.5"/3.5" HDD + 1x 2.5" HDD + 2x M.2 SSD

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

Storage Type***

| Disk Type | Interface | RPM | Security |
|-------------------------|-------------------------|------|----------|
| 2.5" SATA HDD | SATA 6Gb/s | 7.2K | - |
| 3.5" SATA HDD | SATA 6Gb/s | 7.2K | - |
| M.2 2242 SSD | PCIe NVMe®, PCIe 3.0 x2 | - | - |
| M.2 2280 SSD | PCIe NVMe, PCIe 3.0 x4 | - | Opal |
| Intel Optane Memory M10 | PCIe NVMe, PCIe 3.0 x2 | - | - |

RAID

RAID 0/1 support (RAID preset only available via special bid models)

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo storage offerings.

Removable Storage

Optical**

- DVD-ROM, SATA 1.5Gb/s, slim (9.0mm)
- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

Card Reader

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

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC623-CG codec

Speakers

Single speaker, 2W x1

Power Supply

Power Supply**

| Power | Type | Efficiency | Key Features |
|-------|-------|------------|-------------------|
| 180W | Fixed | 85% | - |
| 300W | Fixed | 85% | 100-240V, 50-60Hz |
| 300W | Fixed | 90% | 100-240V, 50-60Hz |
| 500W | Fixed | 92% | 100-240V, 50-60Hz |

DESIGN

Input Device

Keyboard**

- Lenovo Calliope Keyboard (USB connector), black
- Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo Traditional Keyboard (USB connector), black
- No keyboard

Mouse**

- Lenovo Calliope Mouse (USB connector), black
- Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black (EOL on Jan, 2023)
- No mouse

Mechanical

Form Factor

Tower (17L)

Dimensions (WxDxH)^[1]

170 x 298 x 376 mm (6.7 x 11.7 x 14.8 inches)

Packaging Dimensions (WxDxH)

275 x 395 x 540 mm (10.8 x 15.6 x 21.4 inches)

Weight^[2]

Around 6.5 kg (14.3 lbs)

Packaging Weight

9.8 kg (21.61 lbs)

Case Color

Black

Bays

- 1x 2.5" disk bay (bay comes with disk)
- 1x 3.5" disk bay
- 1x 3.5" disk bay (optional, or bay comes with disk)
- 1x slim ODD bay

Expansion Slots

- One PCIe 3.0 x16, full-height (length < 245mm)
- One PCIe 3.0 x4, full-height (length < 245mm)
- One PCIe 3.0 x1, full-height (length < 245mm)
- One dummy slot, only bracket for optional port extension
- Three M.2 slots (one for WLAN, two for SSD)

Others

- (Optional) Dust filter
- Supports Smart Power On

Notes:

[1] The system dimensions may vary depending on configurations.

[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, Intel Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet^{}**

- Gigabit Ethernet, Bitland BN8E88, 1x RJ-45, PCIe x1
- Gigabit Ethernet, Intel Ethernet Server Adapter I350-T4, 4x RJ-45, PCIe x4^[1]
- 2.5 Gigabit Ethernet, Realtek RTL8125BGS, 1x RJ-45, PCIe x1
- No optional Ethernet

WLAN + Bluetooth^{}**

- Realtek RTL8822CE, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth 5.0, M.2 card
- Intel Wireless-AC 9560, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 5.1, M.2 card
- Intel Wi-Fi 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, Intel vPro® technology support, M.2 Card^[2]
- No WLAN and Bluetooth

Notes:

[1] Intel Ethernet Server Adapter I350-T4 is not available in EMEA.

[2] Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports^[1]

Front Ports

- 1x USB-C 3.2 Gen 1

- 2x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

Optional Front Ports

- 1x card reader
- None

Rear Ports^[2]

- 4x USB 3.2 Gen 1
- 2x DisplayPort
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)
- 1x serial (9-pin)

Optional Rear Ports^{***}

- Optional video port (one of HDMI / DisplayPort / USB-C 3.2 Gen 1 with DisplayPort function)
- 2x USB-C 3.2 Gen 2 (support data transfer, via 2-port USB-C expansion card, PCIe x4)
- 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe x1)
- 2x USB 2.0 (via 2-port adapter)
- 1x parallel
- 1x serial
- 4x serial (via 4-port serial expansion card, PCIe x1)
- 2x PS/2

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, 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;

USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;

USB4 40Gbps (USB 40Gbps): 40 Gbit/s;

Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

Monitor Cable**Monitor Cable**^{***}

- DP to VGA dongle
- DP to VGA cable (1.5M)
- DP to dual DP dongle
- DP to DVI-D dongle
- DP to HDMI dongle
- No monitor cable

SECURITY & PRIVACY**Security****Security Chip**

Discrete TPM 2.0, TCG certified

Physical Locks

- (Optional) E-lock
- (Optional) Smart Cable Clip
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Chassis Intrusion Switch

- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader

- Touch style fingerprint reader on mouse (EOL on Jan, 2023)

- No fingerprint reader

BIOS Security

- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- Individual USB port disablement

MANAGEABILITY

System Management

System Management^[1]

- Intel vPro with Intel AMT 14^[2]
- Non-vPro

Notes:

[1] Require choosing a vPro-support Wi-Fi adapter to enable vPro function through wireless connection.

[2] Intel vPro offers a superset of DASH's defined capabilities.

SERVICE

Warranty^[1]

Base Warranty^{}**

- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:

[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

- Operating: 5°C (41°F) to 35°C (95°F)
- 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) EPEAT™ Gold Registered^[2]
- (Optional) EPEAT Silver Registered^[3]
- ENERGY STAR® 8.0 (only available for MT 11DO/11CY)

- ErP Lot 3
- RoHS compliant
- TCO Certified 8.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration.

[2], [3] EPEAT is registered where applicable, please see <https://www.epeat.net> for registration status by country.

Other Certifications

Other Certifications

(Optional) TÜV Rheinland® Ultra Low Noise

- 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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