

## PERFORMANCE

### Processor

#### Processor Family

Intel® Celeron®, Intel Pentium®, 8th Generation Intel Core™ i3 / i5 / i7 Processor, or 9th Generation Intel Core i3 / i5 / i7 / i9 Processor

#### Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Celeron G4900	2	2	3.1GHz	-	2MB	DDR4-2400	Intel UHD Graphics 610
Celeron G4900T	2	2	2.9GHz	-	2MB	DDR4-2400	Intel UHD Graphics 610
Celeron G4920	2	2	3.2GHz	-	2MB	DDR4-2400	Intel UHD Graphics 610
Celeron G4930	2	2	3.2GHz	-	2MB	DDR4-2400	Intel UHD Graphics 610
Celeron G4930T	2	2	3.0GHz	-	2MB	DDR4-2400	Intel UHD Graphics 610
Celeron G4950	2	2	3.3GHz	-	2MB	DDR4-2400	Intel UHD Graphics 610
Pentium Gold G5400	2	4	3.7GHz	-	4MB	DDR4-2400	Intel UHD Graphics 610
Pentium Gold G5400T	2	4	3.1GHz	-	4MB	DDR4-2400	Intel UHD Graphics 610
Pentium Gold G5420	2	4	3.8GHz	-	4MB	DDR4-2400	Intel UHD Graphics 610
Pentium Gold G5420T	2	4	3.2GHz	-	4MB	DDR4-2400	Intel UHD Graphics 610
Pentium Gold G5500	2	4	3.8GHz	-	4MB	DDR4-2400	Intel UHD Graphics 630
Pentium Gold G5500T	2	4	3.2GHz	-	4MB	DDR4-2400	Intel UHD Graphics 630
Pentium Gold G5600	2	4	3.9GHz	-	4MB	DDR4-2400	Intel UHD Graphics 630
Pentium Gold G5600T	2	4	3.3GHz	-	4MB	DDR4-2400	Intel UHD Graphics 630
Pentium Gold G5620	2	4	4.0GHz	-	4MB	DDR4-2400	Intel UHD Graphics 630
Core i3-8100	4	4	3.6GHz	-	6MB	DDR4-2400	Intel UHD Graphics 630
Core i3-8100T	4	4	3.1GHz	-	6MB	DDR4-2400	Intel UHD Graphics 630
Core i3-8300	4	4	3.7GHz	-	8MB	DDR4-2400	Intel UHD Graphics 630
Core i3-8300T	4	4	3.2GHz	-	8MB	DDR4-2400	Intel UHD Graphics 630
Core i3-9100	4	4	3.6GHz	4.2GHz	6MB	DDR4-2400	Intel UHD Graphics 630
Core i3-9100T	4	4	3.1GHz	3.7GHz	6MB	DDR4-2400	Intel UHD Graphics 630
Core i3-9300	4	4	3.7GHz	4.3GHz	8MB	DDR4-2400	Intel UHD Graphics 630
Core i3-9300T	4	4	3.2GHz	3.8GHz	8MB	DDR4-2400	Intel UHD Graphics 630
Core i3-9320	4	4	3.7GHz	4.4GHz	8MB	DDR4-2400	Intel UHD Graphics 630
Core i5-8400	6	6	2.8GHz	4.0GHz	9MB	DDR4-2666	Intel UHD Graphics 630

Core i5-8400T	6	6	1.7GHz	3.3GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-8500	6	6	3.0GHz	4.1GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-8500T	6	6	2.1GHz	3.5GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-8600	6	6	3.1GHz	4.3GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-8600T	6	6	2.3GHz	3.7GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-9400	6	6	2.9GHz	4.1GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-9400T	6	6	1.8GHz	3.4GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-9500	6	6	3.0GHz	4.4GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-9500T	6	6	2.2GHz	3.7GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-9600	6	6	3.1GHz	4.6GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-9600T	6	6	2.3GHz	3.9GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i7-8700	6	12	3.2GHz	4.6GHz	12MB	DDR4-2666	Intel UHD Graphics 630
Core i7-8700T	6	12	2.4GHz	4.0GHz	12MB	DDR4-2666	Intel UHD Graphics 630
Core i7-9700T	8	8	2.0GHz	4.3GHz	12MB	DDR4-2666	Intel UHD Graphics 630
Core i9-9900T	8	16	2.1GHz	4.4GHz	16MB	DDR4-2666	Intel UHD Graphics 630

## Operating System

### Operating System

- Windows® 10 Home 64
- Windows 10 Pro 64
- Windows 10 IoT Enterprise
- DOS
- Ubuntu Linux
- No operating system

## Graphics

### Graphics<sup>[1]</sup>

Graphics	Type	Memory	Connector	Max Resolution	Key Features
Intel UHD graphics 610	Integrated	Shared	1x HDMI®, 1x DP, 1x optional video port (2nd HDMI, VGA, 2nd DP, or USB-C)	4096x2160@24Hz(onboard HDMI), 4096x2304@60Hz(DP), 2048x1536@50Hz(VGA), 4096x2304@60Hz(USB-C)	DirectX® 12
Intel UHD graphics 630	Integrated	Shared	1x HDMI, 1x DP, 1x optional video port (2nd HDMI, VGA, 2nd DP, or USB-C)	4096x2160@24Hz(onboard HDMI), 4096x2304@60Hz(DP), 2048x1536@50Hz(VGA), 4096x2304@60Hz(USB-C)	DirectX 12
AMD Radeon™ RX 560	Discrete	4GB GDDR5	4x Mini DisplayPort™	5120x2880@60Hz(up to 2 Mini DisplayPort), 4096x2160@60Hz(up to 4 Mini DisplayPort)	DirectX 12

# ThinkCentre M920x Tiny

**Notes:**

1. Integrated graphics information and onboard video ports information are not applicable for all models without integrated graphics (for the details, please refer to processor section)

## Monitor Support

### Monitor Support<sup>[1]</sup>

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

**Notes:**

1. Optional port and discrete graphics are mutually exclusive

## Chipset

### Chipset

Intel Q370 chipset

## Memory

### Memory Type<sup>[1]</sup>

DDR4-2666

### Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable

### Memory Protection

Non-ECC

### Max Memory<sup>[2]</sup>

Up to 32GB DDR4-2666

**Notes:**

1. Installed memory is actually 2666MHz, but run at 2400MHz due to the memory support capability of processor
2. The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.

## Storage

### Storage Support

Up to three drives, 1x 2.5" HDD + 2x M.2 2242/2280 SSD

- 2.5" HDD up to 1TB
- 2.5" SSD up to 256GB each
- M.2 SSD up to 512GB each
- Optional Intel Optane™ Memory, M.2

### RAID

RAID 0/1 support for M.2 SSDs (RAID preset only available via special bid model)

### Storage Type

Disk Type	Interface	RPM	Security
2.5" SATA HDD	SATA 6Gb/s	7.2K	-
2.5" SATA HDD	SATA 6Gb/s	5.4K	-
2.5" SATA SSD	SATA 6Gb/s	-	-
2.5" SATA SSD	SATA 6Gb/s	-	Opal
M.2 2242 SSD	PCIe NVMe, PCIe 3.0 x2	-	-
M.2 2242 SSD	PCIe NVMe, PCIe 3.0 x4	-	-
M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	-
M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	Opal
Intel Optane Memory M10	PCIe NVMe, PCIe 3.0 x2	-	-

## Removable Storage

**Optical**

- DVD-ROM, slim (9.0mm), via USB external ODD box
- DVD burner (DVD±RW), slim (9.0mm), via USB external ODD box
- None

**Card Reader**

No card reader

**Multi-Media****Audio Chip**

High Definition (HD) Audio, Realtek® ALC233VB2 codec

**Speakers**

- Single speaker, 1.5W x1
- Single speaker, 2W x1

**Power Supply****Power Supply**

Power	Type	Efficiency	Key Features
135W	Adapter	88%	Autosensing

**DESIGN****Input Device****Keyboard**

- Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo Keyboard (PS/2 connector), black
- Lenovo Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**

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

**Mechanical****Form Factor**

Tiny (1L)

**Dimensions (WxDxH)**

Models	Dimensions
Tiny only	179 x 183 x 34.5 / 37 mm with rubber feet (7.05 x 7.2 x 1.36 / 1.5 inches with rubber feet)
With VESA mount & ODD box	188.4 x 185.38 x 63 mm (7.42 x 7.30 x 2.48 inches)

**Weight**

Models	Weight
Tiny Only	1.32 kg (2.91 lbs)
With VESA mount & ODD box	1.66 kg (3.66 lbs)

**Case Color**

Black

**Bays**

1x 2.5" disk bay

**Expansion Slots<sup>(1)</sup>**

- One PCIe 3.0 x8, low-profile
- Two M.2 slots (one for WLAN, one for SSD)

**EOU**

(Optional) Toolless chassis open (Toolless Chassis Screw required) and toolless M.2 SSD, HDD, memory assembly / removal

**Stand**

- Vertical stand
- No stand

**Mounting**

- VESA mount bracket kit, supports VESA 75mm and 100mm
- Not configured

**Others**

- (Optional) Dust Filter
- (Optional) power adapter cage

**Notes:**

1. PCIe 3.0 x8 slot is for Lenovo qualified PCIe cards, Intel I350-T4 ethernet card, 4x serial port expansion card, and AMD Radeon™ RX 560 4GB graphics card. The PCIe card occupies the space of 2.5" HDD/SSD and optional ports, they are mutually exclusive.

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

Gigabit Ethernet, Intel Ethernet Connection I219-LM, 1x RJ45, supports Wake-on-LAN

**Optional Ethernet**

- Gigabit Ethernet, Intel Ethernet Server Adapter I350-T4, 4x RJ-45, PCIe x4
- No optional Ethernet

**WLAN + Bluetooth™**

- Realtek RTL8821CE, 802.11ac Dual Band 1x1 Wi-Fi + Bluetooth 4.2, M.2 card
- Intel Dual Band Wireless-AC 8265, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 4.2, M.2 Card
- Intel Wireless-AC 9560, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 5.0, Intel vPro technology support, M.2 card
- Intel Dual Band Wireless-AC 3165, 802.11ac Dual Band 1x1 Wi-Fi + Bluetooth 4.2, M.2 Card
- Realtek RTL8822BE, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 4.2, M.2 card
- No WLAN and Bluetooth

**Ports****Front Ports<sup>[1]</sup>**

- 1x USB 3.1 Gen 1 (Always On and fast charge)
- 1x USB-C 3.1 Gen 1
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

**Optional Front Ports**

None

**Rear Ports<sup>[2]</sup>**

- 2x USB 3.1 Gen 1
- 2x USB 3.1 Gen 2
- 1x Ethernet (RJ-45)
- 1x HDMI
- 1x DisplayPort

**Optional Rear Ports**

- Optional Port 1 (VGA / 2nd DisplayPort / 2nd HDMI / serial / USB-C 3.1 Gen 1 with DisplayPort function, select one)
- Optional Port 2 (serial)
- 2x USB 3.1 Gen 1 (via 2-port USB expansion card, PCIe x1)
- 1x Thunderbolt™ 3 (combo USB-C 3.1 Gen 2 / DisplayPort, via Thunderbolt expansion card, PCIe x4)
- 4x serial (via 4-port serial expansion card, PCIe x1)
- 1x parallel (USB to parallel dongle)
- 2x PS/2 (USB to 2x PS/2 dongle)

**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;
  - 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

## Monitor Cable

### Monitor Cable

- MiniDP to DP Dongle
- VGA Cable Tiny
- DP to VGA dongle
- DP to dual DP dongle
- HDMI to VGA Dongle
- DP to DVI-D dongle
- DP to HDMI 1.4 dongle
- DP to VGA Cable (1.5M)
- No monitor cable

## SECURITY & PRIVACY

### Security

#### Security Chip

Discrete TPM 2.0, TCG certified

#### Physical Locks

Kensington® Security Slot

#### Chassis Intrusion Switch

Chassis intrusion switch

#### Fingerprint Reader

- Touch style fingerprint reader on mouse
- No fingerprint reader

#### BIOS Security

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

## MANAGEABILITY

### System Management

#### System Management<sup>[1]</sup>

- Intel vPro with Intel AMT 12.0
- None

Notes:

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

## SERVICE

### Warranty

#### Base Warranty

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

## CERTIFICATIONS

### Green Certifications

#### Green Certifications

- (Optional) EPEAT™ Gold
- (Optional) EPEAT Silver
- ENERGY STAR® 8.0
- ErP Lot 3
- TCO
- RoHS compliant

### Other Certifications

#### Other Certifications

(Optional) TÜV Low Noise certified

#### Mil-Spec Test

MIL-STD-810G military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation)

