## PERFORMANCE

**Processor**
Intel® Core™ i9-14900, 24C (8P + 16E) / 32T, Max Turbo up to 5.8GHz, P-core 2.0 / 5.4GHz, E-core 1.5 / 4.3GHz, 36MB

**Processor Sockets**
1x FCLGA1700

**Integrated Graphics**
Integrated Intel® UHD Graphics 770

**Discrete Graphics**
1x NVIDIA® RTX 4000 SFF Ada Generation 20GB

**Chipset**
Intel® W680 Chipset

**Memory[1]**
2x 32GB SO-DIMM DDR5-4800 Non-ECC

**Memory Slots**
Four DDR5 SO-DIMM slots, dual-channel capable

**Max Memory[2]**
Up to 192GB (4x 48GB DDR5 SO-DIMM)

**PCIe® NVMe® Controller**
Integrated NVMe® controller

**PCIe® NVMe® Drive**
1x 1TB SSD M.2 2280 PCIe® 4.0x4 Performance NVMe® Opal

**SATA Controller**
Integrated SATA controller

**SATA/SAS Drive**
None

**Storage Support[3]**
Up to 1x 2.5" HDD or SSD + 2x M.2 SSD
• 2.5" HDD up to 1TB
• 2.5" SSD up to 7.68TB
• M.2 SSD up to 4TB each

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC897-Q codec

**Power Supply**
300W 90% Adapter

## DESIGN

**Keyboard**
USB Traditional Keyboard, Black, German

**Mouse**
USB Calliope Mouse, Black

**Expansion Slots**
Two PCIe® slots with one PCIe® 4.0 x16 and one PCIe® 3.0 x8.
• Slot 1: PCIe® 4.0 x16 (via MXM to PCIe® riser card), low profile, 75W, double-width
• Slot 2: PCIe® 3.0 x8 (x4 lanes), low profile, 25W

**Bays**
1x 2.5" disk bay (optional, comes with disk)

**Dust Filter**
None

**Dimensions (WxDxH)[4]**
87 x 223 x 202 mm (3.43 x 8.78 x 7.95 inches)

**Weight[5]**
3.6 kg (7.94 lbs, maximum configuration)

## CONNECTIVITY

**Onboard Ethernet**
Intel® I225-LM + I210-AT, 2x RJ-45, 2.5GbE + GbE

**Optional Ethernet**
None

**WLAN + Bluetooth®[6]**
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 + BT5.1, vPro®

**Front Ports**
• 2x Thunderbolt™ 4
• 1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
• 1x headphone / microphone combo jack (3.5mm)

**Rear Ports**
• 4x USB-A (USB 10Gbps / USB 3.2 Gen 2)
• 3x DisplayPort™ 1.2
• 1x Ethernet (2.5GbE RJ-45)
• 1x Ethernet (GbE RJ-45)

**Optional Rear Ports (configured)**
None

## SECURITY & PRIVACY

**Security Chip**
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**
Kensington® Security Slot™, 3 x 7 mm

**Chassis Intrusion Switch**
Chassis Intrusion Switch

## MANAGEABILITY

**System Management[7]**
Intel® vPro® Enterprise with Intel® AMT 16

## SERVICE

**Base Warranty**
3-year, Onsite

**Included Upgrade**
1Y Premier Support from 3Y Onsite Windchill bundles (CPN)

## CERTIFICATIONS

**Green Certifications[8]**
• ENERGY STAR® 8.0
• EPEAT™ Gold Registered
• RoHS compliant
• TCO Certified 9.0

**ISV Certifications**
Please visit ISV certifications for Lenovo® Workstations

**Mil-Spec Test**
MIL-STD-810H military test passed

## SOFTWARE

**Operating System**
Windows® 11 Pro, German

**Bundled Software**
None

## MODEL

| | | | | |
|---|---|---|---|---|
| **TopSeller** | : Yes | | **Announce Date** | : 2024-02-27 |
| **EAN / UPC / JAN** | : 0197531851000 | | **End of Support** | : 2031-05-24 |

Product image is a sample, it may not match the real color of this model

Note:
[1] System comes with DDR5-4800 memory and will run at lower speed due to platform limitations:
4x 32GB configuration runs at 3600 MT/s;
other configurations run at 4000 MT/s.
[2] The max memory is based on the test results with current Lenovo memory offerings.
[3] The storage capacity supported is based on the test results with current Lenovo storage offerings.
[4] The system dimensions may vary depending on configurations.
[5] 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.
[6] Bluetooth 5.3 is hardware ready but may run at a lower......

· Lenovo reserves the right to change specifications without notice.

To see more note information, please link to
https://psref.lenovo.com/Detail/2235?M=30HA0045GE