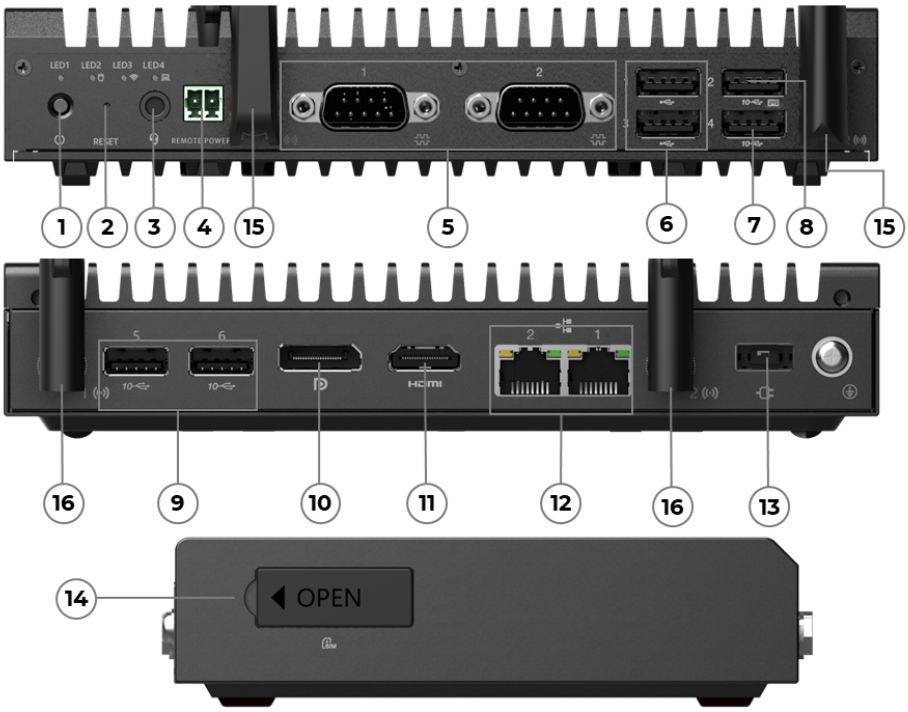
OVERVIEW



1. Power button	9. 2x USB-A (USB 10Gbps)
2. Reset hole	10. DisplayPort 1.4
3. Combo audio jack (on bottom)	11. HDMI 2.1 TMDS
4. Remote power button connector	12. 2x 2.5GbE Ethernet (RJ-45)
5. 2x Serial (RS232 / RS422 / RS485) (Note 3) *	13. AC/DC power connector (DC in 20 V)
6. 2x USB-A (Hi-Speed USB)	14. Nano SIM slot (Note 2) *
7. USB-A (USB 10Gbps)	15. Wireless WAN antenna slot *
8. USB-A (USB 10Gbps), with Smart Power On	16. Wi-Fi antenna slots *

Notes:
- Items with * are only available on selected models
- Nano SIM slot is only available on 0~50°C models
- SE10n Gen2 (0~40°C) features 2x RS-232 serial ports.

PERFORMANCE

Processor

Processor Family

Intel® N-series or Intel® Core™ 3 N-series Processor

Processor**

Processor Name	Cores	Threads	Max Frequency	Cache	Processor Graphics
Core 3 N355[1]	8	8	3.9GHz	6MB Intel® Smart Cache	Intel® Graphics
N150	4	4	3.6GHz	6MB Intel® Smart Cache	Intel® Graphics

Notes:

[1] For 0°C (32°F) to 50°C (122°F) operating temperature models only

Operating System

Operating System**

- Windows® 11 IoT Enterprise LTSC 2024
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Core
- Ubuntu Server
- IGEL Linux
- No preload operating system

Graphics

Graphics

Graphics	Type	Memory	Max Resolution	Connector	Key Features
Intel® Graphics	Integrated	Shared	4096x2160@60Hz(HDMI®), 4096x2160@60Hz(DP)	1x HDMI® 2.1 TMDS , 1x DP 1.4	DirectX® 12.1

Monitor Support

Monitor Support

Supports up to 2 independent displays via onboard ports (DisplayPort™ and HDMI®)

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory

Up to 16GB DDR5-5600

Memory Slots

One DDR5 SODIMM slot

Memory Type[1]

DDR5-5600

Notes:

[1] Installed memory is actually DDR5-5600 but may run as DDR5-4800 depending on the memory support capability of Intel®.

Storage

Max Storage Support[1]

One drive, up to 2TB M.2 SSD

Storage Type

Disk Type	Interface
M.2 2280 SSD[2]	PCIe® NVMe®, PCIe® 3.0

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] M.2 PCIe® Gen 4 SSD in a M.2 PCIe® Gen 3 slot runs at PCIe® Gen 3 speeds.

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC233 codec

Power Supply

Power Supply**

Power	Type	Efficiency	Key Features
65W (0~40°C) / 50W(40~50°C)	Adapter	89%	for 0°C (32°F) to 40°C (104°F) operating temperature models
65W	Adapter	89%	for 0°C (32°F) to 50°C (122°F) operating temperature models
No power adapter	-	-	-

DESIGN

Input Device

Keyboard

No keyboard

Mouse

No mouse

Mechanical

Dimensions (WxDxH)[1]

179 x 135 x 34.5 mm (7.04 x 5.31 x 1.36 inches)

Packaging Dimensions (WxDxH)

303 x 256 x 84 mm (11.93 x 10.08 x 3.31 inches)

Weight[2]

Models	Weight
Operating temperature 0~40°C models	Around 0.97 kg (2.14 lbs)
Operating temperature 0~50°C models	Around 1.16 kg (2.56 lbs)

Packaging Weight

- Operating temperature 0~40°C models: 1.98 kg (4.37 lbs)
- Operating temperature 0~50°C models: 2.2 kg (4.85 lbs)

Case Color

Raven black

Expansion Slots

Three M.2 slots (Key E for WLAN, Key M for SSD, Key B for WWAN)

Mounting***

- Supports VESA mount 100mm
- None
- DIN rail mount

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

Ethernet

Dual 2.5GbE, (Intel® Ethernet Controller I226-V), 2x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®[1]

- MediaTek Wi-Fi® 6 MT7920, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.4, M.2 card
- Intel® Wi-Fi® 6E AX210, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2
- No WLAN and Bluetooth®

WWAN[2]

- Rolling Wireless RW101R-GL, 4G LTE CAT6, M.2 card, with embedded eSIM functionality
- No support

Notes:

[1] Wi-Fi® operation (including Wi-Fi® 6, Wi-Fi® 6E, Wi-Fi® 7, etc.) is subject to the regulatory requirements of each country. Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2] eSIM function only works on Windows® 10 and Windows® 11 IoT LTSC.

Ports[1]

Front Ports

- 2x USB-A (Hi-Speed USB / USB 2.0)
- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)
- 2x serial (RS232 / RS422 / RS485, BIOS selectable)[2]

Optional Front Ports

- None
- Phoenix Terminal Male

Rear Ports

- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 2x 2.5GbE Ethernet (RJ-45)

Optional Left Ports

1x Nano SIM slot[3]

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.
Thunderbolt™ 5: 80 Gbit/s (bidirectional), up to 120 Gbit/s in bandwidth boost mode for video-intensive applications.

[2] 0°C (32°F) to 40°C (104°F) operating temperature models only support 2xRS232

[3] Nano SIM slot is only available on 0°C (32°F) to 50°C (122°F) operating temperature models

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0, TCG certified

BIOS Security

- Absolute persistence module
- Administrator password
- Boot sequence control
- Boot without keyboard and mouse
- Configuration change detection
- Certificate-based BIOS authentication
- Cover tamper detected
- Intel® BIOS guard
- Hard disk password
- Power-on password
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- Never crash Self-healing
- Secure boot
- Secure wipe

SERVICE

Warranty[1]

Base Warranty**

- 1-year courier or carry-in service
- 1-year limited onsite service
- 3-year limited onsite service

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://support.lenovo.com/warrantylookup/warrantypolicy.

ACCESSORIES

Bundled Accessories

Bundled Accessories***

- DP to VGA dongle
- HDMI® to VGA dongle
- IP51 dust shield
- None

OPERATING REQUIREMENTS

Operating Environment

Temperature

- Operating: IEC60068-2-1 Test Ab: Cold, IEC 60068-2-2 Test Bb: Dry heat, 0°C (32°F) to 50°C (122°F) with 0.7m/s air flow
- Storage: IEC60068-2-1 Test A: Cold, IEC 60068-2-2 Test B: Dry heat, -40°C (-40°F) to 85°C (185°F)
- Operating: IEC60068-2-1 Test Ab: Cold, IEC 60068-2-2 Test Bb: Dry heat, 0°C (32°F) to 40°C (104°F) with 0.7m/s air flow

Relative Humidity

Relative humidity operating: IEC 60068-2-66 Damp heat, steady state 95%@40°C non-condensing

Shock Protection

- IEC 60068-2-27, shock, operating, 30G / 11ms, half sine[1]
- IEC 60068-2-27, shock, operating, 50G / 11ms, half sine[2]

Vibration Protection

- IEC 60068-2-64, Vibration, Operating, 3Grms, random, 5 ~ 500Hz, 0.5hr/axis (for 0~50°C)
- IEC 60068-2-64, Vibration, Operating, 1.5Grms, random, 5 ~ 500Hz, 0.5hr/axis (for 0~40°C)

MTBF Prediction

- MTBF @50°C (for 0~50°C)
- MTBF @40°C (for 0~40°C)

Ingress Protection

None

Flowing Mixed Gas Corrosion

IEC 60068-2-60, 25°C/75%RH Gas concentration: H2S/0.01ppm, SO2/0.2ppm, NO2/0.2ppm, Cl2/0.01ppm, 21days

Notes:

[1] For 0°C (32°F) to 40°C (104°F) operating temperature models
[2] For 0°C (32°F) to 50°C (122°F) operating temperature models

CERTIFICATIONS

Green Certifications

Green Certifications

- ErP Lot 6/26
- GREENGUARD®
- Low Halogen
- REACH
- RoHS compliant
- TED (The ECO-declaration)
- VOC Report
- WEEE

Other Certifications

EMC

- EMC CE / FCC Class B
- FCC for USA
- IC for Canada
- RCM for Australia / New Zealand
- VCCI for Japan
- BSMI for Taiwan
- CCC for China
- CE for Europe
- KCC for Korea

Safety

- EAC for Russia/Kazakhstan/Armenia/Kyrgyzstan
- NRTL (ETL, cETL) for USA / Canada
- Ukrsepro for Ukraine
- CE for Europe
- CM for Morocco
- CB for WW
- CCC for China
- BIS for India
- GS for Germany
- KEBS for Kenya
- KUCAS for Kuwait
- KVALITET for Serbia
- NOM-019 for Mexico
- SABS for South Africa
- SONCAP for Nigeria
- STZ for Uzbekistan
- UKCA for United Kingdom

RF

- CE for Europe
- SRRC for China
- SUBTEL for Chile
- UKCA for United Kingdom
- WPC for India
- TELEC/JATE for Japan

- IC for Canada
- KCC for Korea
- NBTC for Thailand
- NCC for Taiwan
- NOM-208 for Mexico
- NTC for Philippines
- SDPPI for Indonesia
- SIRIM for Malaysia
- ANRT for Morocco
- FCC for USA

Other Certifications

- AWS IoT Greengrass Certified
- Microsoft® Azure IoT Edge Certified
- Red Hat Enterprise Linux Certified
- Ubuntu Core Certified
- Ubuntu Server Certified

- Feature with ** means that only one option listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
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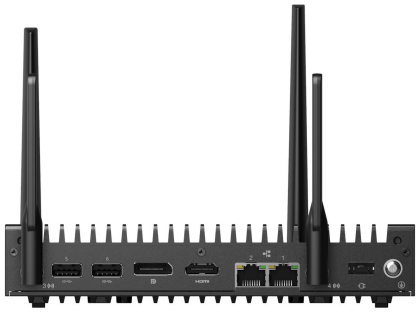

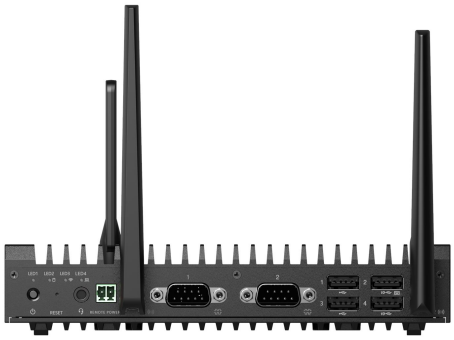

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