



Junta Central Electoral  
Garantía de Identidad y Democracia



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DEPARTAMENTO DE COMPRAS Y CONTRATACIONES

Junta Central Electoral

FICHA TECNICA

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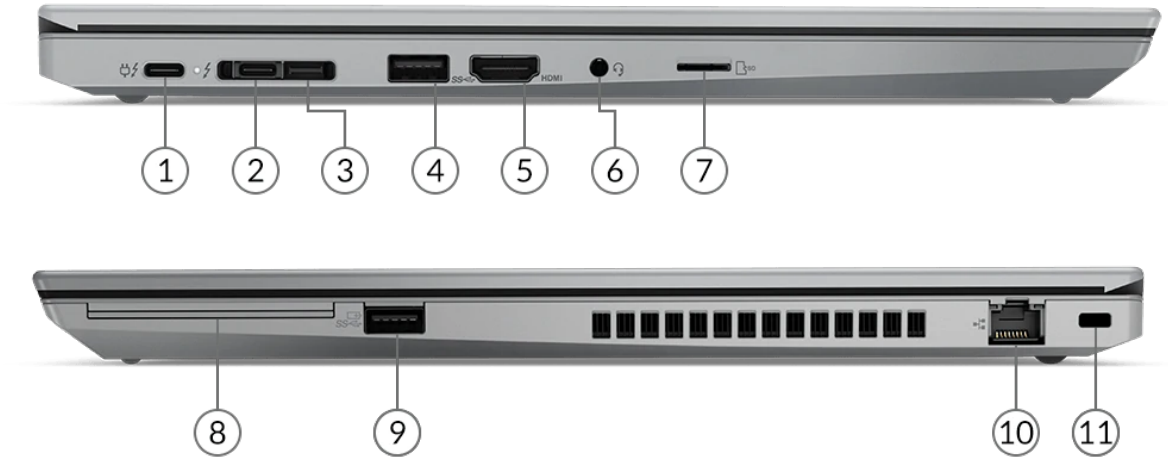
N° DE PARTE Y SERIE	DESCRIPCION	CANTIDAD	GARANTIA
<p>*Lenovo ThinkPad T15 Gen 2 *20W400PYUS</p>	<p>Lenovo ThinkPad T15 Gen 2 20W400PYUS  <b>*Pantalla:</b> 15.6" Touchscreen Notebook - Full HD - 1920 x 1080 -  <b>*Procesador:</b> Intel Core i7-1165G7 Quad-core (4 Core 12MB DDR4-3200) 2.80 GHz – 4.7 GHz.  <b>*Generacion:</b> 11th Gen  <b>*Memoria Ram:</b> 16 GB Total RAM  <b>*Disco Duro:</b>512 GB SSD M.2 PCIe NVMe, - Black - Intel Chip  <b>*Sistema Operativo:</b> Windows 11 Prof. 64  <b>*Tarjeta Grafica:</b> Intel Iris Xe Graphics - In-plane Switching (IPS) Technology - English  Keyboard - IEEE 802.11ax Wireless LAN Standar, Wifi + Bluethoo 5.1.  <b>*Puertos:</b></p> <ul style="list-style-type: none"> <li>• 1x USB 3.2 Gen 1</li> <li>• 1x USB 3.2 Gen 1 (Always On)</li> <li>• 2x Thunderbolt 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)</li> <li>• 1x HDMI 2.0</li> <li>• 1x microSD card reader</li> <li>• 1x Headphone / microphone combo jack (3.5mm)</li> </ul> <p><b>Puertos Opcionales</b></p> <ul style="list-style-type: none"> <li>• 1x Ethernet (RJ-45)</li> <li>• 1x Side docking connector</li> <li>• 1x Smart card reader</li> <li>• 1x Nano-SIM card slot (WWAN support models)</li> </ul> <p><b>*Garantia:</b> Warranty 3-year.</p>	<p>30</p>	<p>3 años</p>

CONDICIONES:

- **TIEMPO DE ENTREGA:** de 3 a 5 semanas una vez se confirme la orden de compra o firma del contrato.
- **CONDICION DE PAGO:** CREDITO A 30 DIAS.

A handwritten signature in blue ink, appearing to be 'Antonio', written over a circular stamp.

**OVERVIEW**



1. Thunderbolt 4	7. microSD card reader
2. Thunderbolt 4	8. Smart card reader *
3. Side docking connector *	9. USB 3.2 Gen 1 (Always On)
4. USB 3.2 Gen 1	10. Ethernet (RJ-45) *
5. HDMI 2.0	11. Kensington Security Slot
6. Headphone / microphone combo jack (3.5mm)	

Notes:

- Ports with \* are only available on selected models
- Optional nano-SIM card slot on the rear side (not shown on the sample product above)
- The combination of 2 and 3 is side docking connector

## PERFORMANCE

### Processor

#### Processor Family

11th Generation Intel® Core™ i5 / i7 Processor

#### Processor\*\*<sup>[1]</sup>

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i5-1135G7	4	8	2.4GHz	4.2GHz	8MB	DDR4-3200	Intel Iris® Xe Graphics
Core i5-1145G7	4	8	2.6GHz	4.4GHz	8MB	DDR4-3200	Intel Iris Xe Graphics
Core i7-1165G7	4	8	2.8GHz	4.7GHz	12MB	DDR4-3200	Intel Iris Xe Graphics
Core i7-1185G7	4	8	3.0GHz	4.8GHz	12MB	DDR4-3200	Intel Iris Xe Graphics

#### Notes:

- Intel Iris Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel Iris Xe Graphics will function as Intel UHD Graphics.

### Operating System

#### Operating System\*\*

- Windows® 11 Pro 64
- Windows 11 Home 64
- Windows 11 Home 64 Single Language
- Windows 11 DG Windows 10 Pro 64
- Windows 10 Pro 64
- Windows 10 Home 64
- Windows 10 Home 64 Single Language
- Linux
- Ubuntu Linux
- No operating system

### Graphics

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

Graphics	Type	Memory	Key Features
Intel Iris Xe Graphics	Integrated	Shared	DirectX® 12.1
NVIDIA® GeForce MX450	Discrete	2GB GDDR6	DirectX 12

#### Notes:

- Intel Iris Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel Iris Xe Graphics will function as Intel UHD Graphics.

### Monitor Support

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

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI®)

- Thunderbolt supports up to 5K@60Hz
- HDMI supports up to 4K@60Hz

#### Notes:

- Refresh rates >60hz also supported, however max resolution will be limited.

### Chipset

#### Chipset

Intel SoC (System on Chip) platform

### Memory

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

- Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200

# ThinkPad T15 Gen 2

- Up to 48GB (16GB soldered + 32GB SO-DIMM) DDR4-3200

## Memory Slots

One memory soldered to systemboard, one DDR4 SO-DIMM slot, dual-channel capable

## Memory Type

DDR4-3200

### 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.

## Storage

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

One drive, up to 256GB M.2 2242 SSD or 2TB M.2 2280 SSD

### Storage Slot

One M.2 2280 PCIe® 3.0 x4 slot

### Storage Type<sup>\*\*[2]</sup>

Disk Type	Interface	Security
M.2 2242 SSD	PCIe NVMe®, PCIe 3.0 x4	-
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4 Performance	Opal2
M.2 2280 SSD	PCIe NVMe, PCIe x4	Opal2

### Notes:

1. The storage capacity supported is based on the test results with current Lenovo storage offerings. The system may support larger storage as the technology develops.
2. The SSD with PCIe 4.0x4 performance is downgraded to closer to PCIe 3.0x4 performance due to the system slot limitation.

## Removable Storage

### Optical

None

### Card Reader

MicroSD card reader

## Multi-Media

### Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

### Speakers

Stereo speakers, 2W x2, Dolby® Audio™

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

- Dual array microphone, far-field
- No microphone

### Camera<sup>\*\*</sup>

- HD 720p, with privacy shutter, fixed focus
- IR & HD 720p hybrid, with privacy shutter, fixed focus
- No camera

### Notes:

1. No microphone is for special bid only.

## Battery

### Battery

Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

### Max Battery Life<sup>[1]</sup>

MobileMark® 2018: 12 hr

JEITA 2.0: 16.8 hr

## Notes:

- All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018, JEITA 2.0, continuous 1080p video playback (with 150nits brightness and default volume level) or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary and depends on many factors such as product configuration and usage, software use, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time and use.

## Power Adapter

### Power Adapter\*\*<sup>[1][2]</sup>

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

## Notes:

- AC adapter offerings depend on the country.
- No power adapter is for special bid only.  
In EMEA only 65W USB-C AC adapter is available.

## DESIGN

### Display

#### Display\*\*<sup>[1]</sup>

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
15.6"	FHD (1920x1080)	None	IPS	300 nits	Anti-glare	16:9	800:1	45% NTSC	170°	DC dimming
15.6"	FHD (1920x1080)	Multi-touch	IPS	300 nits	Anti-glare	16:9	800:1	45% NTSC	170°	DC dimming
15.6"	UHD (3840x2160)	None	IPS	600 nits	Anti-glare	16:9	1400:1	100% Adobe® RGB	170°	Dolby Vision™, DisplayHDR™ 400, DC dimming

#### Touchscreen

- On-cell touch, supports 10-point touch
- Non-touch

## Notes:

- California Electronic Waste Recycling Fee  
In California, per state law, Lenovo charges an electronic waste recycling fee on this covered device at the time of sale of the product. For more information, go to <https://www.calrecycle.ca.gov/Electronics/Consumer>

### Input Device

#### Keyboard

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

#### Keyboard Backlight

- LED backlight
- Non-backlight

#### UltraNav™

TrackPoint® pointing device and Mylar® surface multi-touch touchpad

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

#### Dimensions (WxDxH)

365.8 x 248 x 19.1 mm (14.40 x 9.76 x 0.75 inches)

## Weight

Models	Weight
FHD non-touch models with aluminium top cover	Starting at 1.79 kg (3.96 lbs)
FHD non-touch models with PPS top cover	Starting at 1.82 kg (4.02 lbs)
FHD touch models with aluminium top cover	Starting at 1.81 kg (3.999 lbs)
FHD touch models with PPS top cover	Starting at 1.84 kg (4.07 lbs)
UHD models with PPS top cover	Starting at 1.75 kg (3.86 lbs)

## Case Color\*\*[2]

- Black
- Storm grey

## Surface Treatment

- ISO 22196 compliant anti-microbial surface treatment (not including keyboard, display, and display bezel)
- Not anti-microbial surface treatment

## Case Material\*\*

- Aluminium (top), PC + ABS / Talc15 + magnesium alloy (keyboard cover), PA / 50% GF (bottom)
- PPS / 50% GF (top), PC + ABS / Talc15 + magnesium alloy (keyboard cover), PA / 50% GF (bottom)

## Notes:

1. The system dimensions and weight vary depending on configurations.
2. Storm grey case is NOT available in EMEA.

# CONNECTIVITY

## Network

### Ethernet\*\*

- Gigabit Ethernet, Intel Ethernet Connection I219-LM (vPro models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel Ethernet Connection I219-V (non-vPro models), 1x RJ-45, supports Wake-on-LAN
- No Ethernet

### WLAN + Bluetooth®\*\*[1][2]

- Intel Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1
- Intel Wi-Fi 6E AX210, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1

### WWAN\*\*

- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM120R-GL, 4G LTE CAT12, M.2 card
- Quectel EM120R-GL, 4G LTE CAT12, M.2 card, with embedded eSIM functionality
- Quectel EM160R, 4G LTE CAT16, MIMO 4x4, M.2 card, with embedded eSIM functionality
- No support

### SIM Card

- Gemalto eSIM card (physical)
- No SIM card inbox

### NFC

- Near Field Communication
- No support

## Notes:

1. Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitation
2. Wi-Fi 6 and Wi-Fi 6E full features might be limited by country level restrictions.  
6GHz Wi-Fi 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi 6E, and the regional regulatory certifications & spectrum allocation.

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

### Standard Ports

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)

- 2x Thunderbolt 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x HDMI 2.0
- 1x microSD card reader
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports**\*\*\*[2]

- 1x Ethernet (RJ-45)
- 1x Side docking connector
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

**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 3/4: 40 Gbit/s
2. For the models without Ethernet connector, it is recommended to use the Lenovo USB-C to Ethernet Adapter for Ethernet connection.

## Docking

**Docking**

Various docking solutions supported via side docking connector (optional) or Thunderbolt.  
For more compatible docking solutions, please visit [Docking for ThinkPad® T15 Gen 2](#)

## Monitor Cable

**Monitor Cable**\*\*\*

- Lenovo HDMI to VGA Monitor Adapter
- Lenovo USB-C to VGA Adapter
- Lenovo USB-C to DisplayPort Adapter
- No monitor cable

## SECURITY & PRIVACY

### Security

**Security Chip**

Discrete TPM 2.0, TCG certified

**Physical Locks**

Kensington® Security Slot™, 3 x 7 mm

**Smart Card Reader**

- Smart card reader
- No smart card reader

**Fingerprint Reader**

- Touch style fingerprint reader on palm rest, match-on-chip
- No fingerprint reader

**BIOS Security**

- Power-on password
- Supervisor password
- NVMe password
- Self-healing BIOS

**Other Security**

- (Optional) Camera privacy shutter
- (Optional) IR camera for Windows Hello

## MANAGEABILITY

### System Management



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

- Intel vPro
- Non-vPro

### Notes:

1. Intel vPro offers a superset of DASH's defined capabilities.

## SERVICE

### Warranty

#### Base Warranty<sup>\*\*[1][2]</sup>

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service

### Notes:

1. More information of warranty policy, please access <https://pcsupport.lenovo.com/warranty>
2. No base warranty is for special bid only.

## ENVIRONMENTAL

### Operating Environment

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

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

#### Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

#### Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

### Notes:

1. When you charge the battery, its temperature must be no lower than 10°C (50°F).

## CERTIFICATIONS

### Green Certifications

#### Green Certifications

- EPEAT™ Gold
- ENERGY STAR® 8.0
- TCO Certified
- RoHS compliant

### Other Certifications

#### Mil-Spec Test

MIL-STD-810H military test passed

- 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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