

# Apple MacBook Pro

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Apple



**MacBook Pro**  
Mind-blowing.  
Head-turning.

## Zusammenfassung

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**MacBook Pro**  
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Apple MacBook Pro , Apple M, 41.1 cm (16.2"), 3456 x 2234 pixels, 36 GB, 512 GB, macOS Sonoma

Apple MacBook Pro . Product type: Laptop, Form factor: Clamshell. Processor family: Apple M, Processor model: M3 Pro. Display diagonal: 41.1 cm (16.2"), Display resolution: 3456 x 2234 pixels. Internal memory: 36 GB. Total storage capacity: 512 GB, Storage media: SSD. On-board graphics card model: Apple GPU. Operating system installed: macOS Sonoma. Product colour: Black. Weight: 2.14 kg

## Merkmale

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### Brand-specific features

Accessibility features	Closed Captions, Increase Contrast, Reduce Motion, Siri and Dictation, Switch Control, Text to Speech, VoiceOver, Zoom
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### Packaging content

Cables included	USB Type-C to MagSafe 3
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### Sustainability

Sustainability compliance	Yes
Sustainability certificates	ENERGY STAR
Doesn't contain	Arsenic, Beryllium, Mercury, PVC/BFR

### Weight & dimensions

Width	355.7 mm
Depth	248.1 mm
Height	16.8 mm
Weight	2.14 kg

## Security

Fingerprint reader	Yes
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## Technical details

Warranty period	1 year(s)
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## Memory

Internal memory	36 GB
Memory form factor	On-board

## Performance

Ambient light sensor	Yes
Voice control	Yes

## Software

Pre-installed software	App Store, Books, Calendar, Contacts, FaceTime, Find My Freeform, GarageBand, Home, iMovie, Keynote, Mail, Maps, Messages, Music, News, Notes, Numbers, Pages, Photo Booth, Photos, Podcasts, Preview, QuickTime Player, Reminders, Safari, Shortcuts, Siri, Stocks, Time Machine, TV, Voice Memos
Operating system installed	macOS Sonoma

## Audio

Number of built-in speakers	6
Built-in microphone	Yes
Number of microphones	3

## Camera

Front camera	Yes
Front camera resolution	1920 x 1080 pixels
Front camera HD type	Full HD

## Keyboard

Pointing device	Trackpad
Numeric keypad	No
Keyboard backlit	Yes

## Power

AC adapter power	140 W
AC adapter frequency	50 - 60 Hz

## Battery

Battery technology	Lithium Polymer (LiPo)
Battery capacity	100 Wh
Continuous video playback time	22 h
Browsing time (Wi-Fi)	15 h
Fast charging	Yes

## Design

Product type	Laptop
Product colour	Black
Form factor	Clamshell
Housing material	Aluminium
Introduction year	2023

## Operational conditions

Operating temperature (T-T)	10 - 35 °C
Storage temperature (T-T)	-25 - 45 °C
Operating relative humidity (H-H)	0 - 90%
Operating altitude	0 - 3000 m
Non-operating altitude	0 - 4500 m
Maximum shipping altitude	10500 m

## Ports & interfaces

HDMI ports quantity	1
Thunderbolt 4 ports quantity	3
Intel® Thunderbolt 4	Yes
Combo headphone/mic port	Yes
Docking connector	Yes
Charging port type	MagSafe 3

## Network

Mobile network generation	Not supported
Top Wi-Fi standard	Wi-Fi 6E (802.11ax)
Wi-Fi standards	Wi-Fi 6E (802.11ax)
Mobile network connection	No
Ethernet LAN	No
Bluetooth	Yes
Bluetooth version	5.3

## Storage

Total storage capacity	512 GB
Storage media	SSD
Total SSDs capacity	512 GB
Number of SSDs installed	1
SSD capacity	512 GB
Optical drive type	No
Card reader integrated	Yes
Compatible memory cards	SDXC

## Graphics

Discrete graphics card model	Not available
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AC adapter input voltage 100 - 240 V

On-board graphics card	Yes
Discrete graphics card	No
On-board graphics card family	Apple
On-board graphics card model	Apple GPU
On-board graphics card cores	18
On-board graphics card 4K support	Yes
On-board graphics card 6K support	Yes
Memory bandwidth (max)	150 GB/s

## Processor

Processor manufacturer	Apple
Processor generation	Apple M 3rd Gen
Processor family	Apple M
Processor model	M3 Pro
Processor cores	12
Coprocessor model	Neural Engine
Coprocessor cores	16
Performance cores	6
Efficient cores	6

## Display

Display diagonal	41.1 cm (16.2")
Display resolution	3456 x 2234 pixels
Touchscreen	No
Panel type	Mini LED
Display technology marketing name	Liquid Retina XDR
LED backlight	Yes
Display surface	Gloss
Display brightness	100 cd/m <sup>2</sup>
Maximum display brightness (HDR)	1600 cd/m <sup>2</sup>
Standard Dynamic Range (SDR) brightness	600 cd/m <sup>2</sup>
Pixel density	254 ppi
RGB colour space	DCI-P3
True Tone technology	Yes
Maximum refresh rate	120 Hz
Contrast ratio (typical)	1000000:1
High Dynamic Range (HDR) supported	Yes
High Dynamic Range (HDR) technology	Dolby Vision, Extreme Dynamic Range (XDR), High Dynamic Range 10 (HDR10), Hybrid Log-Gamma (HLG)
ProMotion technology	Yes
Display refresh rates supported	47.95 Hz, 50.00 Hz, 60.00 Hz, 48.00 Hz, 59.94 Hz

Preisänderungen und Irrtümer vorbehalten. Alle Produkte solange der Vorrat reicht.