# POCO F7 Ultra

## Ultrapower Unleashed





VisionBoost D7 Chipset

Ultra-clear graphics with high energy efficiency

120W wired<sup>1</sup> and 50W wireless HyperCharge<sup>2</sup>
Massive 5300mAh (typ) battery

2K 120Hz Flow AMOLED display
Ultra-slim bezels for premium viewing

50MP triple camera with OIS
Flagship 60mm floating telephoto camera

IP68 dust and water resistance<sup>3</sup>
Premium glass back with metal frame

## Performance

- · Snapdragon® 8 Elite Mobile Platform
- 3nm manufacturing process
- Octa-core CPU, Oryon architecture
- 2 Prime Cores, up to 4.32GHz
- 6 Performance Cores, up to 3.53GHz - Adreno™ GPU
- Qualcomm Al engine
- VisionBoost D7 Chipset
- 12nm manufacturing process
- LPDDR5X + UFS 4.1⁴
- 12GB+256GB / 16GB+512GB<sup>5</sup>
- LiquidCool Technology 4.0 with 3D Dual-channel IceLoop System
- · WildBoost Optimization 4.0

## Display

- · 6.67" 2K 120Hz Flow AMOLED display
- Resolution: 3200\*1440, 526 ppi
- Contrast ratio: 5,000,000:1
- Refresh rate: Up to 120Hz<sup>6</sup>
- Brightness: 1800 nits (HBM), 3200 nits (peak brightness)
- Touch sampling rate: Up to 480Hz
- Instant touch sampling rate: Up to 2560Hz
- · 12 bit color depth, 68 billion colors
- DCI-P3 wide color gamut
- · Up to 3840Hz PWM dimming
- POCO Shield Glass

## Camera

#### Rear camera

- 50MP main camera
- Light Fusion 800 image sensor, 1/1.55"
- Aperture: f/1.6
- 2.0µm 4-in-1 Super Pixel
- 6P lens
- 6P le - OIS
- 50MP 2.5x telephoto camera
- Aperture: f/2.0
- 60mm equivalent focal length- OIS
- 32MP ultra-wide cameraAperture: f/2.2
- 120° FOV

#### Front Camera

· 32MP front camera

## **Battery & Charging**

- · 5300mAh (typ) battery
- · 120W HyperCharge<sup>1</sup>
- 50W wireless HyperCharge<sup>2</sup>

## Design

- Dimensions: 160.26 x 74.95 x 8.39mm<sup>7</sup>
- · Weight: 212g<sup>7</sup>
- · Colors: Black, Yellow

## Connectivity

- · Dual SIM (nano SIM + nano SIM)
- Supports 5G<sup>8</sup>/4G/3G/2G
- 5G SA: n1/3/5/7/8/20/26/28/38/40/41/66/77/78/2/48
- 5G NSA: n1/3/5/7/8/20/28/38/40/41/66/77/78
- 4G LTE TDD: 38/40/41/42/48
- 4G LTE FDD: 1/2/3/4/5/7/8/18/19/20/26/28/66
- 3G WCDMA: 1/2/4/5/8/6/19
- 2G GSM: 2/3/5/8Supports 4x4 MIMO
- Wireless connectivity:
- Bluetooth 6.0, Dual-Bluetooth
- Wi-Fi Protocol: Wi-Fi 7/ Wi-Fi 6/ Wi-Fi 5/ Wi-Fi 4 and 802.11a/b/g<sup>9</sup>

### Others

- Powered by Xiaomi HyperOS 2
- IP68 dust and water resistance<sup>3</sup>
- Supports NFC<sup>10</sup>
- IR blaster
- Dual-frequency GPS
   Ultrasopic in display f
- Ultrasonic in-display fingerprint sensor
- · Stereo Dual Speakers





# POCO F7 Ultra

## Ultrapower Unleashed

#### Ultra performance that goes beyond limits

POCO F7 Ultra redefines flagship performance by combining the ultra-powerful Snapdragon 8 Elite Mobile Platform with a dedicated graphics chip - VisionBoost D7 Chipset - for next-level speed, fluidity, and visuals. Built on TSMC's cutting-edge 3nm process technology and Oryon CPU, the Snapdragon 8 Elite Mobile Platform delivers an impressive 45% CPU performance boost and a 52% reduction in power consumption<sup>11</sup>. The Adreno GPU makes games and videos look better and run smoother, with a 44% GPU performance boost and a 46% power consumption decrease<sup>11</sup>. It also has a better brain for Al tasks, with a 105% improvement in Al performance<sup>11</sup>, making POCO F7 Ultra faster and smarter. With an AnTuTu benchmark score of 2,843,461<sup>12</sup>, POCO F7 Ultra is a powerhouse that excels in multitasking, content creation, and high-frame-rate gaming.

Making its debut on POCO F7 Ultra, the VisionBoost D7 Chipset pushes visuals to new heights with Smart Frame Rate for ultra-smooth 120FPS<sup>13</sup>, 2K Super Resolution<sup>13</sup> for enhanced graphics, and Game HDR<sup>13</sup> for improved contrast. These technologies work together to create a truly immersive experience for all gameplay. Leveraging the joint power of Snapdragon 8 Elite Mobile Platform and the VisionBoost D7 Chipset, the Dual-core Visuals<sup>14</sup> function further optimizes video playback for superior clarity across YouTube and Netflix, elevating every moment whether gaming or streaming.

On top of this, POCO F7 Ultra comes with Xiaomi HyperOS 2<sup>15</sup> out of the box. Xiaomi HyperOS 2 introduces three core technological innovations - HyperCore, HyperConnect, and HyperAl. Xiaomi HyperCore optimizes system fluidity and performance, while Xiaomi HyperConnect links seamlessly to Windows and iOS/macOS platforms<sup>16</sup>. Moreover, Xiaomi HyperAl<sup>17</sup> enhances efficiency and creativity for daily tasks, with Google Gemini<sup>18</sup> offering smarter assistance. Through deep integration with POCO apps, Gemini can now find information and take actions directly within POCO Notes, Calendar, and Clock, streamlining productivity like never before.

Building on this foundation, the introduction of WildBoost Optimization 4.0 takes performance up another notch. In the background, Al Performance Scheduling maximizes CPU and GPU efficiency, delivering ultra-smooth gameplay and sustained performance even in heavy-load gaming scenarios. Even after three hours of heavy-load RPG gaming, the device maintains a stable, high average frame rate while keeping power consumption and temperature low. The gaming experience is further enhanced with instant game control, improving touch response by up to 12%19 and track response by up to 22%19, while Game Audio20 accurately captures sound effects like footsteps and voices for enhanced game immersion. Through the dynamic adjustment of computing power between the Snapdragon 8 Elite Mobile Platform and VisionBoost D7 Chipset, WildBoost Optimization 4.0 enables POCO F7 Ultra to power through demanding titles like Genshin Impact at 2K Super Resolution and 120FPS - throughout an hour of gameplay, the device exceeds native settings, offering superior frame rates and image quality while keeping temperatures low<sup>21</sup>.

Paired with a 5300mAh (typ) battery, POCO F7 Ultra powers through the day, with 120W HyperCharge getting to 100% in just 34 minutes<sup>7</sup>, and 50W wireless HyperCharge offering cable-free top-ups when needed. Backed by the POCO Surge P3 charging chipset and POCO Surge G1 battery chipset working in tandem, the system optimizes charging speed and efficiency, while also extending battery lifespan, retaining above 80% of battery capacity even after 1600 charging cycles<sup>7</sup>.

All this power stays cool with LiquidCool Technology 4.0, an advanced cooling system engineered to sustain peak performance. Featuring a 3D Dual-channel IceLoop system with a 5400mm² extra-large area loop heat pipe, this effectively reduces the SoC temperature by up to 3°C7, ensuring the device remains cool and responsive whether tackling heavy workloads or extended gaming sessions.

#### Endless creativity in photography with versatile perspectives

Capture every detail with POCO's most advanced imaging system yet. Featuring POCO's strongest HDR main camera, its first flagship-level floating telephoto lens, and the highest-pixel ultra-wide camera in its lineup, this triple-lens setup redefines mobile photography, offering 8 classic focal lengths for unmatched versatility.

The 50MP main camera, powered by the Light Fusion 800 image sensor, captures sharp, dynamic shots even in challenging lighting conditions. With four focal lengths, it excels in a variety of scenes - including 35mm for everyday candid shots and 48mm for classic portrait photography, which enables natural portraits with ease. The floating telephoto lens opens up more creative possibilities, allowing you to capture intricate 10cm macro shots that reveal the beauty of the micro world, as well as distant scenes with striking detail. At 60mm focal length, it produces vivid, natural portraits, while the 120mm focal length preserves rich textures with stunning clarity. Meanwhile, the 32MP ultra-wide camera's 120-degree field of view unlocks stunning landscapes and immersive group shots.

Powered by POCO's first-ever AI LM computational photography platform, POCO AISP integrates the computational power of the CPU, GPU, NPU, and ISP through Xiaomi HyperOS. This seamless fusion of software and hardware enhances the efficiency of image processing. When paired with the floating telephoto lens, POCO AISP takes telephoto photography to new heights - intricate details come to life with the 20X UltraZoom Beta, while the UltraSnap capability supports rapid continuous capture, processing each shot in real time with a complete algorithm to deliver up to 150 frames with consistent image clarity. For those looking to explore more creative possibilities, Dynamic Shots brings stills to life, and AI Creativity Assistant<sup>17</sup> offers powerful editing tools to perfect photos and videos.

### 2K AMOLED display for flagship-level visuals, designed for ultimate comfort

POCO F7 Ultra elevates the viewing experience with an ultra-slim bezel design. Its Ultra-bright display, with 3200 nits ultra peak brightness and 1800 nits HBM brightness, allows users to enjoy stunning HDR effects even under bright sunlight.

But it's not just about brightness - POCO F7 Ultra prioritizes eye care, too. To further enhance the viewing experience, POCO F7 Ultra incorporates Circular Polarization Technology, which converts the screen's linear polarized light into circularly polarized light, closely mimicking natural light for more comfortable viewing. Even in low-light settings, the 3840Hz high-frequency PWM dimming and 16,000-level auto brightness adjustment maintain clarity without strain. With TÜV Rheinland Low Blue Light (Hardware Solution) Certification, TÜV Rheinland Flicker Free Certification, and TÜV Rheinland Circadian Friendly Certification, POCO F7 Ultra is designed to keep eyes comfortable during prolonged use.

The thoughtfully designed screen experience extends to touch, where Al-enhanced responsiveness ensures effortless interaction, even with oil stains or while wearing gloves<sup>22</sup>. For added convenience, the ultrasonic fingerprint sensor, a first for POCO devices, offers instant unlocking for a faster and more secure experience.

#### Aesthetic excellence, built to endure

POCO F7 Ultra blends advanced craftsmanship with exceptional durability in a design built to impress. Featuring a quad-curved glass back with premium gloss-matte craftsmanship, the upper half boasts a glossy effect, while the lower half contrasts with a matte finish, creating an impactful visual balance. The seamless top design, debuting on a POCO device, flows smoothly into a matte metal frame, bringing a new level of sophistication and a clean finish that resists dust buildup. The circular segmentation design, paired with the aerospace-grade aluminum deco ring around the camera, not only enhances symmetry but also evokes a sense of speed and power. Available in bold Yellow<sup>23</sup>, POCO F7 Ultra captures POCO's signature energy and boldness.

Beyond aesthetics, POCO F7 Ultra is built to withstand real-world challenges. With an IP68 rating for dust and water resistance<sup>3</sup>, it can endure submersion in static water up to 2.5 meters for 30 minutes<sup>7</sup>, offering unparalleled protection against the elements. The new POCO Shield Glass offers the toughest screen protection ever on a POCO device, further reinforcing its durability, enhancing drop and scratch protection.

#### Delivering an ultra experience in connectivity and audio

POCO F7 Ultra takes connectivity to the next level with the Surge T1S tuner, a dedicated signal enhancement chipset, which enhances cellular, Wi-Fi, and Bluetooth performance for stronger signals, even in challenging environments. This results in up to 37% improvement in mid-high frequency cellular performance<sup>24</sup> and up to 16% improvement in Wi-Fi and Bluetooth performance<sup>24</sup>. To further optimize signal strength, the Al-powered antenna switching algorithm automatically recognizes user scenarios and dynamically switches to the best antenna for optimal performance, ensuring seamless connectivity. And when it comes to entertainment, the immersive multimedia experience is elevated with stereo dual speakers delivering powerful sound, and Al Super Cinema<sup>25</sup> enhancing both audio and visuals for a cinematic feel in every moment.



<sup>1</sup> Please consult the local seller on the availability of the power adapter in the box. <sup>2</sup> Wireless chargers sold separately. Availability may vary by countries/regions, you may consult our online store on third party shopping websites for more purchasing options. <sup>3</sup> The device is certified to be water and dust resistant exclusively under specific laboratory conditions not corresponding to normal use conditions. The warranty does not cover liquid damage caused by conditions other than test conditions. Ingress protection might deteriorate due to wear and tear, physical damage and/or disassembly needed for repair. Please visit official website for more information. 4 UFS 4.1 will start to release via OTA, rollout schedule may vary by regions. 5 Available storage and RAM are less than the total memory due to storage of the operating system and software pre-installed on the device. <sup>6</sup> Refresh rate can be adjusted to up to 120Hz for supported apps. <sup>7</sup> Data tested by POCO Internal Labs, actual results may vary. <sup>8</sup> 5G connectivity may vary based on region availability and local operator support. 9 Wi-Fi 7/Wi-Fi 6 capability may vary based on regional availability and local network support. Wi-Fi standards and other features as ratified in IEEE Standard 802.11 specifications) may vary based on regional availability and local network support. The function may be added via OTA when and where applicable. 10 Functions may vary in some markets. 11 CPU, GPU, Al data tested by POCO Internal Labs, compared with Snapdragon® 8 Gen 3 Mobile Platform, actual results may vary. CPU performance data based on Geekbench 6 test, and power consumption data based on GFXbench 5 1080P AztecRuins Vulkan. Al performance data based on the MLPerf Super Resolution Model. 12 Data tested based on AnTuTu v10.4.4 by POCO Internal Labs. Actual results may vary. 132K Super Resolution, 120FPS Smart frame rate depends on the performance dashboard in the Game Turbo) and Game HDR effect on games including but not limited to all games covered under the game category of the GetApps/Mi App Mall. Features may vary depending on software version, please refer to the actual experience. 14 Dual-core Visuals is only available on Youtube and Netflix. 15 Availability of Xiaomi HyperOS 2 features, apps and services may vary depending on region, software version and phone model. <sup>16</sup> Installation of "Xiaomi Connectivity Service" app is required for compatibility with iOS/macOS platforms. <sup>17</sup> Xiaomi HyperConnect and AI features available via OTA starting from 27 March, 2025. Availability of Al features may vary based on region. Please check your local website for more information. Internet connection required. Check responses for accuracy. 18 Results for illustrative purposes may vary. Check responses for accuracy. Internet connection and compatible operating system required. Availability may vary by device, country and language. Google LLC. 19 Compared with POCO F7 Ultra with gesture tracking mode off. Data tested by POCO Internal Labs. Actual results may vary. 20 Game Audio effects are supported only when using headphones, and on supported apps, including PUBG, Call of Duty, Arena of Valor, Honor of Kings (International Edition), and Genshin Impact. 21 Data tested by POCO Internal Labs. Actual results may vary depending on specific testing environments, software versions, and other factors. One hour game test, 25°C ambient temperature, in-game render resolution setting as 60. Super Resolution mode and Smart Frame Rate mode ON. 22 Al glove touch may vary due to factors such as the usage environment, the material of the gloves, or their thickness. Please consult the local seller on the availability of product color. 24 Data tested by POCO Internal Labs in comparison to POCO F7 Ultra test device without Surge T1S Tuner. The test results may vary due to network conditions, environment, and other factors. Please refer to the actual experience. 25 AI Super Cinema is only available for YouTube, Netflix, Amazon Video, and MIUI Video player and is not available for encrypted videos or HDR videos.