#### **Produktdatenblatt**

Delegierte Verordnung (EU) 2023/1669 der Kommission im Hinblick auf die Energieverbrauchskennzeichnung von Smartphones und Slate-Tablets

1. Marke		2. Modellkennung			
realme		RMX3933			
3. Allgemeine	3. Allgemeine Produktparameter:				
Parameter		Wert			
4. Art des Ger	äts	Smartphone			
5. Betriebssys	tem	Android			
6. Energieeffiz	zienzklasse	Α			
7. Vom Benutz	zer austauschbare Batterie	Nein			
8. Batterielauf	fzeit pro Zyklus (ENDE <sub>Gerät</sub> [h])	55			
9. Batterielauf lungen [Zykler	fzeit in Zyklen — Standardeinstel- n]	800			
10. Nennkapa	zität der Batterie (C <sub>rated</sub> [mAh])	5 000			
11. Versand m	nit Schutzabdeckung	Nein			
12. Prüfung der Zuverlässigkeit nach wiederholtem freien Fall — Stürze ohne Defekt [n]		270			
13. Prüfung der Zuverlässigkeit nach wiederholtem freien Fall — Stürze ohne Defekt, im vollständig erweiterten Zustand geprüft [n]		n.a.			
14. Klasse der tem freien Fal	Zuverlässigkeit nach wiederhol-	A			
15. Eindringsc	hutzgrad	IP44			
16. Angegebene Eintauchtiefe in Wasser, bei IPx8 [m]		n.a.			
17. Ritzbeständigkeit des Bildschirms auf Mohsscher Härteskala		4			
18. Ladege- rät	Erforderliche Ausgangsleistung [W]	5			
	Steckverbindertyp (am Ende des Geräts)	USB-C			
Angaben zur I	Reparierbarkeit:				
19. Garantierte Mindestverfügbarkeit von Sicherheits-, Korrektur- und Funktionsaktualisierungen für das Betriebssystem (Jahre)		5			
20. Reparierbarkeitsklasse (auf der Grundlage des nachstehenden Index)		В			
21. Reparierbarkeitsindex		3,37			
21a. Wert "Zerlegungstiefe" (S <sub>DD</sub> )		3,50			
21b. Wert "Befestigungselemente (Typ)" (S <sub>F</sub> )		2,60			
21c. Wert "Werkzeuge (Typ)" (S <sub>T</sub> )		4,05			
21d. Wert "Ersatzteile" (S <sub>SP</sub> )		4			

21e. Wert "Software-Aktualisierungen (Dauer)" (S <sub>SU</sub> )	3
21f. Wert "Reparaturinformationen" (S <sub>RI</sub> )	3
22. Weblink zu Informationen über die Verfügbarkeit von Ersatzteilen für fachlich kompetente Reparateure und Endnutzer	/
23. Weblink zu Reparaturanweisungen für Endnutzer	/
24. Weblink zu Richtbeträgen für die Preise vor Steuern	/
Weitere Angaben:	/
25. Mindestlaufzeit der vom Lieferanten angebotenen Garantie [Monate]	12

Das Modell wurde auf dem Unionsmarkt in Verkehr gebracht, und zwar ab dem 25



**EPREL-Eintragungsnummer** 2398239 <a href="https://eprel.ec.europa.eu/qr/23">https://eprel.ec.europa.eu/qr/23</a>

98239

Lieferant: Apex CE Specialists GmbH (Bevollmächtigter) Website:

**Kundenbetreuung:** 

Name: Apex CE Specialists GmbH Website:

E-Mail-Adresse: Info@apex-ce.de Telefonnummer: +49 177 699 5991

Anschrift:

Grafenberger Allee 277, 40237 Düsseldorf

Deutschland



realme

Note 60

Product Introduction

Final Version



# Note 60 Message House

### **All-round Protection**

Durable quality, leading experience

# **Durable Quality**

Industry-first ArmorShell Protection

#### **ArmorShell Protection**

- ArmorShell tough build
- Impact absorption
- IP64 Dust and Water Resistantce

### TÜV Rheinland High Reliability Certification

Passed 20 rigorous tests

Rigorous quality standards

### **Smooth Experience**

Powerful Prformance with Al Boost

#### 48-month Fluency

- Powerful processor
- Al Boost Engine

### Large-capacity Storage

- Up to 12GB of dynamic RAM
- Up to 128/256GB ROM

### **90Hz Eye Comfort Display**

- High refresh rate and high sampling rate
- New eye-comfort mode

### **Intelligent Experience**

- Rainwater smart touch
- Mini Capsule 2.0

**5000mAh Massive Battery** 

# **Brilliant Images**

32M sharpest imagery in segment

#### **32MP Super Clear Camera**

- High-pixel photography, the highest resolution in its class
- Excellent white balance and color reproduction

#### **Portrait Mode**

- High-definition front portrait
- Professional-grade bokeh effect on the rear camera

#### **Night Mode**

 Quad-Bayer large pixels, powerful light-sensing capability

# Slim Design

Thinnest body, best craftsmanship

### Slim Body

- 7.84mm comfortable grip
- 187g lightweight feel
- Trendy right-angle middle frame

#### **Exquisite Design**

- Pearl chain texture
- Nano-level lithography process

#### **Textured Color Scheme**

- Voyage Blue
- Marble Black

Focusing on "ArmorShell Protection", marketing materials are comprehensively crafted to create a high-quality perception of durability and long-term use.

# Competitor parameter comparison

SPEC	Note 50	Note 60	Redmi A3 (Global)	Infinix Smart 8 (Global)	Tecno Spark Go 2024 (Global)	vivo Y03A (India)
Launch Date	2024.01	2024.08	2024.03	2023.11	2023.11	2024.06
Platform	Unisoc T612 AnTuTu score 245343	Unisoc T612 AnTuTu score 252597	MTK G36 AnTuTu score 153983	Unisoc T606 AnTuTu score 236408	Unisoc T606 AnTuTu score 236408	Unisoc T612 AnTuTu score 245343
Camera	5MP / 13MP + 0.08MP	5MP / 32MP + Flicker	5MP / 13MP + 0.08MP	8MP / 13MP + 2MP	8MP / 13MP + 2MP	5MP / 13MP + 2MP
Display	<mark>6.74"</mark> 720P <mark>90Hz</mark> Waterdrop Screen	6.74" 720P <mark>90Hz</mark> Waterdrop Screen	6.52" 720P 60Hz Waterdrop Screen	6.6" 720P <mark>90Hz</mark> Punch-hole screen	6.6" 720P <mark>90Hz</mark> Punch-hole screen	6.56" 720P Waterdrop Screen
Battary	5000mAh + 10W	5000mAh + 10W	5000mAh + 10W	5000mAh + 10W	5000mAh + 10W	5000mAh + 15W
Thickness/ Weight	7.99mm / 186g	<b>7.84mm</b> / 187g	8.3mm / 199g	8.5mm / <mark>184g</mark>	8.5mm / <mark>184g</mark>	8.39mm / 185g
CMF	Plastic	Plastic	Plastic	Plastic	Vegan Leather	Vegan Leather
Unlocking Methods	Face + Side fingerprint	Face + Side fingerprint	Face + Side fingerprint	Face + Side fingerprint	Face + Side fingerprint	Face + Side fingerprint
Connect	Wi-Fi 5 + Bluetooth 5.0	Wi-Fi 5 + Bluetooth 5.0	Wi-Fi 5 + Bluetooth 5.3	Wi-Fi 5 + Bluetooth 5.0	Wi-Fi 5 + Bluetooth 5.0	Wi-Fi 5 + Bluetooth 5.0
Speaker	Single speaker	Single speaker	Single speaker	Single speaker	Dual speaker	Single speaker
Structure Material	Die-cast aluminum	Die-cast aluminum + Metal frame	Stamped aluminum	Stamped aluminum	Stamped aluminum	Stamped aluminum
Dust/Water Resistance	IP54	IP64	-	_	_	IP54
Software Features	Mini Capsule	Rainwater Smart Touch, Mini Capsule 2.0	-	_	_	_
Price (ID)	3+64: 1199K 4+64: 1299K		4+128 : 1199K	3+64 : 1099K 4+128 : 1249K		

# Note 60 KSPS



ArmorShell Tough Build
Impact absorption
IP64 Dust&water Resistance



48-month Fluency

Powerful Octa-Core Processor

Al Boost Engine

32MP Super Clear Camera

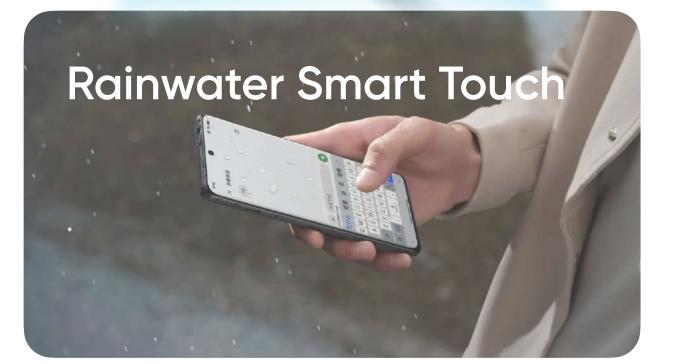
Super Clear Camera
Portrait mode
Night mode

Large-capacity Storage

Up to 12GB Dynamic RAM
Up to 128/256GB ROM

90Hz Eye Comfort Display





### **ArmorShell Protection**

# ArmorShell Protection™

# Quality in a class of its own.

### Redefining the standard of quality.

Reliable quality is a stringent requirement for entry-level smartphones. In the industry, the majority of entry-level devices sacrifice quality for cost considerations. Structural strength, drop resistance, and waterproofing are often compromised to various extents in these budget phones. However, the mission of the Note 60 is to provide every user with a cost-effective entry-level product, and we promise never to compromise on the fundamental user experience, especially not on quality, which is the most critical aspect in this price range.

To this end, we have introduced a new feature on the Note 60 called ArmorShell Protection. This high-strength structural system includes eight optimization measures specifically aimed at enhancing the durability of the phone. With ArmorShell Protection, the Note 60 can easily pass the TÜV Rheinland High-Reliability Certification. Sturdy and durable, it also provides drop and water resistance, redefining the quality standard of entry-level and delivering an exceptional quality experience.

### **ArmorShell Protection**



The newly upgraded ArmorShell Protection armors the phone inside and out, providing robust protection that guards against all sorts of harsh environments with ease.

With eight major structural enhancements, it delivers exceptionally reliable shock absorption. Thanks to ArmorShell Protection, the Note 60 also boasts IP64-level water resistance, ensuring protection against drops, water, and those accidental "oops" moments.

# **Bend Resistant**

**Drop Resistant** 

Reinforced structure

Comprehensive protection

# **Scratch Resistant**

Coated protection film

# Dust&water Resistant

Hermetic design



# Solid as a rock, fortified inside and out.

# Robust die-cast aluminum structure and Integrated metal inner frame



The mainrboard upper cover of a smartphone is a decisive structural element that determines the overall strength of the device. It's akin to the load-bearing walls of a building — the more robust it is, the higher the structural integrity of the smartphone. On Note 60, we've utilized a high-strength die-cast aluminum material, the same type used in race car chassis, which far exceeds the norm in its segment, and offers a rigidity that is 20% superior to the conventional stamped aluminum materials used by competitors.

Additionally, during the die-casting process of the mainboard upper cover, we've added four solid reinforcement ribs on both sides and in the middle, creating a sturdy, integrated metal framework. Compared to the "hollow aluminum sheet + plastic wrapping" structure commonly found in products of the same price range, we've achieved a significant lead. The structure's resistance to bending has been improved by 123% over conventional designs.

### Reinforced glass

By fitting a higher-strength glass, the Note 60's screen boasts excellent drop resistance and scratch resistance, akin to equipping the phone with a powerful shield. It is resistant to bending and can easily pass a drop test from a height of 1.5 meter onto a marble surface.

# Coated protection film

The Note 60 brings greater resistance to abrasion and corrosion by employing high polymer photo-curable resin coating on the mid-frame and battery cover surface. With this added durability, the Note 60 can easily withstand friction tests of common objects such as wood, coarse cloth, and coins, and also holds up well against prolonged contact with oils, detergents, and sweat.

# ArmorShell Protection™

# Invisibly guarding at all times.

### Shock-absorbing circuit board



A phone drop can cause not only external damage but also irreversible harm to the internal electronic components. The Note 60's motherboard and sub-board feature silicone sealing rings at all 7 interfaces. These silicone rings effectively prevent damage to the internal connectors from drops and prevent wire disconnections, and they also provide significant water resistance, offering crucial protection to vital parts.

### Component dispensing glue



For the three most critical components—the SOC, DDR, and EMMC—the Note 60 has undergone a potting process with adhesive, which significantly enhances the stability of the connections. This treatment prevents issues such as poor contact or even detachment due to stress.

# Screen protection bezel

To counteract the impact of drops on the screen, we have elevated the screen support frame of the Note 60, creating a protective bezel around the edges of the screen. This reduces the likelihood of the screen being struck and damaged in the event of a fall.

# InSeal Design

The Note 60 features added silicone strips or foam padding at all openings for external connections, such as the card slot, USB port, speakers, headphone jack, and microphone. These additions transform the interior of the device into a sealed compartment, providing full waterproofing and cushioning protection. It is designed to be impervious to liquid ingress and resistant to damage from drops.



# **Exceptional Quality, Worthy of Trust.**

### TÜV Rheinland High Reliability Certificate



The TÜV Rheinland High Reliability Certification is a set of excellence performance standards specifically designed for smartphones, which organically integrates three dimensions: the user, product research and development, and product manufacturing. It includes 20 major tests, such as 7 daily usage test scenarios like drop and abrasion; 7 extreme environment test scenarios like ultra-high and low temperatures, voltage fluctuations, key life, electrostatics, and air pressure; and 6 component reliability test scenarios.

Thanks to ArmorShell Protection, the Note 60 has become the first smartphone in its price segment to pass the TÜV Rheinland High Reliability Certification, bringing a revolutionary quality experience that assures reliability across all scenarios.



### **IP64 Dust & Water Resistant**

ArmorShell Protection ensures that the internal core components and various ports are optimized for waterproofing, allowing the Note 60 to easily handle light water exposure and everyday splashes.

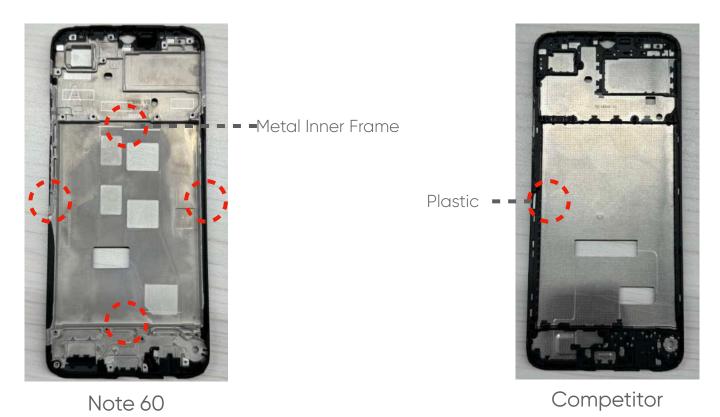
# realme's rigorous quality standards

The Note 60 has withstood more than 320 rigorous quality tests from realme. Among these, the 1,000,000 times button press test and the 40,000 times USB plug and unplug test have reached **twice the industry standard**, ensuring a durable usage experience. Additionally, it has undergone 21 days of high-temperature/high-humidity testing at 65°C and 90% RH, along with 14,000 Micro Drop Tests, making it thoroughly reliable.

### **Technical details of ArmorShell Protection**

#### 1. Where is the Metal Inner Frame?

Vertical supports are placed on both sides of the motherboard, and horizontal supports are located at the top and bottom ends of the battery compartment, providing high-strength support to the phone from all directions.



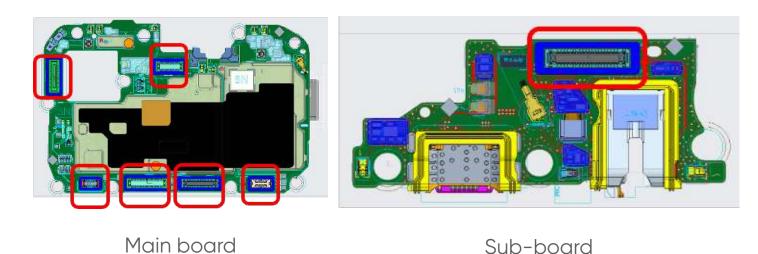
#### 2. Why is the die-cast aluminum better?

Die-cast aluminum has a material strength similar to stamped aluminum, but the manufacturing process is more costly. Thanks to the integrated die-casting process, reinforcement ribs can be formed around the edges, achieving higher strength with thinner aluminum sheets. In contrast, the stamping process can only work with existing aluminum sheets and cannot create reinforcement ribs. Therefore, it must continuously increase thickness to optimize strength, which compromises the slimness of the device.

Additionally, the Note 60 uses 20% more aluminum than the conventional stamped aluminum, resulting in a 123% increase in strength. Making it the most robust structural material in segment.

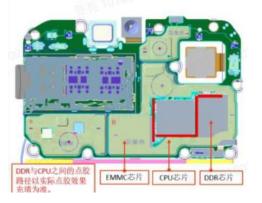
# 4. Where are the silicone rings of the shockabsorbing circuit board located?

On both the main board and the sub-board, there are Board-to-Board interfaces, as indicated by the red circles in the diagram.



### 5. Where is the dispensing glue located?

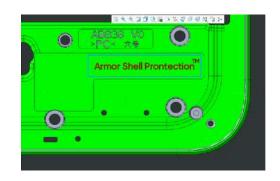
The dispensing is located in the gap under the main board's shielding cover, indicated by the red line.



Main board faces the screen side

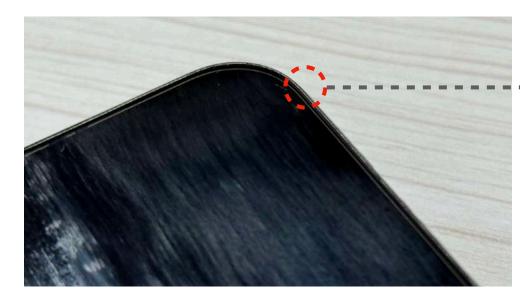
# 6. Where is the ArmorShell laser engraving located inside the chassis?

The laser engraving is located at the bottom right corner of the chassis, visible after opening the battery cover.



#### 6. Where is the screen protector bezel?

The edges of the support frame around the screen are raised to provide better protection.



A height difference at the edge of the bezel

# 48-month Fluency Guarantee

# Smooth for daily use, remains over time.

### 48-month Fluency Guarantee



Thanks to a powerful processor and advanced performance tuning technology, the Note 60 remains smooth even after 48 months of use in realme laboratory simulation tests, ensuring long-lasting performance.

### Powerful T612 Octa-core Processor



The most powerful processor in its price range, built to withstand the test of time. Smooth gameplay and quick app launches.

252597

1.8GHz

AnTuTu Score

High Clock Speed

# Al Boost Engine + Dynamic RAM

Leading memory expansion technology in its class allows for 8GB of ROM space to be shared with RAM, achieving up to 12GB of dynamic memory and offering double the memory capacity. Combined with the AI Boost engine, specifically developed for entry-level models, it optimizes resource allocation efficiency from the ground up, ensuring efficient and smooth operation of foreground applications, providing a leading user experience in its price range.

40+ FPS

Stable frame rate for common applications

59.79 FPS

MLBB average frame rate

51.2s

Note 60 App continuous startup time\*

60.8s

Competitor Smart 8
App continuous startup time\*

\*For detailed data analysis, see page 13 for a detailed explanation.

# **Quality hardware + smart software**

# Everything at your fingertips, everything to your satisfaction.

### 90Hz Eye Comfort Display

A 6.74-inch large display with a high screen-to-body ratio of 90.3% offers an immersive visual experience. The 90Hz high refresh rate display and 180Hz touch sampling rate ensure smooth visuals and silky touch responsiveness. With a peak brightness of 560 nits, it provides a clear and bright sunlight screen effect. The system includes an eye protection mode, supporting low blue light emission.

90Hz

180Hz

560nits

Refresh rate

Sampling rate

Peak brightness

### Rainwater Smart Touch



Flagship-grade wet touch functionality. Smartly differentiates between water droplets and fingertips, ensuring normal touch control and phone unlocking even with wet hands. This feature addresses the pain point of touch malfunction in rainy weather or near swimming pools, and also prevents sweat during gaming from affecting touch precision.

# 5000mAh Massive Battery

5000mAh large battery, offering ample endurance to last 1.8 days on a single charge. Also, this long-lifespan battery maintains over 80% of its capacity even after 1000 charge cycles, ensuring durability and longevity.

96.66 Hrs

30 Hrs

1013 Hrs

Spotify music play

Voice call

Standby time

# Mini Capsule 2.0



The newly upgraded mini capsule prominently displays critical information like battery level, step count, and data usage in real-time at the top of the screen, and additionally offers music playback control, weather alerts, and personal event notifications. With essential information instantly visible, you won't miss out on anything important, no matter how busy you are.

# 32MP Super Clear Camera

# Easily take great photos.

Regular photography

Portrait

Low-light shooting

Peerless

### **32MP Super Clear Camera**

The highest rear camera pixel count in its price range, with a 146% increase in pixel quantity over the previous generation, ensuring clarity in every detail. Enhanced with a new photography algorithm, it delivers more accurate colors and better visual output compared to competitors in the same price bracket.



### High-definition front portrait

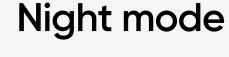
High-definition 5MP front-facing camera, paired with a beautification algorithm, captures clear and attractive portraits.



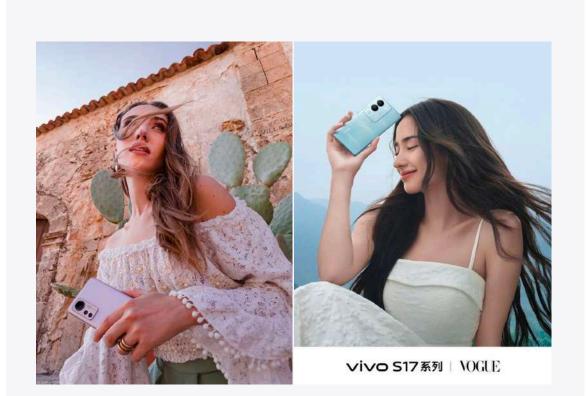
### Leading

The rear portrait mode algorithm has been upgraded to produce more realistic bokeh effects and more natural skin tone enhancements.

Rear portrait mode



The sensor supports pixel 4 in 1 technology, combining four pixels into one larger pixel area, resulting in clearer night shots and effortless night photography.

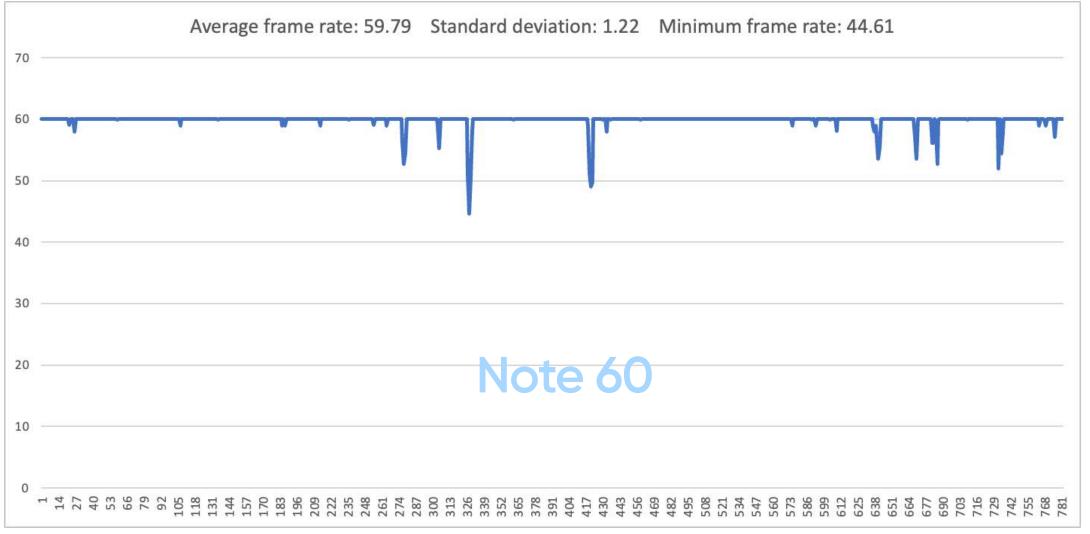


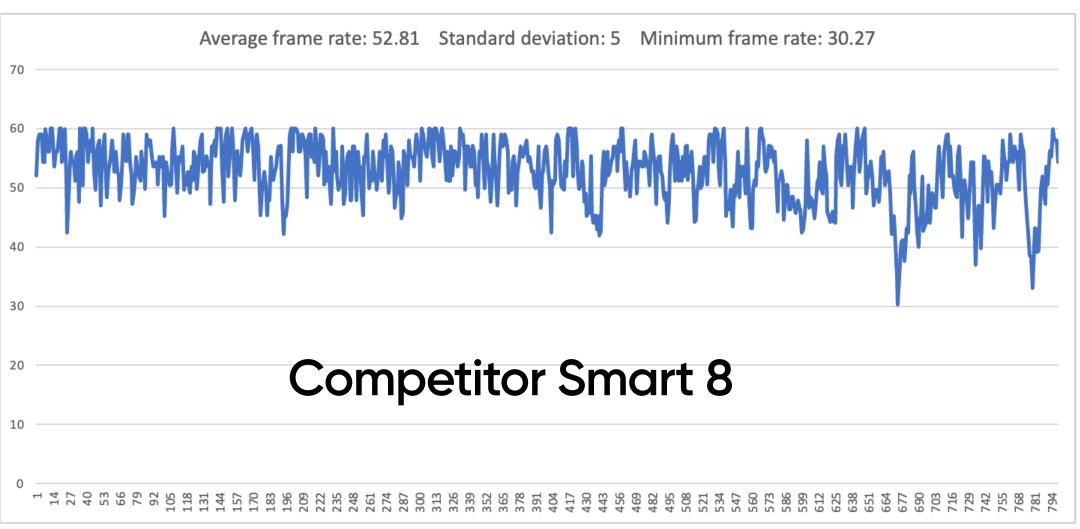


\_eading

# Technical details of peformance

### 1. MLBB game performance comparison





### 2. Smoothness comparison

Test item	Testing method	Note 60	Competitor Smart 8
Continuous app launch time	Simultaneously launch 10 identical apps on the competitor's smartphone and the Note 60, and record the differences in launch times between the two phones. Test Apps: WhatsApp/Facebook/MLBB/Free Fire/Garena/Twitter/Tik Tok/Google Maps/Instagram/YouTube	51.2s	60.8s

### 3. Advantageous imaging scenarios

The rear camera has advantages in well-lit daytime conditions when capturing urban landscapes, natural scenery, and similar scenes. The advantages are evident in resolution, white balance, and automatic exposure.

# Design

# Thinnest body, best craftsmanship

### Ultra slim body

Peerless

With a body thickness of only 7.84mm, it is the thinnest in its category. At 186g, it offers a lightweight feel. Paired with a fashionable straight-edged middle frame, it delivers a top-tier texture in segment.

7.84mm

Comfortable grip

187g

Lightweight feel



# Exquisite design

Ultra-precise lithography equipment, employing chip-manufacturinggrade techniques to create designs on the device body, utilizes millions of pearl chain textures to fully exhibit a light and agile feel, while showcasing a high-quality texture in every detail.

**Peral Chain** 

Nano-level

Exquisite texture

Lithography process



# Instructions for use

Concept	Function	Use case	Function entry
ArmorShell Protection	Robust Die-cast Aluminum Structure	The whole device can withstand a 700N soft pressure test on the back; after disassembly, the middle	See the technical explanation
	Integrated Metal Inner Frame	frame bending test can withstand a pressure of 370N.	See the technical explanation
	Reinforced Glass	1.5-meter front drop test on a marble floor, or place the phone screen-up on an asphalt road, and it is run over by an electric vehicle at a speed of 40 km/h.	_
	Coated Protection Film	Conduct quality tests on suede-like competitors using oil stains, sweat stains, and oil-based pens for comparison.	_
	Shock-absorbing Circuit Board	Disassemble to display the rubber ring on the board-to-board interface on the motherboard, and if possible, compare it with competitors.	See the technical explanation
	Component Dispensing Glue	Once the motherboard shield is removed, the glue points can be seen.	See the technical explanation
	Screen Protection Bezel	Display the bazel around the screen and explain its role in preventing drops at specific angles.	See the technical explanation
	InSeal Design	Disassemble to show the foam or rubber sleeves at the speaker, USB port, headphone jack, microphone, and card slot.	_
48-month Fluency	Powerful Octa-core chipset	Show the processor benchmark scores compared with competitors, and if necessary, supplement with a comparison of game frame rates.	_
	Up to 8GB Dynamic RAM	Open 20 apps simultaneously and compare the number of background apps that remain active.	About device-RAM
32MP Super Clear Camera	32MP Super Clear Camera	Take photos of natural scenery or urban landscapes when there is ample light.	Camera-1×
	Night Mode	Take photos of the cityscape at night when the lights are bright, and compare them with competitors.	Camera-Night
Quality hardware	90Hz Eye Comfort Display	Set the refresh rate to Auto mode and scroll through the news feed page.	Display-Screen refresh rate
	5000mAh Massive Battery	Test in everyday usage scenarios, and avoid testing charging.	_
Smart software	Rainwater Smart Touch	Can be used in scenarios such as wet hands, screen surface with a thin mist, or light rain conditions (small water droplets should be away from the edges of the screen).	Enabled by default
	Mini Capsule 2.0	Play music and display the weather at set intervals.	Special features-Mini Capsule

# **Specs**



Voyage Blue / Marble Black

### Design

Size: 167.26mm × 76.67mm × 7.84mm

Weight: 187g

\*Dimensions and weight may vary slightly due to changes in manufacturing processes, measurement methods, material suppliers, and other factors.

### Chip

UNISOC T612 Octa-core Processor

Up to 1.8GHz Clock Speed

### Memory

3 + 64GB / 4 + 64GB / 4 + 128GB / 6 + 256GB

RAM Expansion: 1GB, 2GB, 4GB, 8GB

\*Specific storage specifications are subject to the models available in each region.

### Display

Size: 6.74inch

Material of panel: LCD

Refresh rate: 90Hz

Sampling rate: 180Hz (Max), 120Hz (Default)

Resolution: 1600\*720

Brightness: 450nits (TYP), 560nits (HBM)

Dimming mode: DC

### Battery

5000mAh Battery + 10W Fast Charge

maintains over 80% of capacity after 1000 charge cycles

#### Camera

32MP Super Clear Rear Camera

f/1.8, 4 in 1 output 1.4  $\mu$ m, AF, 1080P video taking

**5MP Front Camera** 

Equipped with a Flicker Sensor

#### Wireless

Wi-Fi 5 with 1 × 1 MIMO, Up to 433Mbps

LTE with 2 × 2 MIMO, VoLTE, HD Voice

Bluetooth 5.0

### SIM Card and Connectors

Dual NanoSIM + microSD

3.5mm Interface Earphone

USB Type-C

### OS

realme UI based on Android 14