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› Ulefone Armor 27T Pro 5G Rugged Smartphone Instruction Manual

## Ulefone Armor 27T Pro

# Ulefone Armor 27T Pro 5G Rugged Smartphone Instruction Manual

Model: Armor 27T Pro

## 1. PRODUCT OVERVIEW

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The Ulefone Armor 27T Pro 5G is a rugged smartphone designed for demanding environments, featuring a thermal imaging camera, night vision capabilities, and a robust build. It operates on Android 15 and is powered by the MediaTek Dimensity 6300 processor, offering efficient performance and extensive memory options.



Image: Front and back view of the Ulefone Armor 27T Pro 5G rugged smartphone, highlighting its robust design and camera module.

## 2. WHAT'S IN THE BOX

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Verify that all items are present in your product package:

- 1 x Ulefone Armor 27T Pro 5G Smartphone
- 1 x AC Power Charger (33W, 100~240V)
- 1 x Type-C to Type-C Data Cable (100cm)
- 1 x Pre-installed Protective Film
- 1 x Tempered Glass Screen Protector
- 1 x SIM Tray Ejector
- 1 x Lanyard

- 1 x Multi-language User Manual
- 1 x Multi-Function Instruction Card
- 1 x Charging Instruction Card
- 1 x Safety Prompt Card
- 1 x Accessories Ecosystem Brochure
- 1 x Service Center APP Instructions
- 1 x Thermal Imaging User Manual

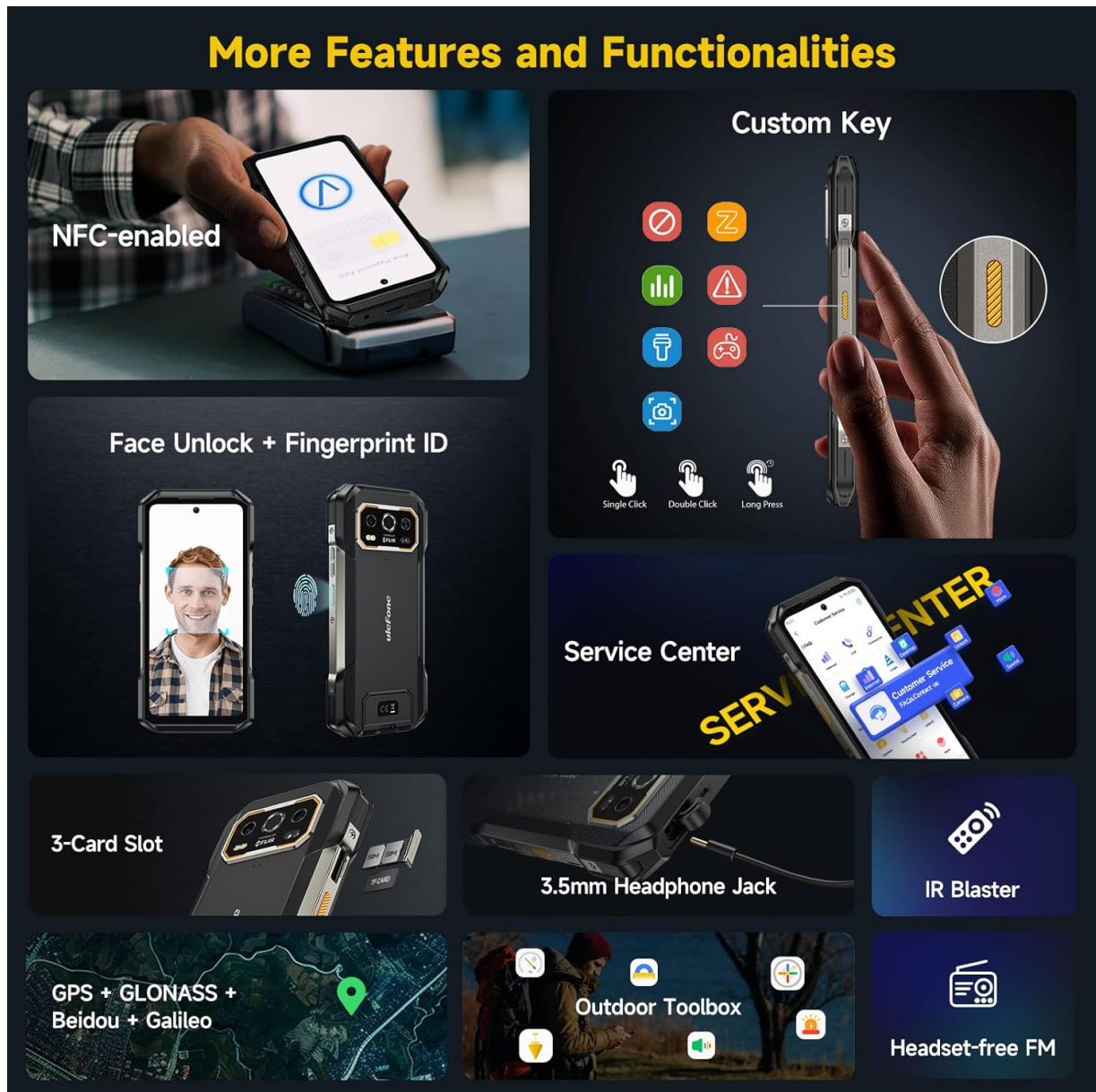


Image: All items included in the Ulefone Armor 27T Pro 5G retail package, laid out on a white surface.

### 3. PHYSICAL FEATURES

#### 3.1. Buttons and Ports

The Ulefone Armor 27T Pro features a robust physical design with strategically placed buttons and protected ports to ensure durability in harsh conditions.

- **Right Side:** Volume rocker and Power button. The Power button also integrates a fingerprint sensor for secure unlocking.
- **Left Side:** Customizable button for quick access to preferred applications or functions. SIM/SD card

tray, protected by a watertight seal.

- **Bottom:** USB Type-C charging port, covered by a watertight latch.
- **Top:** IR Blaster and a 3.5mm headphone jack, both protected by watertight covers.



Image: Side view of the Ulefone Armor 27T Pro, illustrating the location of the volume buttons, power button with fingerprint sensor, custom key, and covered ports.

## 4. SETUP

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### 4.1. SIM Card and MicroSD Card Installation

1. Locate the SIM/SD card tray on the left side of the device.
2. Use the provided SIM ejector tool to open the tray.
3. Carefully place your Nano-SIM cards (supports dual 5G SIM) and/or a MicroSD card (up to 2TB) into the designated slots.
4. Ensure the tray is properly aligned and push it back into the device until it clicks securely. The tray is designed to be watertight when fully closed.

### 4.2. Initial Power On

1. Press and hold the Power button on the right side of the device until the Ulefone logo appears.

2. Follow the on-screen instructions to complete the initial setup, including language selection, Wi-Fi connection, and Google account setup.

## 5. OPERATING THE DEVICE

### 5.1. Display

The device features a 6.78-inch FHD+ display with a 120Hz refresh rate, offering a smooth visual experience. The screen resolution is 1080 x 2460 pixels, protected by Corning Gorilla Glass Victus for enhanced durability against scratches and drops.

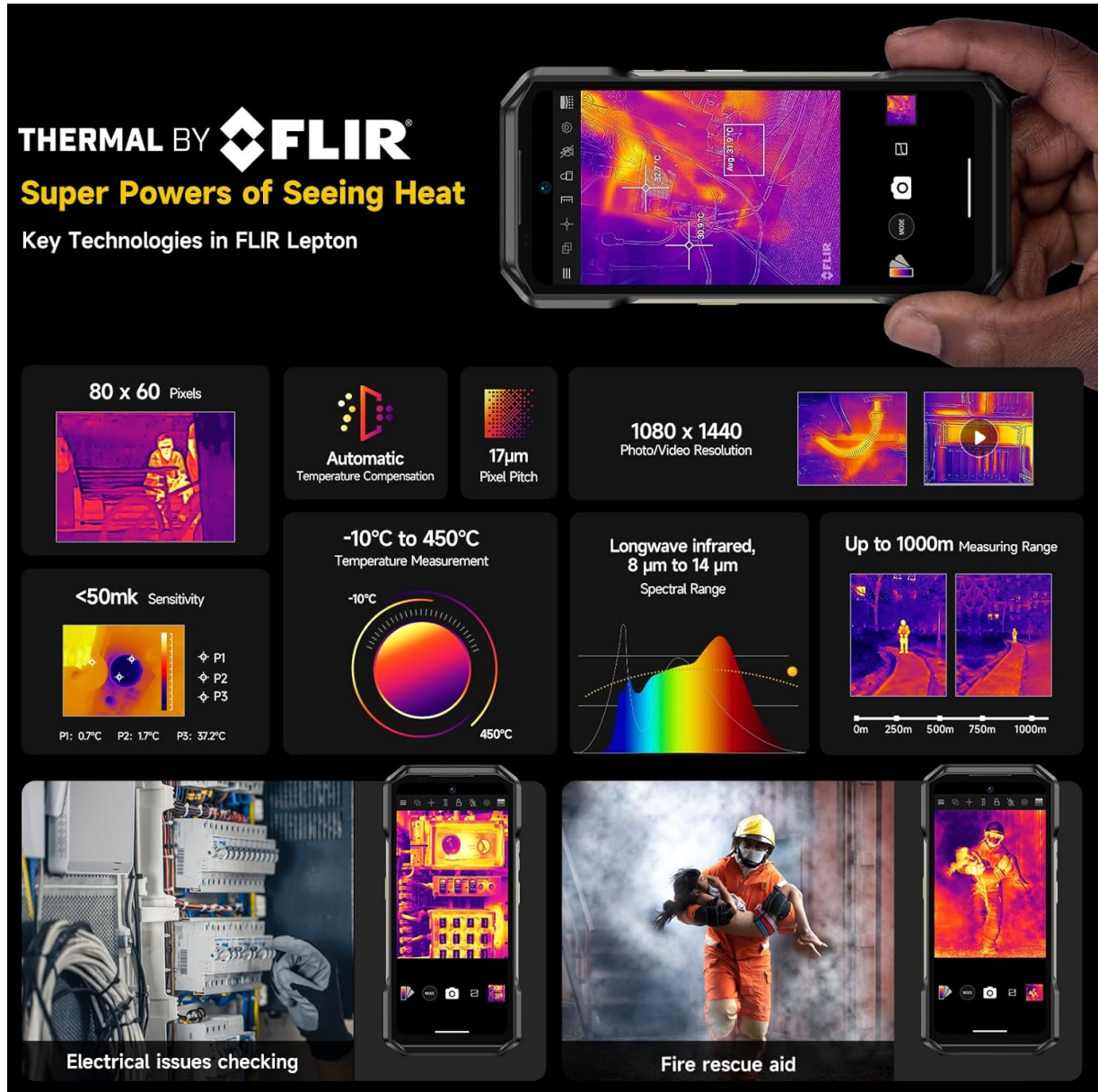


Image: The 6.78-inch FHD+ 120Hz display of the Ulefone Armor 27T Pro, highlighting its resolution, refresh rate, and Corning Gorilla Glass Victus protection.

### 5.2. Performance and Storage

Powered by the MediaTek Dimensity 6300 Octa-Core 2.4GHz processor and running Android 15, the Armor 27T Pro delivers responsive performance. It comes with 12GB of LPDDR4X RAM, expandable with an additional 12GB of virtual RAM, totaling up to 24GB. Internal storage is 256GB (UFS 2.2), which can be expanded up to 2TB using a MicroSD card.

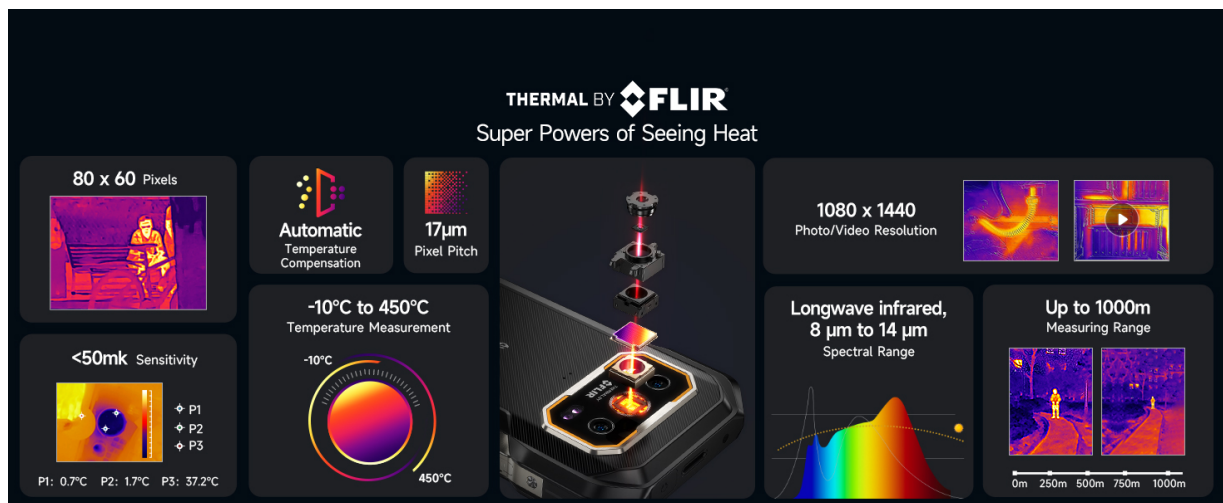


Image: Diagram illustrating the MediaTek Dimensity 6300 5G processor, highlighting its 6nm advanced process, 2.4GHz clock speed, and Cortex-A76 performance.



Image: Visual representation of the 24GB RAM (12GB physical + 12GB virtual) and 256GB ROM with 2TB expansion capabilities of the Ulefone Armor 27T Pro.

### 5.3. Battery and Charging

The device is equipped with a large 10600mAh battery, providing extended usage times (up to 576 hours standby, 58 hours talk time, 20 hours video playback). It supports 33W fast charging and 30W Qi wireless charging. Wireless reverse charging is also available, allowing the phone to act as a power bank for other devices.



Image: The Ulefone Armor 27T Pro 5G showcasing its 10600mAh battery, 33W fast charging, 30W wireless charging, and wireless reverse charging capabilities.

## 6. CAMERA FEATURES

The Ulefone Armor 27T Pro is equipped with a versatile camera system, including specialized thermal and night vision cameras.

### 6.1. Thermal Imaging Camera (FLIR)

The integrated thermal camera, powered by FLIR, offers high-resolution thermal imaging (up to 1080 x 1440 pixels). It can detect temperatures from -10°C to 450°C, making it suitable for various applications such as electrical inspections, pipeline maintenance, wildlife observation, and emergency rescue.

**64MP Night Vision Camera**  
NightElf Ultra 3.0 Algorithm

By Normal Mode      By Other Phone's Night Mode      By Ulefone Infrared Night Vision Camera

**50MP Wide-angle Camera**

ULEFONE  
ARMOR 27T PRO

THERMAL BY  
FLIR

**32MP Ultra-clear Selfie Camera**

Image: Detailed view of the thermal imaging capabilities of the Ulefone Armor 27T Pro, showing temperature ranges, pixel resolution, and example applications like electrical issue checking and fire rescue aid.



Image: Infographic detailing the "Thermal by FLIR" features, including 80x60 pixels, automatic temperature compensation, 17µm pixel pitch, 1080x1440 photo/video resolution, -10°C to 450°C temperature measurement, longwave infrared, and up to 1000m measuring range.

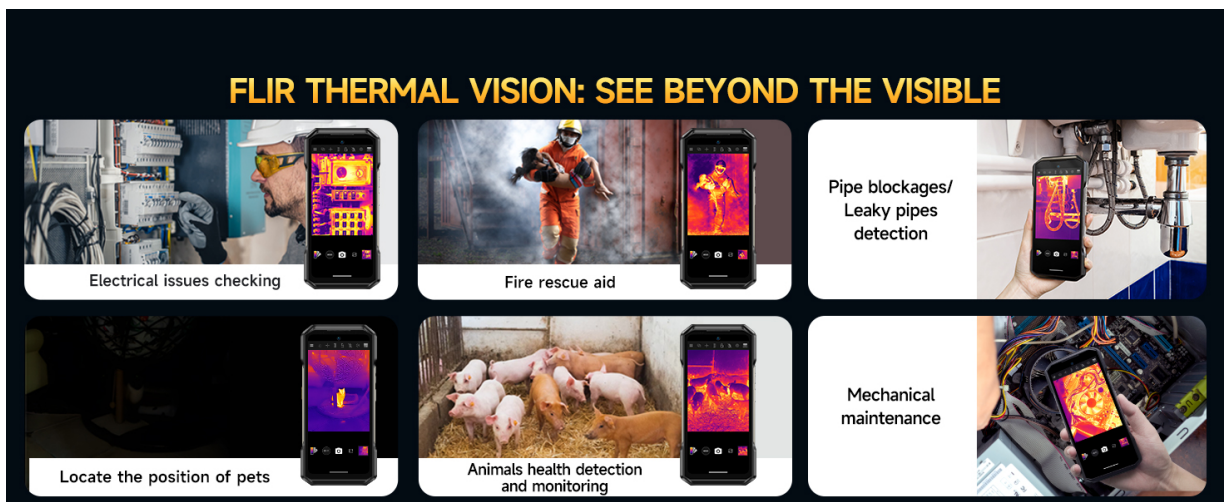


Image: Examples of how the FLIR thermal vision can be used, such as checking electrical issues, fire rescue aid, detecting pipe blockages, locating pets, monitoring animal health, and mechanical maintenance.

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Video: An official product video demonstrating the Ulefone Armor 27T Pro 5G's thermal imaging camera in various practical scenarios, including industrial inspections and home maintenance.

## 6.2. Night Vision Camera

The 64MP Night Vision Camera, utilizing the NightElf Ultra 3.0 Algorithm and two IR LEDs, allows for clear visibility in dimly lit or completely dark environments. This feature is beneficial for night security, wildlife observation, field rescue, and hidden camera detection.



Image: The 64MP Night Vision Camera of the Ulefone Armor 27T Pro, showing its effectiveness in low-light conditions compared to normal and other phones' night modes.

### 6.3. Main and Front Cameras

- **50MP Main Camera:** Features a 1/1.31-inch ultra-large Samsung ISOCELL GN1 sensor with an f/1.65 aperture, providing excellent low-light performance and sharp photos.
- **32MP Front Camera:** Equipped with a Samsung GD1 Sensor and 80.4° field of view, ideal for clear selfies and video calls.
- **Underwater Mode:** Allows for capturing photos and videos while submerged, suitable for swimming or diving.



Image: Illustration of the 1/1.31-inch ultra-large 50MP main camera sensor (Samsung ISOCELL GN1) and its comparison to other sensors.



Image: The 32MP ultra-clear selfie camera, demonstrating its use for portraits, night mode, and HDR mode.

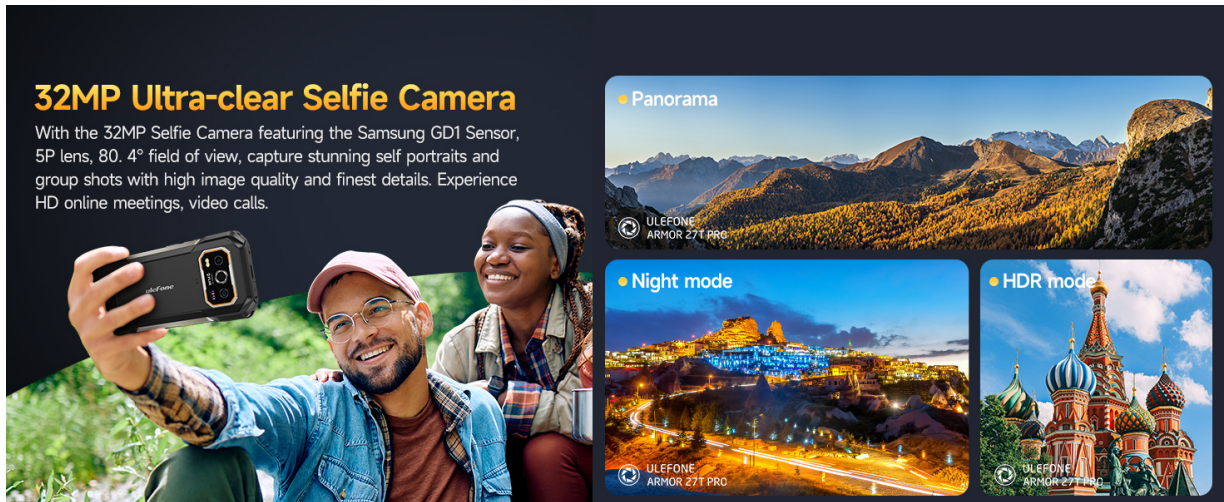


Image: A person using the Ulefone Armor 27T Pro's underwater camera mode to capture images of coral reefs.

## 7. CONNECTIVITY

The Armor 27T Pro offers comprehensive connectivity options:

- **5G Network:** Supports 5G/4G/3G/2G dual SIM, dual standby for high-speed data.
- **Wi-Fi:** Features Wi-Fi 6 for faster and more stable wireless connections.
- **Bluetooth:** Bluetooth 5.2 for efficient wireless accessory pairing.
- **NFC:** Supports NFC for contactless payments and data transfer.
- **GPS:** Integrated GPS, GLONASS, Beidou, and Galileo for accurate navigation.



Image: Visual representation of the Ulefone Armor 27T Pro's connectivity features, including 5G network support, Wi-Fi 6, and Bluetooth 5.2.


## 8. DURABILITY AND RUGGED FEATURES


The Ulefone Armor 27T Pro is built to withstand extreme conditions, meeting industry-leading ruggedness standards.

- **IP68/IP69K Rated:** Fully waterproof (up to 2 meters for 30 minutes) and dustproof.
- **MIL-STD-810H Certified:** Military-grade durability against drops (up to 2 meters), shocks, and extreme temperatures (-30°C to 55°C).
- **Corning Gorilla Glass Victus:** Enhanced screen protection against scratches and impacts.

## 6.78" FHD+ 120Hz Display

 **1080x2460**  
FHD+ Resolution

 **120Hz**  
Ultra High Refresh Rate

 **680nits**  
Max Brightness



## Corning Gorilla Glass Victus



**4x** 4X Higher  
scratch threshold

**2m** Up to 2m  
drop resistance


Image: The Ulefone Armor 27T Pro 5G submerged in water, demonstrating its IP68/IP69K waterproof rating.

## 6.78" 120Hz FHD+ Display



Corning Gorilla  
Glass 5



 **6.78"**  
Screen Size

 **1080x2460**  
FHD+ Resolution

 **20.5:9**  
Aspect Ratio

 **120Hz**  
Refresh Rate

Image: Visuals depicting the Ulefone Armor 27T Pro's compliance with IP68, IP69K, and MIL-STD-810H standards, showcasing its resistance to water, dust, drops, and extreme temperatures.

## 9. ADDITIONAL FEATURES

- **Custom Key:** A programmable button on the side for quick access to a chosen app or function.
- **Fingerprint ID & Face ID:** Multiple biometric security options for convenient and secure unlocking.

- **uSmart Expansion Connector:** Supports external accessories like endoscopes and microscopes for specialized tasks.
- **IR Blaster:** Allows the phone to function as a universal remote control.
- **FM Radio:** Enjoy radio without needing headphones (headset-free FM).
- **Outdoor Toolbox:** A suite of utility apps for outdoor activities.
- **Notification LED:** Provides visual alerts for incoming notifications.
- **Service Center App:** An exclusive app for personalized support.



**IP68/IP69K/  
MIL-STD-810H**  
Dare to Explore

**30 Minutes**  
2M Water Deep

**24 Hours**  
1M Concrete Deep

**2M**  
Drop Resistance

**PROOF**  
WATER SHOCK DUST  
**IP68**

**MILITARY...  
GRADE**  
**MIL-STD 810H**  
DROP \* TEST  
CERTIFIED  
USA



**Brave the Cold at -30°C**  
**Sub-zero Solid-State Battery**

**Consistent performance**  
at **-30°C / -22°F**

**Also reliable at**  
**55°C / 131°F**

Image: The Ulefone Armor 27T Pro 5G highlighting its uSmart connector for accessories, NFC, custom key, fingerprint ID, face ID, GPS, outdoor toolbox, IR blaster, and 3.5mm headphone jack.



Image: The uSmart Expansion Connector on the Ulefone Armor 27T Pro, shown with compatible accessories like a two-way rotatable endoscope, dual camera endoscope, and 1000x digital microscope.

## 10. MAINTENANCE

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To ensure the longevity and optimal performance of your Ulefone Armor 27T Pro, follow these maintenance guidelines:

- **Keep Ports Sealed:** Always ensure all port covers (USB-C, headphone jack) are securely closed when not in use, especially in wet or dusty environments, to maintain water and dust resistance.
- **Regular Cleaning:** Clean the device regularly with a soft, damp cloth. For stubborn dirt, use a mild soap solution. Avoid harsh chemicals or abrasive materials.
- **Screen Care:** While protected by Gorilla Glass Victus, avoid placing the phone face down on rough surfaces. Use the provided screen protector for added defense.
- **Temperature Management:** Avoid prolonged exposure to extreme heat or cold beyond the specified operating temperatures (-30°C to 55°C) to prevent battery degradation and component damage.
- **Software Updates:** Keep your device's software updated to ensure optimal performance, security, and access to new features.

## 11. TROUBLESHOOTING

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If you encounter issues with your Ulefone Armor 27T Pro, try the following common troubleshooting steps:

- **Device Unresponsive:** If the device is frozen or unresponsive, press and hold the Power button for about 10-15 seconds to force a restart.
- **Network Issues:** If you experience problems with calls or data, check if your SIM card is correctly inserted. Try toggling Airplane Mode on and off. Verify network settings in the "Settings" menu.
- **Battery Drain:** Review app usage in "Settings > Battery" to identify power-hungry applications. Reduce screen brightness and disable unnecessary features like Wi-Fi, Bluetooth, or GPS when not in use.
- **Camera Malfunction:** Ensure camera lenses are clean and free from obstructions. Restart the camera app or the device.
- **Thermal Camera Inaccuracy:** Ensure the thermal camera lens is clean. Environmental factors can affect readings; ensure proper calibration if available in the FLIR app.
- **Water/Dust Damage Concerns:** If you suspect water or dust ingress due to an open port cover, power off the device immediately and allow it to dry completely before attempting to power it on again. Do not charge a wet device.
- **Factory Reset:** As a last resort, if software issues persist, you may perform a factory reset.**Warning:**

This will erase all data on your device. Back up important information before proceeding. Go to "Settings > System > Reset options > Erase all data (factory reset)".

## 12. SPECIFICATIONS

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Feature	Detail
Brand	Ulefone
Model Name	Ulefone Armor 27T Pro
Operating System	Android 15
Processor	MediaTek Dimensity 6300 Octa-Core 2.4GHz
RAM	24GB (12GB LPDDR4X + 12GB Virtual RAM)
Internal Storage	256GB UFS 2.2
Expandable Storage	Up to 2TB MicroSD
Screen Size	6.78 Inches
Display Resolution	1080 x 2460 FHD+
Refresh Rate	120Hz
Screen Protection	Corning Gorilla Glass Victus
Main Camera	50MP (Samsung ISOCELL GN1)
Night Vision Camera	64MP
Front Camera	32MP
Thermal Camera	FLIR, 1080 x 1440 resolution, -10°C to 450°C range
Battery Capacity	10600mAh
Fast Charging	33W
Wireless Charging	30W (Qi standard)
Water Resistance	IP68, IP69K
Durability Standard	MIL-STD-810H
Connectivity	5G, Wi-Fi 6, Bluetooth 5.2, NFC, GPS (GLONASS, Beidou, Galileo)
SIM Card Slots	Dual SIM (Nano)
Other Features	Fingerprint ID, Face ID, Custom Key, uSmart Connector, IR Blaster, 3.5mm Headphone Jack, FM Radio

## 13. WARRANTY AND SUPPORT

Ulefone provides a 2-year warranty for non-human damage. For any questions or support regarding your mobile phone, please contact Ulefone support via email at [support@ulefone.com](mailto:support@ulefone.com). Additionally, an exclusive Service Center App is available on your device for instant, personalized support.

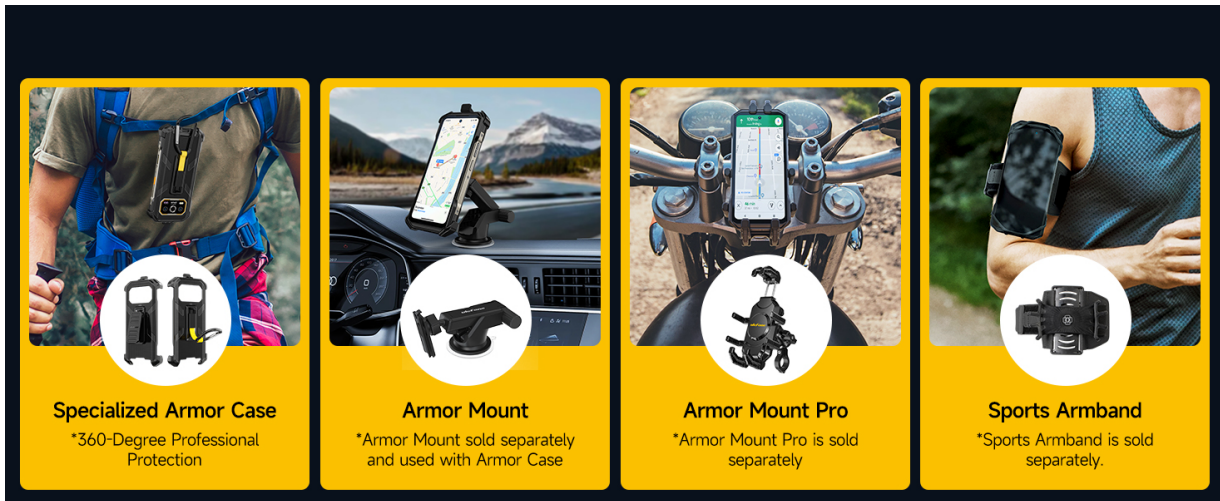


Image: The Ulefone Service Center App interface and various quality assurance tests (Tumble Test, Mini Drop Test, Multi-Angle Drop Test, Screen Touch Test, Keys Pressing Test, USB Endurance Test) the device undergoes.