

[Home](#) › [Razer](#) › [Phone 2](#)

## Razer Phone 2 - Specifications

Width	Height	Thickness	Weight	Write a review		
Specifications	Display	Camera	CPU	Battery	SAR	Prices <sup>7</sup>

Prices 

**Dimensions:** 78.99 x 158.5 x 8.5 mm  
**Weight:** 219 g  
**SoC:** Qualcomm Snapdragon 845  
**CPU:** 4x 2.8 GHz Kryo 385, 4x 1.8 GHz Kryo 385, **Cores:** 8  
**GPU:** Qualcomm Adreno 630, 710 MHz  
**RAM:** 8 GB, 1866 MHz  
**Storage:** 64 GB  
**Memory cards:** microSD, microSDHC, microSDXC  
**Display:** 5.72 in, IGZO, 1440 x 2560 pixels, 24 bit  
**Battery:** 4000 mAh, Li-Ion  
**OS:** Android 8.1 Oreo  
**Camera:** 4032 x 3024 pixels, 3840 x 2160 pixels, 30 fps  
**SIM card:** Nano-SIM  
**Wi-Fi:** a, b, g, n, n 5GHz, ac, Dual band, Wi-Fi Hotspot, Wi-Fi Direct, Wi-Fi Display  
**USB:** 2.0, USB Type-C  
**Bluetooth:** 4.2  
**Positioning:** GPS, A-GPS, GLONASS, BeiDou








## Lycamobile Wholesale SIM Cards - Become Lyca Master Agent

This wholesale Package of SIM cards is designed for dealers or distributors only. roar

### Brand and model

Information about the brand, model and model alias (if any) of a specific device.

<b>Brand</b> Brand name of the company that manufactures the device.	Razer
<b>Model</b> Model name of the device.	Phone 2
<b>Model alias</b> Alternative names, under which the model is known.	Phone2

### Design

Information about the dimensions and weight of the device, shown in different measurement units. Body materials, available colors, certifications.

<b>Width</b> Information about the width, i.e. the horizontal side of the device when it is used in its standard orientation.	78.99 mm (millimeters) 7.9 cm (centimeters) 0.26 ft (feet) 3.11 in (inches)
<b>Height</b> Information about the height, i.e. the vertical side of the device when it is used in its standard orientation.	158.5 mm (millimeters) 15.85 cm (centimeters) 0.52 ft (feet) 6.24 in (inches)
<b>Thickness</b>	8.5 mm (millimeters) 0.85 cm (centimeters)

Information about the thickness/depth of the device in different measurement units.	0.03 ft (feet) 0.33 in (inches)
<b>Weight</b> Information about the weight of the device in different measurement units.	219 g (grams) 0.48 lbs (pounds) 7.72 oz (ounces)
<b>Volume</b> Estimated volume of the device, calculated from the dimensions provided by the manufacturer. Applies for devices in the form of a rectangular parallelepiped.	106.42 cm <sup>3</sup> (cubic centimeters) 6.46 in <sup>3</sup> (cubic inches)
<b>Colors</b> Information about the colors, in which the device is available in the market.	Black
<b>Body materials</b> Materials used in the fabrication of the device's body.	Aluminium alloy
<b>Certification</b> Information about the standards, in which the device is certified.	IP67

## SIM card

The Subscriber Identity Module (SIM) is used in mobile devices for storing data authenticating the subscribers of mobile services.

<b>SIM card type</b> Information about the type and size (form factor) of the SIM card used in the device.	Nano-SIM (4FF - fourth form factor, since 2012, 12.30 x 8.80 x 0.67 mm)
<b>Number of SIM cards</b> Information about the number of SIM cards, supported by the device.	1

## Networks

A mobile (cellular) network is a radio system, which allows a large number of mobile devices to communicate with each other.

<b>GSM</b> GSM (Global System for Mobile Communications) was developed to replace the analog cellular network (1G), therefore it is referred to as a 2G mobile network. It has been improved with the addition of General Packet Radio Services (GPRS) and later via the Enhanced Data rates for GSM Evolution (EDGE) technology.	GSM 850 MHz GSM 900 MHz GSM 1800 MHz GSM 1900 MHz
<b>TD-SCDMA</b> TD-SCDMA (Time Division Synchronous Code Division Multiple Access) is a 3G standard for mobile networks. It is developed as an alternative to the W-CDMA standard in China by the Chinese Academy of Telecommunications Technology, Datang Telecom and Siemens AG, and combines TDMA and CDMA.	TD-SCDMA 1880-1920 MHz TD-SCDMA 2010-2025 MHz
<b>UMTS</b> UMTS stands for Universal Mobile Telecommunications System. Based on the GSM standard, it is deemed as a 3G mobile network standard. It has been developed by the 3GPP and its major advantage is the provision of greater bandwidth and spectral efficiency, due to the W-CDMA technology.	UMTS 850 MHz UMTS 900 MHz UMTS 1700/2100 MHz UMTS 1900 MHz UMTS 2100 MHz
<b>LTE</b> LTE is deemed to be the fourth generation (4G) of mobile communications technology. It has been developed by the 3GPP based on the GSM/EDGE and UMTS/HSPA technologies in order to increase the speed and capacity of wireless data networks. A further development of the technology is called LTE Advanced.	LTE 700 MHz Class 13 LTE 700 MHz Class 17 LTE 800 MHz LTE 850 MHz LTE 900 MHz LTE 1700/2100 MHz LTE 1800 MHz LTE 1900 MHz LTE 2100 MHz LTE 2600 MHz LTE-TDD 1900 MHz (B39) LTE-TDD 2300 MHz (B40) LTE-TDD 2500 MHz (B41) LTE-TDD 2600 MHz (B38) LTE 700 MHz (B12) LTE 700 MHz (B14) LTE 800 MHz (B18)

LTE 800 MHz (B19)  
 LTE 850 MHz (B26)  
 LTE 700 MHz (B28)  
 LTE 700 MHz (B29)  
 LTE 2300 MHz (B30)  
 LTE 1500 MHz (B32)  
 LTE 1700/2100 MHz (B66)  
 LTE 600 MHz (B71)

## Mobile network technologies and bandwidth

Communication between devices within mobile networks is realized via various generations of network technologies, which provide different bandwidth.

### Mobile network technologies

There are several network technologies that enhance the performance of mobile networks mainly by increased data bandwidth. Information about the communication technologies supported by the device and their respective uplink and downlink bandwidth.

UMTS (384 kbit/s )  
 EDGE  
 GPRS  
 HSPA+  
 LTE Cat 18 (221.0 Mbit/s , 1.2 Gbit/s )  
 TD-SCDMA  
 TD-HSDPA

## Operating system

Operating system is the system software, which manages and controls the functioning of the hardware components of the device.

### Operating system (OS)

Information about the operating system used by the device as well as its version.

Android 8.1 Oreo  
 Android 9.0 Pie

## System on Chip (SoC)

A system on a chip (SoC) includes into a single chip some of the main hardware components of the mobile device.

### SoC

The SoC integrates different hardware components such as the CPU, GPU, memory, peripherals, interfaces, etc., as well as software for their functioning.

Qualcomm Snapdragon 845

### Process technology

Information about the process technology used in manufacturing the chip. The value in nanometers represents half the distance between elements that make up the CPU.

10 nm (nanometers)

### CPU

CPU is the Central Processing Unit or the processor of a mobile device. Its main function is to interpret and execute instructions contained in software applications.

4x 2.8 GHz Kryo 385, 4x 1.8 GHz Kryo 385

### CPU bits

The CPU bits are determined by the bit-size of the processor registers, address buses and data buses. 64-bit CPUs provide better performance than 32-bit ones, which on their part perform better than 16-bit processors.

64 bit

### Instruction set

The instruction set architecture (ISA) is a set of commands used by the software to manage the CPU's work. Information about the set of instructions the processor can execute.

ARMv8-A

### Level 1 cache memory (L1)

The cache memory is used by the processor in order to shorten the time needed to access data and instructions that a frequently used. The L1 (level 1) cache memory has a small volume, but operates faster than the RAM and the rest cache memory levels. If the processor does not find the data needed in L1, it continues to look for it in the L2 cache memory. In some processors the search in L1 and L2 is simultaneous.

32 KB + 32 KB (kilobytes)

<p><b>Level 2 cache memory (L2)</b></p> <p>The L2 (level 2) cache memory is slower than L1, but has a larger capacity, instead, which allows it to cache more data. Just like L1, it is much faster than the system memory (RAM). If the CPU does not find the data needed in L2, it proceeds to look for them in the L3 cache memory (if there is such) or in the RAM.</p>	<p>1536 KB (kilobytes) 1.5 MB (megabytes)</p>
<p><b>Level 3 cache memory (L3)</b></p> <p>The L3 (level 3) cache memory is slower than L2, but has a larger capacity, instead, which allows it to cache more data. Just like L2, it is much faster than the system memory (RAM).</p>	<p>2048 KB (kilobytes) 2 MB (megabytes)</p>
<p><b>CPU cores</b></p> <p>A CPU core is the processor unit, which executes software instructions. Presently, besides single-core processors, there are dual-core, quad-core, hexa-core and so on multi-core processors. They increase the performance of the device allowing the execution of multiple instructions in parallel.</p>	<p>8</p>
<p><b>CPU frequency</b></p> <p>The frequency of the processor describes its clock rate in cycles per second. It is measured in Megahertz (MHz) or Gigahertz (GHz).</p>	<p>2800 MHz (megahertz)</p>
<p><b>GPU</b></p> <p>GPU is a graphical processing unit, which handles computation for 2D/3D graphics applications. In mobile devices GPU is usually utilized by games, UI, video playback, etc. GPU can also perform computation in applications traditionally handled by the CPU.</p>	<p>Qualcomm Adreno 630</p>
<p><b>GPU frequency</b></p> <p>The frequency is the clock rate of the graphic processor (GPU), which is measured in Megahertz (MHz) or Gigahertz (GHz).</p>	<p>710 MHz (megahertz)</p>
<p><b>RAM capacity</b></p> <p>RAM (Random-Access Memory) is used by the operating system and all installed applications. Data in the RAM is lost after the device is turned off or restarted.</p>	<p>8 GB (gigabytes)</p>
<p><b>RAM type</b></p> <p>Information about the type of RAM used by the device.</p>	<p>LPDDR4X</p>
<p><b>RAM channels</b></p> <p>Information about the number of RAM channels integrated in the SoC. More channels mean higher data transfer rates.</p>	<p>Double channel</p>
<p><b>RAM frequency</b></p> <p>RAM frequency relates directly to the rate of reading/writing from/in the RAM memory.</p>	<p>1866 MHz (megahertz)</p>
	<p>Vapor Cooling system</p>

## Storage

Every mobile device has a built-in storage (internal memory) with a fixed capacity.

<p><b>Storage</b></p> <p>Information about the capacity of the built-in storage of the device. Sometimes one and the same model may be offered in variants with different internal storage capacity.</p>	<p>64 GB (gigabytes)</p>
	<p>UFS 2.1</p>

## Memory cards

Memory cards are used in mobile devices for expanding their external storage capacity.

<p><b>Types</b></p> <p>The various types of memory cards are characterized by different sizes and capacity. Information about the supported types of memory cards.</p>	<p>microSD microSDHC microSDXC</p>
--	--

## Display

The display of a mobile device is characterized by its technology, resolution, pixel density, diagonal length, color depth, etc.

<b>Type/technology</b> One of the main characteristics of the display is its type/technology, on which depends its performance.	IGZO
<b>Diagonal size</b> In mobile devices display size is represented by the length of its diagonal measured in inches.	5.72 in (inches) 145.29 mm (millimeters) 14.53 cm (centimeters)
<b>Width</b> Approximate width of the display	2.8 in (inches) 71.23 mm (millimeters) 7.12 cm (centimeters)
<b>Height</b> Approximate height of the display	4.99 in (inches) 126.63 mm (millimeters) 12.66 cm (centimeters)
<b>Aspect ratio</b> The ratio between the long and the short side of the display	1.778:1 16:9
<b>Resolution</b> The display resolution shows the number of pixels on the horizontal and vertical side of the screen. The higher the resolution is, the greater the detail of the displayed content.	1440 x 2560 pixels
<b>Pixel density</b> Information about the number of pixels per centimeter (ppcm) or per inch (ppi) of the display. The higher the pixel density, the more detailed and clearer is the information displayed on the screen.	513 ppi (pixels per inch) 201 ppcm (pixels per centimeter)
<b>Color depth</b> The color depth of the display is also known as bit depth. It shows the number of bits used for the color components of one pixel. Information about the maximum number of colors the screen can display.	24 bit 16777216 colors
<b>Display area</b> The estimated percentage of the screen area from the device's front area.	72.28 % (percent)
<b>Other features</b> Information about other functions and features of the display.	Capacitive Multi-touch Scratch resistant
	Display manufacturer - Sharp Corning Gorilla Glass 5 120 Hz refresh rate 1800:1 contrast ratio 600 cd/m <sup>2</sup> UltraMotion Technology Wide Color Gamut

## Sensors

Different sensors measure different physical quantities and convert them into signals recognizable by the mobile device.

<b>Sensors</b> Sensors vary in type and purpose. They increase the overall functionality of the device, in which they are integrated.	Proximity Light Accelerometer Compass Gyroscope Fingerprint
--	--

## Primary camera

The primary camera of the mobile device is usually placed at its back and is used for taking photos and recording videos.

<b>Sensor model</b> Information about the manufacturer and the model of the image sensor used by the camera of the device.	Sony Exmor RS
<b>Sensor type</b> Digital cameras use image sensors for taking photos. The sensor characteristics are some of the main factors	CMOS (complementary metal-oxide semiconductor)

determining the quality of the camera integrated in the mobile device.	
<b>Aperture</b> Aperture (f-stop number) indicates the size of the lens diaphragm opening, which controls the amount of light reaching the image sensor. The lower the f-stop number, the larger the diaphragm opening is.	f/1.75
<b>Focal length</b> Focal length is the distance in millimeters from the focal point of the image sensor to the optical center of the lens. A focal length, which results in the same field of view on a full-frame (35 mm) camera, is also provided.	4.29 mm (millimeters)
<b>Flash type</b> Cameras of mobile devices use mainly a LED or a Xenon flash. The LED flash has a softer burst of light and in contrast to the much brighter Xenon flash, is used for recording videos as well.	Dual LED
<b>Image resolution</b> One of the main characteristics of the cameras of mobile devices is their resolution, which shows the number of pixels on the horizontal and vertical dimensions of the image.	4032 x 3024 pixels 12.19 MP (megapixels)
<b>Video resolution</b> Information about the maximum resolution available for shooting a video with the device.	3840 x 2160 pixels 8.29 MP (megapixels)
<b>Video FPS</b> Information about the maximum number of frames per second (fps), supported by the device while recording a video at maximum resolution. Some of the main standard frame rates for recording and playing video are 24p, 25p, 30p, 60p.	30 fps (frames per second)
<b>Features</b> Information about additional software and hardware features of the primary camera, which improve its overall performance.	Autofocus Continuous shooting Digital zoom Optical zoom Optical image stabilization Geotagging Panorama HDR Touch focus Face detection White balance settings ISO settings Exposure compensation Self-timer Scene mode
	Sensor size - 1/2.55" Pixel size - 1.4 µm Phase detection with Dual Pixel Focal length (35 mm equivalent) - 25 mm Secondary rear camera - 12 MP (telephoto) Sensor size - 1/3.1" (#2) Pixel size - 1.0 µm (#2) Aperture size - f/2.6 (#2) Phase detection (#2)

## Secondary camera

Secondary cameras are placed above the screen of the device and are usually used for video calls, gesture recognition, etc.

<b>Aperture</b> Aperture (f-stop number) indicates the size of the lens diaphragm opening, which controls the amount of light reaching the image sensor. The lower the f-stop number, the larger the diaphragm opening is.	f/2
<b>Image resolution</b> Information about the maximum image resolution of the secondary camera. Often, the resolution of the secondary camera is lower than the one of the primary camera.	3264 x 2448 pixels 7.99 MP (megapixels)
<b>Video resolution</b> Information about the maximum resolution available for shooting a video by the secondary camera.	1920 x 1080 pixels 2.07 MP (megapixels)
<b>Video FPS</b>	30 fps (frames per second)

Information about the maximum number of frames per second (fps), supported by the secondary camera while recording a video at maximum resolution.

## Audio

Information about the type of speakers and the audio technologies supported by the device.

### Speaker

The loudspeaker is a device, which reproduces various sounds such as ring tones, alarms, music, voice calls, etc. Information about the type of speakers the device uses.

Loudspeaker  
Earpiece  
Stereo speakers

Dolby Atmos  
THX-certified DAC  
Headphone adapter

## Radio

The radio in a mobile device is a built-in FM radio receiver.

### Radio

Information whether the device has an FM radio receiver or not.

No

## Tracking/Positioning

Information about the positioning and navigation technologies supported by the device.

### Tracking/Positioning

The tracking/positioning service is provided by various satellite navigation systems, which track the autonomous geo-spatial positioning of the device that supports them. The most common satellite navigation systems are the GPS and the GLONASS. There are also non-satellite technologies for locating mobile devices such as the Enhanced Observed Time Difference, Enhanced 911, GSM Cell ID.

GPS  
A-GPS  
GLONASS  
BeiDou

## Wi-Fi

Wi-Fi is a technology that provides wireless data connections between various devices within a short range.

### Wi-Fi

Wi-Fi communication between devices is realized via the IEEE 802.11 standards. Some devices have the possibility to serve as Wi-Fi Hotspots by providing internet access for other nearby devices. Wi-Fi Direct (Wi-Fi P2P) is another useful standard that allows devices to communicate with each other without the need for wireless access point (WAP).

802.11a (IEEE 802.11a-1999)  
802.11b (IEEE 802.11b-1999)  
802.11g (IEEE 802.11g-2003)  
802.11n (IEEE 802.11n-2009)  
802.11n 5GHz  
802.11ac (IEEE 802.11ac)  
Dual band  
Wi-Fi Hotspot  
Wi-Fi Direct  
Wi-Fi Display

## Bluetooth

Bluetooth is a standard for secure wireless data transfer between different types of devices over short distances.

### Version

The technology has several versions, which improve the connection speed, range, connectivity and discoverability of the devices. Information about the Bluetooth version of the device.

4.2

### Features

Bluetooth uses various profiles and protocols related to faster exchange of data, energy saving, better device discoverability, etc. Some of those supported by the device are listed here.

A2DP (Advanced Audio Distribution Profile)  
EDR (Enhanced Data Rate)  
LE (Low Energy)

## USB

The Universal Serial Bus (USB) is an industry standard that allows different electronic devices to exchange data.

**Connector type**

There are several USB connector types: the Standard one, the Mini and Micro connectors, On-The-Go connectors, etc. Type of the USB connector used by the device.

USB Type-C

**Version**

There are several versions of the Universal Serial Bus (USB) standard: USB 1.0 (1996), the USB 2.0 (2000), the USB 3.0 (2008), etc. With each following version the rate of data transfer is increased.

2.0

**Features**

The USB interface in mobile devices may be used for different purposes such as battery charging, using the device as a mass storage, host, etc.

Charging  
Mass storage  
On-The-Go

**Headphone jack**

The headphone jack is an audio phone connector, a.k.a. an audio jack. The most widely used one in mobile devices is the 3.5 mm headphone jack.

**Headphone jack**

Information whether the device is equipped with a 3.5 mm audio jack.

No

**Connectivity**

Information about other important connectivity technologies supported by the devices.

**Connectivity**

Information about some of the most widely used connectivity technologies supported by the device.

Computer sync  
OTA sync  
Tethering  
NFC

**Browser**

A web browser is a software application for accessing, fetching, displaying and navigating through information on the World Wide Web.

**Browser**

Information about some of the features and standards supported by the browser of the device.

HTML  
HTML5  
CSS 3

**Audio file formats/codecs**

Mobile devices support various audio file formats and codecs, which respectively store and code/decode digital audio data.

**Audio file formats/codecs**

List of some of the most common audio file formats and codecs supported standardly by the device.

AAC (Advanced Audio Coding)  
AAC+ / aacPlus / HE-AAC v1  
AMR / AMR-NB / GSM-AMR (Adaptive Multi-Rate, .amr, .3ga)  
AMR-WB (Adaptive Multi-Rate Wideband, .awb)  
AMR-WB+ (Extended Adaptive Multi-Rate Wideband)  
eAAC+ / aacPlus v2 / HE-AAC v2  
FLAC (Free Lossless Audio Codec, .flac)  
M4A (MPEG-4 Audio, .m4a)  
MIDI  
MP3 (MPEG-2 Audio Layer II, .mp3)  
OGG (.ogg, .ogv, .oga, .ogx, .spx, .opus)  
WMA (Windows Media Audio, .wma)  
WAV (Waveform Audio File Format, .wav, .wave)

**Video file formats/codecs**

Mobile devices support various video file formats and codecs, which respectively store and code/decode digital video data.

**Video file formats/codecs**

List of some of the most common video file formats and codecs supported standardly by the device.

3GPP (3rd Generation Partnership Project, .3gp)  
AVI (Audio Video Interleaved, .avi)  
DivX (.avi, .divx, .mkv)  
Flash Video (.flv, .f4v, .f4p, .f4a, .f4b)  
H.263  
H.264 / MPEG-4 Part 10 / AVC video  
H.265 / MPEG-H Part 2 / HEVC  
MKV (Matroska Multimedia Container, .mkv, .mk3d, .mka, .mks)  
QuickTime (.mov, .qt)  
MP4 (MPEG-4 Part 14, .mp4, .m4a, .m4p, .m4b, .m4r, .m4v)  
WebM



WMV (Windows Media Video, .wmv)  
Xvid

## Battery

The batteries of mobile devices differ in capacity and technology. They provide the electrical charge needed for the functioning of the devices.

<b>Capacity</b> The capacity of a battery shows the maximum charge, which it can store, measured in milli-Ampere hours.	4000 mAh (milliampere-hours)
<b>Type</b> The battery type is determined by its structure and more specifically, by the chemicals used in it. There are different battery types and some of the most commonly used in mobile devices are the lithium-ion (Li-Ion) and the lithium-ion polymer battery (Li-Polymer).	Li-Ion
<b>Quick charge technology</b> Quick charge technologies differ in energy efficiency, power output, control over charging, temperatures, etc. The device, battery and charger must support one and the same charging technology to achieve faster charging times.	Qualcomm Quick Charge 4+
<b>Features</b> Information about some additional features of the device's battery.	Wireless charging Fast charging Non-removable

## Specific Absorption Rate (SAR)

The SAR rating shows the amount of electromagnetic radiation absorbed by the human body when using a mobile device, expressed in W/kg.

<b>Head SAR (EU)</b> The SAR head rating shows the highest level of exposure to electromagnetic radiation measured when the device is held next to the ear in a talk position. In Europe, the SAR limit for hand-held mobile devices is set to 2 W/kg per 10 g of tissue. This standard is specified by the CENELEC, complies with the IEC standards and follows the ICNIRP Guidelines 1998.	0.508 W/kg (watts per kilogram)
<b>Body SAR (EU)</b> This SAR rating shows the highest level of exposure to electromagnetic radiation measured when the device is placed at the hip level. The top SAR value for mobile devices used in Europe is limited to 2 W/kg per 10 g of tissue. This standard follows the ICNIRP Guidelines 1998 as well as the IEC standards and is determined by the CENELEC.	1.493 W/kg (watts per kilogram)
<b>Head SAR (USA)</b> This SAR rating shows the maximum level of exposure to electromagnetic radiation taken when the device is placed next to the ear. The applicable limit for the US is 1.6 W/kg per 1 g of tissue. In the US the FCC tests and sets the SAR limits for all mobile devices, which are controlled by the CTIA.	0.94 W/kg (watts per kilogram)
<b>Body SAR (USA)</b> The SAR body rating shows the maximum level of exposure to electromagnetic radiation when the device is positioned against the body at the hip. The highest SAR value of mobile devices allowed in the US is set to 1.6 W/kg per 1 g of tissue. It is specified by the FCC and the CTIA follows whether the mobile devices comply with this standard.	0.58 W/kg (watts per kilogram)

## Most recent comparisons including Razer Phone 2

List of the latest comparisons made by the website visitors, which include Razer Phone 2

[View](#)

[View](#)