

49.5" Samsung - Specifications



Display: 49.5 in, VA, Edge-LED, 3840 x 2160 pixels
 Refresh rate: 60 Hz
 Frame interpolation: 1300 PQI (Picture Quality Index)
 TV tuner: Analog (NTSC/PAL/SECAM), DVB-T2, DVB-C, DVB-T, DVB-S, DVB-S2
 SoC: Jazz-L
 Cores: 4
 Dimensions: 1128.9 x 654.4 x 63.2 mm
 Weight: 12.2 kg
 Network: LAN

Brand, series, model

Information about the brand, series, model and model aliases.

Brand Name of the company-manufacturer.	Samsung
Series Name of the series, which the model belongs to.	KU6072
Model Designation of the model.	UE50KU6072
Model alias Other known designations of the model.	UE50KU6072UXXH

Display

Information about the main characteristics of the display - panel, backlight, resolution, refresh rate, etc.

Size class Size class of the display as declared by the manufacturer. Often this is the rounded value of the actual size of the diagonal in inches.	49.5 in (inches)
Diagonal Approximate diagonal size of the display. If the manufacturer does not provide such information, the diagonal is calculated from the width and height of the screen.	1257 mm (millimeters) 125.7 cm (centimeters) 49.4882 in (inches) 4.124 ft (feet)
Width Approximate width of the display. If the manufacturer does not provide such information, the width is calculated from the diagonal and the aspect ratio.	1095.57 mm (millimeters) 109.557 cm (centimeters) 43.1327 in (inches) 3.5944 ft (feet)
Height Approximate height of the display. If the manufacturer does not provide such information, the height is calculated from the diagonal and the aspect ratio.	616.258 mm (millimeters) 61.6258 cm (centimeters) 24.2621 in (inches) 2.0218 ft (feet)

<p>Panel type</p> <p>There are various panel technologies. Each has its own specific features - viewing angles, color reproduction, response time, brightness/contrast, production cost, etc. The image quality depends directly on the type of the display panel used.</p>	VA
<p>Panel bit depth</p> <p>The most widely used panels are those with 6, 8, and 10 bits for each of the RGB components of the pixel. They provide 18-, 24-, and 30-bit color, respectively.</p>	8 bits
<p>Colors</p> <p>The maximum number of colors, which the display is able to reproduce, depends on the type of the panel in use and color enhancing technologies like FRC.</p>	16777216 colors 24 bits
<p>Aspect ratio</p> <p>The ratio between the horizontal and the vertical side of the display. Some of the standard and widely used aspect ratios are 4:3, 5:4, 16:9 and 16:10.</p>	1.778:1 16:9
<p>Resolution</p> <p>Information about the number of pixels on the horizontal and vertical side of the screen. A higher resolution allows the display of a more detailed and of higher quality image.</p>	3840 x 2160 pixels Ultra HD (UHD) / 4K / 2160p
<p>Pixel pitch</p> <p>The pixel pitch shows the distance from the centers of two neighboring pixels. In displays, which have a native resolution (the TFT ones, for example), the pixel pitch depends on the resolution and the size of the screen.</p>	0.285 mm (millimeters) 0.0285 cm (centimeters) 0.0112 in (inches) 0.0009 ft (feet)
<p>Pixel density</p> <p>Information of the number of pixels in a unit of length. With the decrease of the display size and the increase of its resolution, the pixel density increases.</p>	89 ppi (pixels per inch) 34 ppcm (pixels per centimeter)
<p>Display area</p> <p>The percentage of the approximate area, taken by the active part of the screen, to the total front area.</p>	91.39 % (percent)
<p>Backlight</p> <p>The backlight is the source of light of the LCD display panels. The type of backlight determines the image quality and the color space of the display. There are various backlights such as CCFL, LED, WLED, RGB-LED, and etc.</p>	Edge-LED

3D

3D displays use various technologies to achieve a 3D effect. Each of these technologies has its own advantages and drawbacks.

<p>3D</p> <p>Information on whether 3D is supported or not.</p>	No
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Frequencies

Information about the horizontal and vertical refresh rates/frequencies.

<p>Vertical frequency (digital)</p> <p>The vertical frequency/refresh rate shows how many times in a second the image on the screen is refreshed.</p>	60 Hz (hertz)
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Frame interpolation

Many smart TV sets use a technology for interpolating (inserting) of intermediate frames between existing ones in order to achieve more fluent visualization, especially for dynamic scenes.

<p>Interpolation technology</p> <p>Frame interpolation technologies differ according to the manufacturer and each has its own specific name.</p>	Picture Quality Index
<p>Interpolation value</p> <p>The frame interpolation value as provided by the manufacturer. This value must not be confused with the refresh rate of the screen.</p>	1300
<p>Interpolation measurement unit</p> <p>Some manufacturers name commercially the measurement unit of their own interpolation technologies as to denote the degree of interpolation. Very often the</p>	PQI

measurement unit is an abbreviation of the frame interpolation technology in use.

Power supply and consumption

Information about the power supply and consumption, energy efficiency class, etc.

220V Permissible voltage tolerance in a 220-volt electric system.	220 V - 240 V (volts)
Alternating current frequency Requirement regarding the alternating current frequency in the electric system.	50 Hz - 60 Hz (hertz)
Power consumption (sleep) Power consumption in sleep/stand by/suspend mode.	0.3 W (watts)
Power consumption (maximum) The maximum possible power consumption.	190 W (watts)
Energy efficiency class The energy efficiency class/label provides general idea about the power consumption. There are different energy efficiency classes and each sets its own requirements regarding the power consumption. Some of the existent energy efficiency classes are A+++, A++, A+, A, B, C, D, E, F, G.	A

Dimensions, weight and color

Information about the dimensions and the weight of the specific model with and without stand as well as the colors, in which it is offered to the market.

Width Width without stand in different measurement units.	1128.9 mm (millimeters) 112.89 cm (centimeters) 44.4449 in (inches) 3.7037 ft (feet)
Height Height without stand in different measurement units.	654.4 mm (millimeters) 65.44 cm (centimeters) 25.7638 in (inches) 2.147 ft (feet)
Depth Depth without stand in different measurement units.	63.2 mm (millimeters) 6.32 cm (centimeters) 2.4882 in (inches) 0.2073 ft (feet)
Weight Weight without stand in different measurement units.	12.2 kg (kilograms) 26.9 lbs (pounds)
Width with stand Width with stand in different measurement units.	1128.9 mm (millimeters) 112.89 cm (centimeters) 44.4449 in (inches) 3.7037 ft (feet)
Height with stand Height with stand in different measurement units.	723.7 mm (millimeters) 72.37 cm (centimeters) 28.4921 in (inches) 2.3743 ft (feet)
Depth with stand Depth with stand in different measurement units.	310.5 mm (millimeters) 31.05 cm (centimeters) 12.2244 in (inches) 1.0187 ft (feet)
Weight with stand Weight with stand in different measurement units.	13.2 kg (kilograms) 29.1 lbs (pounds)
Colors Information about the colors, in which the specific model is offered to the market.	Black

Ergonomics

Information about the ergonomic functions - height adjustment, swivel angles, tilt angles, etc.

VESA mount Information about whether there is a possibility for wall mounting according to the VESA Mounting Interface Standard (MIS).	Yes
VESA interface There are many various interfaces under the VESA standard, which differ in the size of the brackets, the distances between the screw holes and their number.	400 x 400 mm
Removable stand	Yes

Information about whether the stand can be dismantled. Usually, this is required for wall mounting.

Height adjustment

Information about whether the stand allows height adjustment.

No

Landscape/portrait pivot

Some displays have the ability to operate in landscape and portrait mode alike.

No

Left/right swivel

Information whether the display can be swiveled around the stand axis.

No

Forward/backward tilt

Most displays have the ability to be tilted forward and backward as to provide a more comfortable viewing position for the user.

No

V-shape stand

TV tuner

The TV tuner is a device, which allows the receiving and visualization of a certain type of television signal. There are tuners for digital, analog, cable and satellite television.

TV tuner

Information about the TV tuners, which the current model is equipped with.

Analog (NTSC/PAL/SECAM)
DVB-T2
DVB-C
DVB-T
DVB-S
DVB-S2

System on Chip (SoC)

Information about the central processor, graphic processor and the memory of the model.

SoC

The system-on-chip (SoC) integrates different hardware components such as CPU, GPU, memory and others.

Jazz-L

CPU cores

The software instructions are performed by the CPU cores. The higher number of cores allows for the parallel (simultaneous) processing of more instructions and achieving higher performance. There are various processors equipped with 1, 2, 4, 6, 8, and more cores.

4

Operating system

Smart TV sets have operating systems, which in terms of functionality and universality bring them close to the computers.

Operating system (OS)

The operating systems of the smart TV sets feature interactive user interface technologies for navigation and other ways of interaction with the smart TV - installing applications, internet browsing, video calls, sharing content with other users, playing videos and music, etc.

Tizen 2.4

Audio

Information about the audio system - number and power of the built-in speakers, supported audio technologies.

Speakers

The speaker is a device, which converts electrical audio signals into acoustic vibrations resulting in corresponding sounds.

2 x 10 W (watts)

2 CH down firing + bass reflex
Dolby Digital Plus
DTS

Camera

Many contemporary desktop monitors and smart TV sets have built-in cameras.

Camera

Information whether the current model has a built-in camera or not.

No

Network

Supported network technologies and standards for exchanging data with other devices.

Network

Information about the network technologies and standards supported by the model, which allow for it to connect to and communicate with other devices.

LAN
Wi-Fi
802.11a (IEEE 802.11a-1999)
802.11b (IEEE 802.11b-1999)
802.11g (IEEE 802.11g-2003)
802.11n (IEEE 802.11n-2009)
Wi-Fi Direct
DLNA

Connectivity

Available connectivity ports, slots and interfaces.

Connectivity

Information about the available connectivity ports, slots and interfaces such as USB, infrared port, SD card slot, audio/video and network interfaces, etc.

2 x USB 2.0
1 x Ethernet RJ45
3 x HDMI 2.0 (ARC; CEC)
1 x Satellite In (Main; F-type female)
1 x AV Composite In 3.5 mm jack
1 x Video Component In 3.5 mm jack
1 x Optical Audio Out
1 x Antenna (RF) (female)
1 x CI+ 1.3

Features

Some additional functional features of the model.

Features

Information about additional software features, technologies, functions and services of the model.

Anynet+ (HDMI-CEC)
Auto Motion Plus
Contrast Enhancer
Digital Clean View
Extended PVR
HDCP (High-bandwidth Digital Content Protection) 2.2
HDR
Light sensor
Picture-in-Picture
PurColor
Smart View 2.0
UHD Dimming
UHD Upscaling
Ultra Clean View

Image file formats

Smart TV sets allow the display of different image file formats.

Image file formats

Information about some of the main image file formats supported by the current model.

JPEG
GIF
PNG
MPO
BMP

Audio file formats

Smart TV sets allow playing different audio file formats.

Audio file formats/codecs

Information about some of the main audio file formats/codecs supported by the current model.

AAC (Advanced Audio Coding)
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)
APE
AIFF
ALAC

Video file formats

Smart TV sets allow playing various video file formats.

Video file formats/codecs

Information about some of the main video file formats/codecs supported by the current model.

3GPP (3rd Generation Partnership Project, .3gp)
AVI (Audio Video Interleaved, .avi)
ASF (Advanced Systems Format, .asf, .wma, .wmv)
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)
M2TS (Blu-ray Disc Audio-Video (BD-AV) MPEG-2 Transport Stream, .m2ts, .MTS)

MP4 (MPEG-4 Part 14, .mp4, .m4a, .m4p, .m4b, .m4r, .m4v)
MPEG-4
TS (MPEG Transport Stream, .ts, .tsv, .tsa)
VC-1
VP7
VP8
VP9
VOB (Video Object, .VOB)
VRO (DVD-VR, .VRO)
WebM
WMV (Windows Media Video, .wmv)

Certificates, standards and licenses

Licenses from regulatory agencies, standards, certificates.

Certificates, standards and licenses

List of the standards, certificates and licenses supported/received by the current model.

RoHS

Accessories

Often the packaging of desktop monitors and smart TV sets includes accessories for them.

Accessories

Information about some of the main accessories included in the standard packaging of the current model.

3.5 mm component adapter
3.5 mm composite adapter
Remote control - TM1240A