

8K TV buying guide quick reference handout

8K TVs are ideal when you want a very large screen with the clearest image possible.

What is 8K TV?

An 8K TV is similar in many ways to 4K TV, except that an 8K TV has double the resolution and more pixels per square inch (PPI). The higher the PPI, the better the picture quality. For example, a 4K Ultra HD TV has 59 PPI and an 8K Ultra HD TV has 117 PPI.

Compare 1080p to 4K and 8K

1. **1080p TVs (or HD TVs)** have a resolution of 1920 horizontal pixels x 1080 vertical pixels. As screen size gets bigger, these pixels get spread out for a dull image. There is lots of HD content.
2. **4K TVs** have a resolution of 3840 x 2160 pixels for a clearer image. 4K content is almost as common as 1080p content now.
3. **8K resolution** bumps up to 7680 by 4320 pixels for the clearest image even on huge screens. Very little 8K content exists but most 8K TVs can upscale 4K content to make it close to 8K quality.

Benefits of 8K resolution

With double the resolution of a 4K TV, 8K offers the sharpest and most spectacular image quality possible. There are quite a several benefits to bringing home an 8K TV right now.

1. **8K will shine in bright or dark rooms:** they display brighter, crisper images, even offsetting glare from outside windows.
2. **8K offers better contrast:** experience what true colour is, with the deepest blacks and whitest whites you've ever seen on a TV.
3. **8K TVs can upscale 4K content:** everything you watch, even gaming, will be upscaled to as close to 8K as possible.

Differences between 8K panel types

Types include 8K Ultra HD LED TVs, 8K QLED TVs, and 8K OLED TVs.

1. **8K Ultra HD LED TV** similar to other LED TVs, 8K Ultra HD LED TV is a type of LCD TV that uses light-emitting diodes (LEDs) to provide the backlight for the display.
2. **LED vs Mini-LED:** Mini-LED TVs are starting to appear in the market using a mini version of an LED light, so TV manufacturers can add more of them when designing the backlight of a TV for better control of pixel brightness.
3. **8K QLED TV:** A QLED TV is a LED TV with an added layer of quantum dots, nano-sized semiconductors that produce different colours of light depending on their size, improving the brightness and contrast of the TV.
4. **8K OLED TV:** 8K OLED doesn't use backlight technology, instead, light is provided by self-illuminating organic light emitting diodes for jaw-dropping colour and contrast.
5. **8K MicroLED TV:** MicroLED promises the absolute best colour, contrast, and picture quality possible and is expected to become available within the next year or two. MicroLED TVs are a lot like OLEDs in that the diode can completely turn on and off, but MicroLED uses non-organic LEDs at a rate of three per pixel.

Features to look for on 8K TVs

1. **AI processors:** The latest 8K displays are powered by processors with AI built-in to improve sound, refresh rate, and more.
2. **8K Upscaling:** Long story short, everything you watch on an 8K display will look better.
3. **Dolby Vision and HDR content:** including Cinema HDR for theatre quality experience.
4. **Sound system on 8K:** most 8K panels will have multiple speakers with multi-directional audio.
5. **Size range of 8K TVs:** the enhanced resolution offered in larger TV sizes.
6. **HDMI ports and Wi-Fi:** 8K displays offer multiple wired and wireless connections
7. **Refresh rate on 8K TVs:** 8K TVs offer the same types of refresh rate as 4K TVs.
8. **8K Smart TVs:** every 8K TV is a smart TV with instant connections to streaming apps.
9. **Voice control:** the voice assistant can access shows and control smart home devices

10. 8K Nanocell TVs: provide the widest viewing angles due to a layer of nanoparticles that improve brightness, colour, and filter out unwanted colour wavelengths.

11. 8K Full Array: LEDs are placed in different locations all over the TV's LCD panel.

12. 8K HFR: An 8K HFR TV is a TV with a high frame rate.

Gaming on 8K TV

Although consoles don't support 8K yet, gamers are choosing TVs with 8K resolution because of built-in features like Game Mode, HDMI 2.1 ports, and gaming menus.