

Smart TV

Almost all TVs today are “smart” with Internet connectivity, apps for streaming, smart home functions, and even some alien-sounding technologies. They are part TV, part computer, and part smart device. They keep getting better and better every year. I replace my 16 year old “dumb” \$2000 TV that died recently with a \$399 Smart TV.

What Can They Do?

Warning - Not all apps or features are supported by all TV vendors or models. Each model uses an operating system: Roku TV, Amazon Fire TV, Google's Android TV, or a proprietary OS. Each has a different remote and user interface that vary widely. Spend time at the store flipping through the set's smart offerings to make sure you will be comfortable with how it works before you buy and has the apps you need. Sometimes you can find reviews on YouTube that can help.

- Apps for paid live or on demand streaming services like Netflix, Hulu Plus, HBO Max, AT&T TV, Disney+, and many others. Also, free ad supported free streaming services like Peacock, PlutoTV, Tubi, and Crackle.
- Apps to stream music like Spotify, Pandora, YouTube Music, and Apple Music. Also, podcast apps.
- Apps for social media like Facebook, YouTube, Twitter, and Instagram.
- Apps to video Chat like Skype, Teams, FaceTime, or Zoom through the TV.
- Mirror/share pictures/video from a smartphone/tablet on the TV like Google Chromecast or Apple AirPlay.
- Web browser. Browsing can be challenging unless you add on a wireless keyboard. Using your remote control buttons or voice-interaction to navigate websites can be a challenge.
- Voice or video assistant built into the TV, like Amazon Alexa and Google Assistant. Usually with a mke in the remote and/or a mic/camera built into the TV.
- Control the TV using a voice or video assistant. Example: Power On, Mute, Volume Up, Change Channel, Playback (fast forward, rewind, pause, etc.), Change Input, and more.
- An on-screen universal search engine or guide. This will save you time when you're looking for a program but don't know which channels/apps offer it. Voice works best and is the easiest for input.
- SmartPhone/tablet app to control or setup the TV.

Some TV Questions

- How do they connect to the Internet? – Support a wired Ethernet and/or Wi-Fi connection. Use the Ethernet if possible. For streaming 1K video your Internet connection needs to support at least 6 Mbps per TV in the house. For 4K 25 Mbps per TV. Most support WiFi 802.11ac that came out in 2014. A few support the current 802.11ax Wi-Fi 6. Consider upgrading your WiFi router if it is 3 years old or older. If your TV isn't getting a strong WiFi signal, you may need to run a Ethernet line or buy a Mesh WiFi system. I don't recommend WiFi repeaters due to the bandwidth needed to stream high quality video.
- Can my TV be hacked? - In theory yes, but it is very, very rare. To be safe, avoid doing anything sensitive on a TV, such as online banking or shopping with a credit card. TVs are not as safe as a PC. If you do not use a strong secure password and secure WiFi your TV can be compromised.
- Can a TV track my activity? – Yes, information you share and click on a Facebook app, ordering on Amazon, or what you watch on Netflix is shared in the same way SmartPhone apps collect data on you all the time. All TVs and apps are sending viewing data back to be sold to marketers and advertisers, regardless of who makes the hardware or app.
- Can a TV replace my Xfinity cable service? – Yes, see the past Aug 2018 PCC meeting “Internet TV”. Also, Xfinity has an app for some Smart TVs so you do not need to rent a cable box.

Issues - Tips

- Most get automatic software updates to fix bugs and add new features to the OS. A TV can crash or hang like a PC.
- Stand alone streaming devices like a Roku, Apple TV, Google Chromecast, Amazon Fire TV, and others can be connected to an old “dumb” TV or a not so smart TV to provide the services/features you need. A Roku set top device has more services/features than most TVs on the market. The only downside besides an additional cost of the device is another remote and menu.
- An Apple household that needs iTunes needs to get an Apple TV device, no TVs support apps for iTunes.
- Check the sound quality of the built in speakers unless you plan on buying a sound bar for \$100+.
- When buying a new TV, make sure you get enough HDMI connections. HDMI 2.1 is the most recent version. Some people can live with two HDMI ports while others need 4-6. Possible HDMI devices: Streaming boxes or plugs, Games, DVD, OTA DVR, Laptop, and others.
- Don't overspend on HDMI cables, a standard cable will work for up to 15 feet and cost about \$1 per foot.
- Not all TVs have a built-in digital TV tuner for local stations or a TV channel guide. Do you need?

- Most content is currently 1K or 1080p with more being made available at 4K every month. Don't worry about 8K now, it is very limited today and you pay a premium for the TV and streaming services. A TV with HDR will provide better contrast and color than a TV without HDR.
- OLED TVs have the best picture, but are expensive. LED and LCD are usually good enough.
- Size 43" for bedroom, 55" and up for living room depending on how far back you view the TV from.
- Some TVs look better or have a wider viewing angle. A TV's picture quality starts to degrade when it is watched from the side.
- The purpose of a TV's spec sheet is to bombard you with confusing terms and numbers in an attempt to get you to "step up" and buy the more expensive models. Buy the one that has the features you need and the picture looks good.

What I Bought – Sep 2020

- I am not cheap, I am thrifty. Why spend more than what I need?
- At Sams Club I purchased a 55" Samsung 7 Series TU700D for \$399. Supports 4K, HDR, 802.11ac/Ethernet, Bluetooth (speakers, keyboard, etc.), Alexa support, 2 HDMI 2.0, USB HID (Human Interface Device) (mouse/keyboard), web Browser, weighed 30 lbs, Not too many or too few buttons on the remote, looked clear in the store, good viewing angle, had some TV features, and everything I needed.
- It took me several hours to setup the TV. I had to install a Samsung app on my phone to get it connected to my WiFi and setup an account so I could get about 50 streaming channels for free. It supported 2 HDMI ports, but I really only needed one because I already had a 5 port HDMI switch and an HDMI splitter to send whatever signal I wanted to multiple TVs/rooms in my house.
- The TV came with a few pages of Quick Setup/Start info, so I went to the Samsung site and downloaded the PDF 188 page Manual, Quick Start, User Manual, and saved the specs to a directory on my PC where I keep all my manuals and info. I recommend everyone do this for all your new devices. It makes it easy to find info and you do not have to keep paper copies that get lost. Over the next day I read the almost 200 pages and found how to connect a Bluetooth keyboard to the TV, setup Alexa commands to control the TV, what all the remote control buttons did, and how to setup Apple Air Drop support.
- It came with a Youtube and Browser app installed. I installed apps for "AT&T Now" streaming TV and HBO Max. I wanted to install the Google Photos app, but the TV only supports a limited number of apps and it was not one of them. It does come with an Internet Browser app that I was able to go to "Google Photos" and see my photos on the TV. Samsung also has a photo viewer app that uses the Samsung Cloud to view photos. I can also cast my tablet/Smartphone to the TV when needed.
- All in all I am happy with the new TV. They sure pack lots of features into the new TVs. They are now part TV and part computer and smart device. Also, the price of \$399 was lots better than \$2,000 16 years ago for the old heavy Plasma. The Plasma picture did look a little better in bright lighting and from all angles, but the new Samsung is fine.
- I checked YouTube reviews before I bought: <https://www.youtube.com/watch?v=YXNACZ0y30k>

Additional Links and Information

The Best TVs for 2022 - If you want a new television, you now have more options than ever, including HD, 4K, and smart TV sets. No matter your budget or the size of screen you want, here's what to look for when shopping, along with the best TVs we've tested. <https://www.pcmag.com/picks/the-best-tvs>

The best TV for 2022 - Looking for a new TV? Start here.
<https://www.cnet.com/tech/home-entertainment/best-smart-tv-for-2022/>

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 Questions or comments can be sent to TCKreuzer@gmail.com