**ZENMUSE X5S FAQ**

**FAQ**

[1.How is the Zenmuse X5S different from Zenmuse X4S?](https://www.dji.com/zenmuse-x5s/info" \l "0-0)

While both cameras capture 20 megapixel photos, the X4S features a 1-inch Exmor R CMOS sensor and a fixed prime lens specially designed to fit the sensor and the imaging engine. Additionally, the X4S captures 4K video in the H.264 and H.265 formats.  
  
The Zenmuse X5S features a M4/3 sensor and an interchangeable lens mount for M4/3 lenses. Combined with the Inspire 2’s internal CineCore 2.0 image processing system, the Zenmuse X5S can capture video H.264 and H.265 formats as well as CinemaDNG and Apple ProRes and is suitable for a wide range of professional filmmaking and television production applications.

[2.How is the Zenmuse X5S different from the Zenmuse X5R?](https://www.dji.com/zenmuse-x5s/info" \l "0-1)

The Zenmuse X5R was DJI’s first M4/3 camera dedicated to aerial photography. With a 16-megapixel sensor it is capable of recording 4K/30 in CinemaDNG RAW at an average bitrate of 1.7Gbps. The Zenmuse X5S is a major upgrade over this camera. New features include:  
  
a. A new quick-release connector to connect the Inspire 2 and the Zenmuse X5S. As it has been separated from its image processing system, the camera sensor is protected from magnetic interference and thermal noise.  
  
b. An uprated 20.8-megapixel sensor has a better signal to noise ratio and improved color sensitivity. Working with advanced oversampling technology, it creates clear, low noise images.  
  
c. When used with the CineCore 2.0 image processing system on the Inspire 2, the Zenmuse X5S is able to record 4k/30 oversampling video in both H.264 and H.265 codecs, with a maximum bitrate of 100Mbps. When DJI Inspire 2 License Keys are used and the DJI CINESSD is equipped, the Zenmuse X5S can record 5.2K/30 or 4K/60 video in CinemaDNG, 5.2K/30 in Apple ProRes 422 HQ, and 4K/30 in Apple ProRes 4444 XQ video (no alpha). When shooting at 5.2K, the Zenmuse X5S has a maximum bitrate of 4.2Gbps.

[3.Can I use the Zenmuse X5S separately as a stand-alone camera?](https://www.dji.com/zenmuse-x5s/info" \l "0-2)

No. The Zenmuse X5S must be used with the Inspire 2. It will be supported on additional products in future.

[4.How is Apple ProRes video recorded by the Zenmuse X5S different from ProRes recorded using the Zenmuse X5R?](https://www.dji.com/zenmuse-x5s/info" \l "0-3)

The Zenmuse X5R records CinemaDNG video, which then needs processing in DJI CINELIGHT to create Apple ProRes video. Through the new CineCore 2.0 Image Processing System on the Inspire 2, the Zenmuse X5S can directly export Apple ProRes video when using an appropriate DJI Inspire 2 License Key and when equipped with the DJI CINESSD.

[5.What storage devices does the Zenmuse X5S support?](https://www.dji.com/zenmuse-x5s/info" \l "0-4)

Micro SD card and DJI CINESSD. A Micro SD card is required for image capture, while the CINESSD is necessary only for high-end productions requiring specific video formats.

[6.How are the X5S camera, Inspire 2, DJI Inspire 2 License Key and CINESSD related?](https://www.dji.com/zenmuse-x5s/info" \l "0-5)

The Zenmuse X5S is a professional aerial camera that is compatible with the Inspire 2. Videos recorded by the Zenmuse X5S are processed by the CineCore 2.0 Image Processing System. A DJI Inspire 2 License Key unlocks CinemaDNG and/or Apple ProRes processing capabilities in CineCore 2.0. These files are then saved in the CINESSD. Video quality is dependent on whether the 120G CINESSD or 480G CINESSD is used.

[7.Where are Zenmuse X5S images stored?](https://www.dji.com/zenmuse-x5s/info" \l "0-6)

JPEG and DNG pictures (not including RAW images captured in Burst Mode) and videos recorded in H.264 and H.265 codecs are saved to the Micro SD card, while RAW images captured in Burst Mode are stored in the DJI CINESSD. After unlocking using a DJI Inspire 2 License Key, CinemaDNG and Apple ProRes videos will be saved in the DJI CINESSD.

[8.How does the Zenmuse X5S record CinemaDNG and Apple ProRes video?](https://www.dji.com/zenmuse-x5s/info" \l "0-7)

CinemaDNG and Apple ProRes videos are only available when these formats are unlocked using a DJI Inspire 2 License Key and the Zenmuse X5S is used with a DJI CINESSD. Video quality is dependent on whether the 120G CINESSD or 480G CINESSD is used. The Zenmuse X5S can also generate H.264 or H.265 video while recording in CinemaDNG or Apple ProRes.

[9.How is the H.265 codec superior to H.264?](https://www.dji.com/zenmuse-x5s/info" \l "0-8)

H.265 is the new video compression standard that follows H.264. H.265 has 50% more information, better compression performance and a lower bandwidth utilization ratio. Please be aware that you will need an upgraded device to play or decode H.265 video.

[10.What will the focal length of lenses be when used with the Zenmuse X5S?](https://www.dji.com/zenmuse-x5s/info" \l "0-9)

Equivalent focal length will be approximately double the lens’ actual focal length.