

Which Zoom Lens Cover Which Sensor Size?

10/27/2022

This chart shows lens coverage for specific camera sensor formats. It only shows lenses which completely cover the sensor with no vignetting. Illumination falloff is acceptable if it is part of the lens design. If your chosen camera/shooting format is not shown, find and use the image circle Ø that is closest to your format: https://www.omnicalculator.com/math/diagonal-of-rectangle

Red Monstro 8K 40.96mm x 21.60mm (46.31 mm Ø) 8192 x 4320 Pixels

Table listing lens models (e.g., Angenieux Ultra 12x FF/VV 36 - 435mm T4.2) and their corresponding sensor coverage metrics (cf 5', cf 6', cf 3' 4", cf 1' 6", cf 2' 8", cf 5', cf 8.8lbs, cf 114mm).

Arri Mini LF Open Gate 36.70mm x 25.54mm (44.71 mm Ø) 4448 x 3096 Pixels

Table listing lens models and their corresponding sensor coverage metrics for Arri Mini LF Open Gate.

Red Monstro 8KHD 38.40mm x 21.60mm (44.10 mm Ø) 7680 x 4320 Pixels

Table listing lens models and their corresponding sensor coverage metrics for Red Monstro 8KHD.

Red Monstro 7.5K Sony Venice 2.8K 3:2 Sony Venice 6K 3:2 Canon C700, C500 FF 17:9 38.40mm x 20.40mm (43.50 mm Ø) 35.90mm x 24.00mm (43.18 mm Ø) 36.20mm x 24.10mm (43.50 mm Ø) 38.10mm x 20.10mm (43.10 mm Ø) 7680 x 4080 Pixels 8640 x 5760 Pixels 6048 x 4032 Pixels 5592 x 3140 Pixels

Table listing lens models and their corresponding sensor coverage metrics for Red Monstro 7.5K and Sony Venice series.

Red Monstro 7.5KHD Arri Mini LF 4.3K 16:9 - UHD 36.48mm x 20.52mm (41.86 mm Ø) 35.64mm x 20.05mm (40.89 mm Ø) 7296 x 4104 Pixels 4320 x 2430 Pixels

Table listing lens models and their corresponding sensor coverage metrics for Red Monstro 7.5KHD and Arri Mini LF 4.3K.

Red Monstro 7K Sony Venice FF 6K 17:9 Sony FX9 FF 4K 17:9 35.80mm x 18.90mm (40.50 mm Ø) 35.90mm x 19.00mm (40.57 mm Ø) 35.70mm x 18.80mm (40.35 mm Ø) 7168 x 3780 Pixels 6048 x 3190 Pixels 3840 x 2160 Pixels

Table listing lens models and their corresponding sensor coverage metrics for Red Monstro 7K and Sony Venice/FX9 series.

Sony Venice 5.7K 16:9 Sony Venice 2.8.2K 17:9 33.7 mm x 18.9 mm (38.64 mm Ø) 34.1 mm x 18.00 mm (38.56 mm Ø) 5670 x 3190 Pixels 8192 x 4320 Pixels

Table listing lens models and their corresponding sensor coverage metrics for Sony Venice 5.7K and 2.8.2K.

Red Monstro 6K Red Dragon 6K Arri Alexa 35 4.6K Open Gate Red Helium 8K 30.70mm x 16.20mm (34.70mm Ø) 30.70mm x 15.80mm (34.50mm Ø) 27.99mm x 19.22mm (33.96mm Ø) 29.90mm x 15.77mm (33.80mm Ø) 6144 x 3240 Pixels 6144 x 3160 Pixels 4608 x 3164 Pixels 8192 x 4320 Pixels

Table listing lens models and their corresponding sensor coverage metrics for Red Monstro 6K, Red Dragon 6K, Arri Alexa 35, and Red Helium 8K.

Arri Mini Open Gate Red Monstro 6KHD 28.17mm x 18.13mm (33.50mm Ø) 28.80mm x 16.20mm (33.00mm Ø) 3414 x 2198 Pixels 5760 x 3240 Pixels

Table listing lens models and their corresponding sensor coverage metrics for Arri Mini Open Gate and Red Monstro 6KHD.

Sony FX9 FF Crop 5K 17:9 Canon C700 S35 Arri Alexa 35 4.6K 16:9 29.73mm x 15.66mm (33.55mm Ø) * 29.90mm x 15.20mm (32.60mm Ø) 27.99mm x 15.75mm (32.12mm Ø) 5008 x 2640 Pixels 4096 x 2160 Pixels 4096 x 2592 Pixels (Arri Raw)

Table listing lens models and their corresponding sensor coverage metrics for Sony FX9, Canon C700, and Arri Alexa 35.

Red Komodo 6K Arri Mini LF 3.2K S35 16:9 Arri Mini 4K UHD Phantom Flex 4K UHD Canon C300 MkIII 4K Canon C70 4K 27.03mm x 14.25mm (30.55mm Ø) 26.40mm x 14.85mm (29.99mm Ø) 25.90mm x 14.85mm (29.90mm Ø) 26.20mm x 13.80mm (29.61mm Ø) 26.20mm x 13.80mm (29.61mm Ø) 3200 x 1800 Pixels 6144 x 3160 Pixels 3840 x 2160 Pixels 4096 x 2160 Pixels 4096 x 2160 Pixels

Table listing lens models and their corresponding sensor coverage metrics for Red Komodo 6K, Arri Mini LF 3.2K, Arri Mini 4K, Phantom Flex 4K, Canon C300, and Canon C70.

Red Monstro 5KHD Arri Alexa 35 4K 16:9 Venice S35 4K 17:9 Arri Mini HD 16:9 Sony Venice 2.5K 5.8K 17:9 Sony FX9 S35 4K 17:9 Black Magic BMPCC 6K 24.00mm x 13.50mm (27.54mm Ø) 24.88mm x 14.00mm (28.55mm Ø) 23.70mm x 12.80mm (27.46mm Ø) 23.76mm x 13.37mm (27.26mm Ø) 24.10mm x 12.70mm (27.24mm Ø) 24.00mm x 12.70mm (27.15 mm Ø) 23.10mm x 12.99mm (26.50 mm Ø) 4800 x 2700 Pixels 4096 x 2304 Pixels 4096 x 2160 Pixels 5920 x 1080 Pixels 3840 x 2160 Pixels 5742 x 2160 Pixels 6144x 3456 Pixels

Table listing lens models and their corresponding sensor coverage metrics for Red Monstro 5KHD, Arri Alexa 35, Venice S35, Arri Mini HD, Sony Venice, Sony FX9, and Black Magic BMPCC 6K.