

EPIC-W TECHNICAL SPECIFICATIONS

EPIC-W TECHNICAL SPECIFICATIONS

SPECIFICATION	DESCRIPTION
Sensor Type	HELIUM 35.4 Megapixel CMOS
Effective Pixels	8192 x 4320
Sensor Size	29.90 mm x 15.77 mm (Diagonal: 33.80 mm)
Dynamic Range	16.5+ stops
Signal-to-Noise Ratio	80 dB
Max Data Rates	Up to 275 MB/s using RED MINI-MAG (480GB, 512GB, 960GB & 1TB) Up to 225 MB/s using RED MINI-MAG (120GB & 240GB)
Max Frame Rates ¹	30 fps at 8K Full Format (8192 x 4320), 30 fps at 8K 2.4:1 (8192 x 3456) 30 fps at 7K Full Format (7168 x 3780), 40 fps at 7K 2.4:1 (7168 x 3024) 75 fps at 6K Full Format (6144 x 3240), 100 fps at 6K 2.4:1 (6144 x 2592) 96 fps at 5K Full Format (5120 x 2700), 120 fps at 5K 2.4:1 (5120 x 2160) 120 fps at 4K Full Format (4096 x 2160), 150 fps at 4K 2.4:1 (4096 x 1728) 150 fps at 3K Full Format (3072 x 1620), 200 fps at 3K 2.4:1 (3072 x 1296) 240 fps at 2K Full Format (2048 x 1080), 300 fps at 2K 2.4:1 (2048 x 864)
Playback Frame Rates (Project Time Base)	23.98, 24, 25, 29.97, 47.95, 48, 50, 59.94, 60 fps, all resolutions
Best Available REDCODE Settings ¹	6:1 REDCODE for 8K Full Format (8192 x 4320) at 24 fps 7:1 REDCODE for 8K Full Format (8192 x 4320) at 30 fps 2:1 REDCODE for 4K Full Format (4096 x 2160) at 24 fps 4:1 REDCODE for 4K Full Format (4096 x 2160) at 60 fps

EPIC-W TECHNICAL SPECIFICATIONS

SPECIFICATION	DESCRIPTION
REDCODE RAW Acquisition Formats	<p>8K Full Format (8192 x 4320), 2:1, 2.4:1, 16:9, 14:9, 8:9, 3:2, 6:5, 4:1, 8:1, and Ana 2x, 1.3x, 1.25x</p> <p>7K Full Format (7168 x 3780), 2:1, 2.4:1, 16:9, 8:9, 6:5, 4:1, 8:1, and Ana 2x, 1.3x</p> <p>6K Full Format (6144 x 3240), 2:1, 2.4:1, 16:9, 8:9, 3:2, 4:3, 6:5, 4:1, 8:1, and Ana 2x, 1.3x, 1.25x</p> <p>5K Full Format (5120 x 2700), 2:1, 2.4:1, 16:9, 8:9, 6:5, 4:1, 8:1, and Ana 2x, 1.3x</p> <p>4K Full Format (4096 x 2160), 2:1, 2.4:1, 16:9, 8:9, 3:2, 4:3, 5:4, 6:5, 4:1, 8:1, 1:1, and Ana 2x, 1.3x</p> <p>3K Full Format (3072 x 1620), 2:1, 2.4:1, 16:9, 3:2, 4:3, 5:4, 6:5, 4:1, 8:1, and Ana 2x, 1.3x</p> <p>2K Full Format (2048 x 1080), 2:1, 2.4:1, 16:9, 3:2, 4:3, 5:4, 6:5, 4:1, 8:1, and Ana 2x, 1.3x</p>
Apple ProRes	<p>ProRes 422 HQ, ProRes 422 and ProRes 422 LT at 4K (4096 × 2160) up to 29.97 fps</p> <p>ProRes 4444 XQ and ProRes 4444 at 2K (2048 × 1080) up to 120 fps</p> <p>ProRes 422 HQ, ProRes 422 and ProRes 422 LT at 2K (2048 × 1080) up to 120 fps</p>
Avid Codecs	<p>DNxHR HQX at 4K (4096 × 2160) 12-bit up to 29.97 fps</p> <p>DNxHR HQ, SQ and LB at 4K (4096 × 2160) 8-bit up to 29.97 fps</p> <p>DNxHR 444 at 2K (2048 × 1080) 12-bit up to 120 fps</p> <p>DNxHD 444 and HQX (1920 × 1080) 10-bit up to 120 fps</p> <p>DNxHD HQ, SQ and LB (1920 × 1080) 8-bit up to 120 fps</p>
Construction	Magnesium and Aluminum Alloy
Weight	3.35 lbs (BRAIN with Integrated Media Bay)
Operating Temperature	0° C to 40° C (32° F to 104° F)
Storage Temperature	-20° C to 50° C (-4° F to 122° F)
Relative Humidity	0% to 85% non-condensing
Color Management	<p>Supports 33×33×33, 32×32×32, 26×26×26, and 17×17×17 3D LUTs</p> <p>Variable number of 3D LUT outputs with DSMC2 expander module</p> <p>User programmable shaper 1D LUTs</p> <p>Tetrahedral interpolation, 16-bit processing</p>

EPIC-W TECHNICAL SPECIFICATIONS

SPECIFICATION	DESCRIPTION
Audio	Integrated dual channel digital stereo microphones, uncompressed, 24-bit 48 kHz Optional 2 additional channels with DSMC2 expander module, uncompressed, 24-bit 48 kHz
Remote Control	Integrated R.C.P. WiFi antenna Ethernet, RS232, and GPI Trigger with DSMC2 expander module
Monitor Outputs	3G-SDI (HD-SDI) and HDMI with DSMC2 expander module 1080p RGB or 4:2:2, 720p RGB or 4:2:2 480p RGB or 4:2:2 (HDMI only) SMPTE Timecode, HANC Metadata, 24-bit 48 kHz Audio
Monitor Options	DSMC2 RED Touch 4.7" LCD, DSMC2 RED Touch 7.0" LCD and DSMC2 RED EVF (OLED) with cable-free connection. RED Touch 9.0" LCD, RED Touch 7.0" LCD, RED Touch 5.0" LCD, RED PRO 7" LCD, BOMB EVF (OLED) and BOMB EVF (LCOS) compatible with DSMC2 LEMO Adaptor A and LCD/EVF cable.
REDCINE-X PRO Delivery Formats	4K: DPX, TIFF, OpenEXR (.RED via REncode plugin) 2K: DPX, TIFF, OpenEXR (.RED via REncode plugin) 1080p RGB 4:2:2, 720p 4:2:2 : QuickTime, JPEG, Avid AAF, MXF 1080p 4:2:0, 720p 4:2:0 : H.264, .MP4
Video Editing Software Compatibility ²	Adobe Premiere Pro, Avid Media Composer, DaVinci Resolve, Edius Pro, Final Cut Pro, Vegas Pro

1. REDCODE values and max frame rates may vary based on selected acquisition format, aspect ratio, project time base, Lookaround setting, and SSD. For more information, see the [DSMC Media Operation Guide](#).

2. Third-party non-linear editing (NLE) applications may have limited compatibility with R3D files.