

TECHNICAL SPECIFICATIONS

RED RANGER GEMINI



SENSOR TYPE	GEMINI 15.4 Megapixel Dual Sensitivity CMOS
EFFECTIVE PIXELS	5120 × 3000
SENSOR SIZE	30.72 mm × 18 mm (Diagonal: 35.61 mm)
DYNAMIC RANGE	16.5+ stops
MAX DATA RATES	Up to 300 MB/s using RED MINI-MAG (480GB & 960GB) Up to 225 MB/s using RED MINI-MAG (120GB & 240GB)
MAX FRAME RATES	75 fps at 5K Full Height 1.7:1 (5120 × 3000) 96 fps at 5K Full Format (5120 × 2700), 120 fps at 5K 2.4:1 (5120 × 2160) 120 fps at 4K Full Format (4096 × 2160), 150 fps at 4K 2.4:1 (4096 × 1728) 150 fps at 3K Full Format (3072 × 1620), 200 fps at 3K 2.4:1 (3072 × 1296) 240 fps at 2K Full Format (2048 × 1080), 300 fps at 2K 2.4:1 (2048 × 864)
PLAYBACK FRAME RATES (PROJECT TIMEBASE)	23.98, 24, 25, 29.97, 47.95, 48, 50, 59.94, 60 fps, all resolutions
REDCODE SETTINGS RANGE FROM 2:1 UP TO 22:1	3:1 REDCODE at 5K Full Height (5120 × 3000) and 24 fps 6:1 REDCODE at 5K Full Height (5120 × 3000) and 60 fps 2:1 REDCODE at 5K Full Format (5120 × 2700) and 24 fps 8:1 REDCODE at 5K Full Format (5120 × 2700) and 96 fps 2:1 REDCODE at 4K Full Format (4096 × 2160) and 24 fps 6:1 REDCODE at 4K Full Format (4096 × 2160) and 120 fps
REDCODE RAW ACQUISITION FORMATS	5K Full Height 1.7:1 (5120 × 3000), 5K Full Height 6:5 (3600 × 3000), and Ana 2x, 1.3x 5K Full Format (5120 × 2700), 2:1, 2.4:1, 16:9, 6:5, 4:1, 8:1, and Ana 2x, 1.3x 4K Full Format (4096 × 2160), 2:1, 2.4:1, 16:9, 3:2, 4:3, 5:4, 6:5, 4:1, 8:1, and Ana 2x, 1.3x 3K Full Format (3072 × 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 2K Full Format (2048 × 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



APPLE PRORES	ProRes 422 HQ, ProRes 422 and ProRes 422 LT at 4K (4096 × 2160) up to 30 fps ProRes 4444 XQ and ProRes 4444 at 2K (2048 × 1080) up to 120 fps ProRes 422 HQ, ProRes 422 and ProRes 422 LT at 2K (2048 × 1080) up to 120 fps
AVID CODECS	DNxHR HQX at 4K (4096 × 2160) 12-bit up to 30 fps DNxHR HQ, SQ and LB at 4K (4096 × 2160) 8-bit up to 30 fps DNxHR 444 at 2K (2048 × 1080) 12-bit up to 120 fps DNxHD 444 and HQX (1920 × 1080) 10-bit up to 120 fps DNxHD HQ, SQ and LB (1920 × 1080) 8-bit up to 120 fps
CONSTRUCTION	Aluminum Alloy
WEIGHT	7.30 lbs (with Integrated Media Bay, PL Mount, and Gold Mount) 7.50 lbs (with Integrated Media Bay, PL Mount, and V-Lock)
DC IN POWER INPUT	11.5 V DC to 32 V DC
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	Supports 33×33×33, 32×32×32, 26×26×26, and 17×17×17 3D LUTs Variable number of 3D LUT outputs User programmable shaper 1D LUTs Tetrahedral interpolation, 16-bit processing
AUDIO	Integrated dual channel digital stereo microphones, uncompressed, 24-bit 48 kHz Integrated dual channel 5-pin XLR with preamplifiers, uncompressed, 24-bit 48 kHz
REMOTE CONTROL	External R.C.P. WiFi antenna with SMA connector Ethernet, RS232, and GPI Trigger
MONITOR OUTPUTS	3G-SDI (HD-SDI) and MON-1 1080p RGB or 4:2:2, 720p RGB or 4:2:2 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, DSMC2® Touch 7.0" Ultra-Brite LCD, BOMB EVF® (OLED) and BOMB EVF® (LCOS) compatible with DSMC2® LCD/EVF Adaptor A or DSMC2® LCD/EVF Adaptor D, and LCD/EVF cable.
REDCINE-X PRO DELIVERY FORMATS	4K: DPX, TIFF, OpenEXR (.RED via RREncode plugin) 2K: DPX, TIFF, OpenEXR (.RED via RREncode 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**

Adobe Premiere Pro, AVID Media Composer,
DaVinci Resolve, Edius Pro, Final Cut Pro, Vegas Pro

* Tech specs reflect both current and projected information. Everything is subject to change.