

TECHNICAL SPECIFICATIONS

Technical specifications reflect both current and projected information. Everything is subject to change.

V-RAPTOR® XE		
ITEM	DETAILS	
Sensor Type	V-RAPTOR® XE 8K VV 35.4 Megapixel Global Shutter CMOS	
Effective Pixels	8192 x 4320	
Sensor Size	40.96 mm x 21.60 mm (Diagonal: 46.31 mm)	
Dynamic Range	17+ stops	
Mount Type	Integrated locking Nikon Z mount with electronic communication Supports /i PL lenses with RED PL Adapters Support for other adapters based on the Nikon Z mount	
Max Data Rates	Up to 800 MB/s using RED branded or other qualified CFexpress media cards ¹	
REDCODE® RAW	W	60 fps at 8K 17:9 (8192 x 4320), 75 fps at 8K 2.4:1 70 fps at 7K 17:9 (7168 x 3780), 87 fps at 7K 2.4:1
Maximum	Super 35	80 fps at 6K 17:9 (6144 x 3240), 100 fps at 6K 2.4:1
Frame		96 fps at 5K 17:9 (5120 x 2700), 120 fps at 5K 2.4:1
Rates		120 fps at 4K 17-9 (4096 x 2160), 150 fps at 4K 2.4:1
	Super 16	160 fps at 3K 17-9 (3072 x 1620), 200 fps at 3K 2.4:1 240 fps at 2K 17-9 (2048 x 1080), 300 fps at 2K 2.4:1
Playback Frame Rates (Project Time Base)	23.98, 24, 25, 29.97, 30, 50, 59.94, 60 fps, at all resolutions	
Best Available REDCODE® Settings	REDCODE HQ, MQ, LQ, and ELQ at 8K 17:9 up to 60 fps REDCODE HQ, MQ, LQ, and ELQ at 6K 17:9 up to 96 fps REDCODE HQ, MQ, LQ, and ELQ at 4K 17:9 up to 240 fps REDCODE HQ, MQ, LQ, and ELQ at 2K 17:9 up to 480 fps	
REDCODE RAW Acquisition Formats	8K 17:9, 2:1, 2.4:1, 16:9, 1:1 and Anamorphic 2x, 1.8x, 1.6x, 1.5x, 1.3x, 1.25x 7K 17:9, 2:1, 2.4:1, 16:9, 1:1 and Anamorphic 2x, 1.8x, 1.6x 6K 17:9, 2:1, 2.4:1, 16:9, 1:1 and Anamorphic 1.5x, 1.3x, 1.25x 5K 17:9, 2:1, 2.4:1, 16:9, 1:1 4K 17:9, 2:1, 2.4:1, 16:9, 1:1 3K 17:9, 2:1, 2.4:1, 16:9, 1:1 2K 17:9, 2:1, 2.4:1, 16:9, 1:1	
Apple® ProRes	Dedicated recording in ProRes 4444 XQ, ProRes 4444, ProRes 422 HQ, ProRes 422, and ProRes 422 LT at resolutions up to 4K (4096x2160) 120P Proxy recording available up to ProRes 422 HQ in 2K (2048 x 1080) up to 60P	
Construction	Aluminum Alloy	
Dimensions	Length: 5.9 inches, Width: 4.5 inches, Height: 4.3 inches (149.63 mm x 115.5 mm x 108 mm)	
Weight	4.03 lb without the body cap and the CFexpress card	
Media Type	CFexpress Type B	
Battery Type	Integrated V-Lock battery interface optimized for the Micro V-Lock batteries ¹	
DC Power	+11 to +17 volts DC using the integrated 6-Pin DC-IN port	
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	Image Processing Pipeline 2 (IPP2) Supports 33x33x33 3D LUTs Supports import and adjustment of CDLs	
Audio	Integrated dual channel digital mono microphones, uncompressed, 24-bit 48 kHz Integrated dual channel (mic/line/+48V) input through 5-Pin 00B Audio Port, uncompressed, 24-bit 48 kHz 3.5mm stereo headphone port	
Autofocus	Phase detect with Face Detection	
IP Connected	Dual band Wi-Fi (2.4 GHz or 5 GHz) for wireless camera control, live preview, and direct Camera to Cloud workflow using FrameIO or Amazon S3 Wired control over USB-C or Ethernet (compatible USB-C to Ethernet adapter ¹ required) for remote camera control, live preview, direct Camera to Cloud workflow and high speed remote media offload Compatible with the optional RED Connect license for live 8K R3D video over USB-C to Ethernet adapter	
Monitor Outputs	Proprietary Top Accessory Port for Monitoring and Control Integrated dual 12G-SDI with 6G-SDI, 3G-SDI, and 1.5G-SDI modes 12G-SDI: Up to 4096 × 2160 4:2:2 for 60p 6G-SDI: Up to 4096 × 2160 4:2:2 for 30p, 25p, and 24p 3G-SDI: Up to 2048 × 1080 4:2:2 for 60p 1.5G-SDI: Up to 2048 × 1080 4:2:2 for 30p, 25p, and 24p SMPTE Timecode, HANC metadata, and 24-bit 48 kHz audio	
Monitor Options	DSMC3™ RED® Touch 7.0" LCD RED® Compact EVF with DSMC3™ Adapter A Wireless 1080p live preview video feed using 2.4Ghz/5Ghz Wi-Fi for framing Integrated 2.4" LCD for camera control (no preview video)	
Additional I/O	Tri-Level Genlock Input using 9-Pin EXT LTC Timecode Input using 9-Pin EXT RS-232 CTRL (with RCP2) using 9-Pin EXT	
SOFTWARE		
RED Control and RED Control Pro	Access full camera controls and live preview from iOS or Android devices. Pro App: Operate one or multiple cameras over an IP connection to synchronize settings, manage media files locally or upload directly to FrameIO, develop custom looks with advanced CDL and LUT controls, and more. Ideal for control of multi-camera arrays, multi-cam shoots, and live events, all from one central location. Standard app available from the Apple App Store and Google Play Store. RED Control Pro available from Apple App store only and requires additional purchase. RED Control works wirelessly or wired using USB-C	

1. For more information on accessories, refer to [RED.com/third-party-accessories](https://red.com/third-party-accessories)