ChemiDoc XRS+ Technical Specifications

Applications	
Chemiluminescence	Yes
Fluorescence*	Yes
Colorimetry	Yes
Gel documentation	Yes
Hardware Specifications	
Maximum sample size	Length: 28 cmWidth: 36 cm
Maximum image area	Length: 26 cmWidth: 35 cm
Excitation source	 Trans-UV and epi-white are standard (302 nm included, with 365 nm available as an option) Optional trans white, self-powered or conversion screen Optional XcitaBlue™ UV/blue conversion screen
Illumination control	 5 modes: Trans-UV (standard) Epi-white (standard) No illumination for chemiluminescence (standard) Trans white (optional) XcitaBlue (optional)
Detector	Supercooled CCD
Pixel size	6.45 x 6.45 (H x V in microns)
Cooling system	Peltier cooled
Camera cooling temperature	-30°C controlled
Filter selector	3 positions:2 for filters1 without filter (for chemiluminescence)

Emission filters	1 included (standard)
	3 optional
Dynamic range	>4.0 orders of magnitude
Pixel density (gray levels)	65,535
Dynamic flat fielding	Application-specific, for all applications
Instrument size	Length: 36 cm
	 Width: 60 cm
	Height: 96 cm
Instrument weight	32 kg
Operating Ranges	
Operating voltage	110/115/230 V AC nominal
Operating temperature	10–28°C (21°C recommended)
Operating humidity	<70% noncondensing
Automation Capabilities	
Workflow automated selection	Application driven, user selected or recalled by a protocol
Workflow automated execution	Controlled by a protocol via application-specific setup for image area, illumination source, filter, analysis, and reporting
Workflow reproducibility	100% repeatability via recallable protocols; from image capture to quantitative analysis and reports
Autofocus	Precalibrated focus for any zoom setting or sample height
Image flat fielding	Dynamic; precalibrated and optimized per application
Autoexposure	2 user-defined modes (intense or faint bands)

* When acquiring images from SYBR® Safe DNA applications, Bio-Rad highly recommends that you use the optional XcitaBlue Conversion Screen kit (catalog #1708182), which enables you to visualize DNA samples and protects them against UV damage.