Technical Specifications

Applications	
Chemiluminescence	Yes
Fluorescence*	Yes
Colorimetry	Yes
Gel documentation	Yes
Hardware Specifications	
Maximum sample size	■ Length: 28 cm ■ Width: 36 cm
Maximum image area	■ Length: 26 cm ■ Width: 35 cm
Maximum image area for standard, UV-excited gels	■ Length: 25 cm ■ Width: 26 cm
Excitation source	■ Trans-UV and epi-white are standard (302 nm included, with 365 nm available as an option). ■ Optional trans-white conversion screen. ■ Optional XcitaBlue™ UV/blue conversion screen. Blue, green, and red epis.
Detector	Supercooled CCD
Pixel size (H x V in microns)	6.45 x 6.45
Cooling system	Peltier cooled
Camera cooling temperature	–30°C controlled
Filter selector	■ 6-position filter wheel ■ 1 without filter for chemiluminescence
Emission filters	■ 1 included (standard) ■ 3 optional (530, 605, 695)
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	AC 110/115/230 V 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, focus, and reporting
Workflow reproducibility	100% repeatability via recallable protocols; from image capture to quantitative analysis and reports
Autofocus	Precalibrated focus for any zoom setting
Image flat fielding	Dynamic; precalibrated and optimized per application
Autoexposure	2 user-defined modes (intense or faint bands

* Using the optional XcitaBlue kit (catalog # 1708182) is highly recommended if performing preparative DNA applications with blue excitable stains. The UV to blue conversion screen allows you to visualize DNA samples while protecting against UV damage.

Workflow

Following are the basic steps for acquiring, analyzing, and archiving an image using the ChemiDoc MP imaging system and Image Lab software:

1. Select a protocol or customize a new one.
2. Position the gel or blot to be imaged.
3. Run your selected protocol.