

Technical Specifications

Supported Applications

Chemiluminescence Yes

Fluorescence Yes

Important: Using the optional Blue Tray (cat. #1708373) is highly recommended for SYBR® Safe DNA applications because the conversion to blue light makes DNA samples visible while protecting them from UV damage.

Colorimetry Yes

Gel documentation Yes

Hardware Specifications

Touch screen functionality

- Multitouch capable
- Display resolution 1024 x 768 pixels
- 12.1" (30.73 cm) display

Onboard computer system

- 4 GB RAM
- 60 GB disk space
- 4 USB ports

Sample thickness Maximum thickness of 5 mm is supported

Maximum image area

- Length: 16.8 cm
- Width: 21 cm

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|--------------------------------|---|
| Excitation source | <ul style="list-style-type: none"> ■ Trans-UV 302 nm (standard) ■ Epi-white (standard) ■ Trans-white (optional) ■ Trans-blue (optional) |
| Detector | Deeply cooled CCD |
| Pixel size | 4.54 x 4.54 μm |
| Cooling system | Thermoelectric, setpoint -25°C |
| Filter selector | Automated |
| Emission filters | 1 included (535–645 nm) |
| Dynamic range | >4.0 orders of magnitude |
| Pixel density (gray levels) | 65,535 |
| Instrument size | <ul style="list-style-type: none"> ■ Length: 63 cm (24") ■ Width: 50 cm (20") ■ Height: 53 cm (21") |
| Instrument weight | 32 kg (78 lb) |
| Operating Ranges | |
| Operating voltage | 100–240 VAC, 50–60 Hz |
| Operating temperature | 10–28 $^{\circ}\text{C}$ |
| Operating humidity | 10–80% relative humidity (noncondensing) |
| Automation Capabilities | |
| Workflow automated selection | Application-driven, tray-based imaging |

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|---------------------|---|
| Autofocus | Precalibrated focus for any zoom setting |
| Image flat fielding | Dynamic; precalibrated and optimized per application |
| Autoexposure | 2 user-defined modes (rapid or optimal) for chemiluminescent applications 2 user-defined modes (intense or faint bands) for fluorescent and visible applications |

Environmental Requirements

The ChemiDoc Touch imager requires a space 52 x 56 x 62 cm (W x H x D) and a clearance of at least 8 cm from the back for instrument ventilation and for connecting or disconnecting the AC power cord. Place the imager on a sturdy and level laboratory bench or table away from excessive heat and moisture. The imager's operating temperature range is 10–28°C. The imager contains a universal power supply that supports a voltage range of 100–240 VAC.



WARNING! Transilluminators are powerful sources of UV radiation, which can cause serious damage to unprotected eyes and skin. The accessory UV shield (cat. #1708375) provides UV protection. However, this shield does not guarantee complete protection nor does it provide protection to others in the area around the imager. Before performing band excision, the user and anyone near the imager must put on protective gear including eyeglasses (laboratory glasses provide adequate protection), a face shield, lab coat, and gloves.