MQ Chemiluminescence Imaging System

Cat No: CIS-M-20M

MOLEQULE-ON®

Description

MQ Chemiluminescence Imaging System uses chemiluminescence technology for imaging and equipped with a high-sensitivity-cooled camera with a resolution of 20 million pixels. It enables fast, accurate, and high-throughput detection and imaging of samples without the need for additional light sources. It finds extensive applications in life sciences, pharmaceuticals, environmental protection, and more.

Features

- Original AI algorithm, capable of quickly calculating the optimal exposure time;
- Deep cooling, high sensitivity, high-resolution camera, capable of detecting weak signals, greatly reducing image noise;
- Standard analysis software, capable of automatically identifying and analyzing lanes;
- 10.4-inch touchscreen computer, also compatible with external computers, one-button control switch;
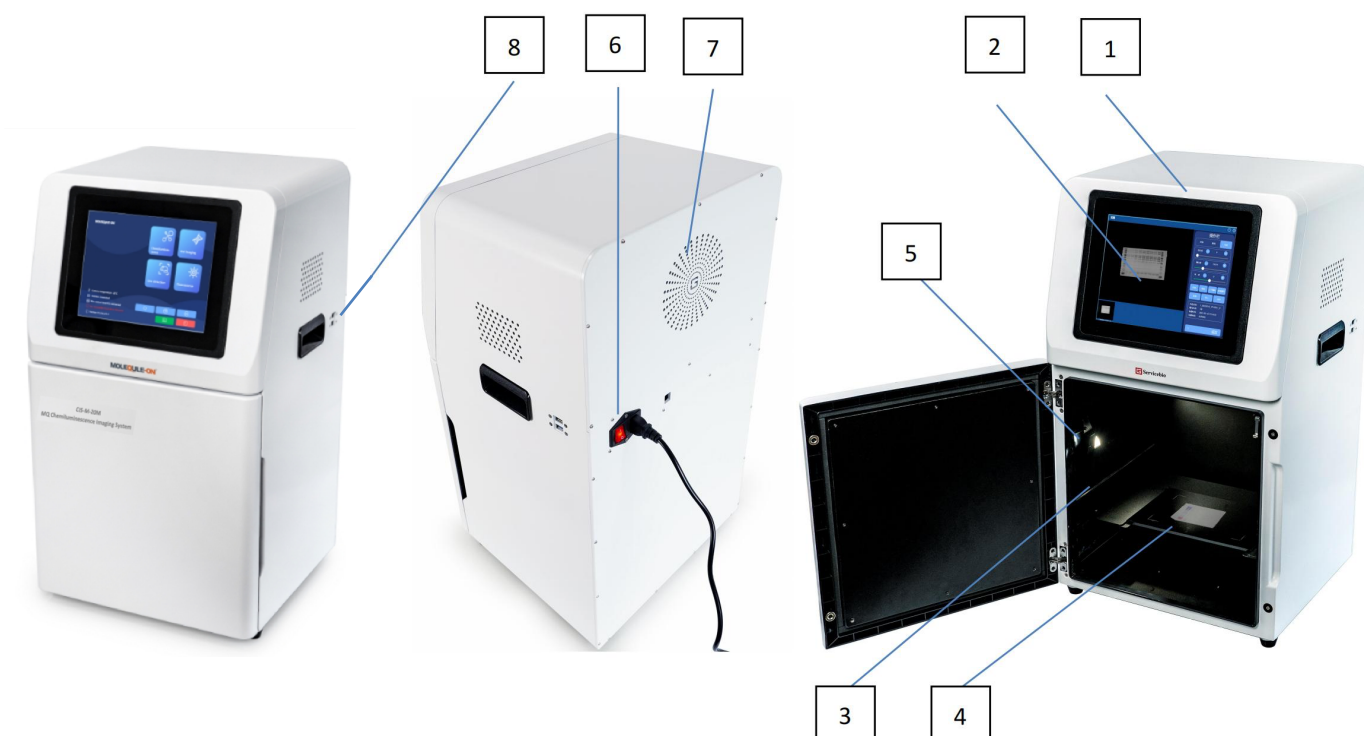
Advantages over competing products

CIS-M-20M has high resolution (20 million pixels), high sensitivity and AI algorithm (the intuitive result is under automatic exposure mode, the best exposure time can be calculated and the best exposure effect can be obtained).
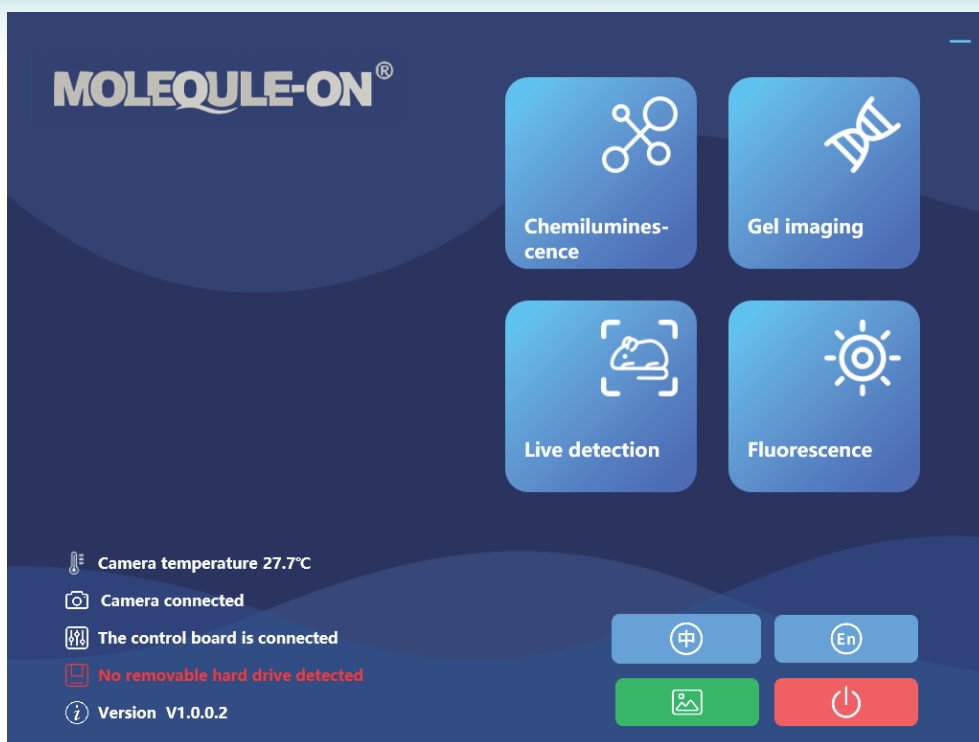
Advantages compared with traditional darkroom exposure

- Easy to operate, no need for developing and fixing etc. reagents, photosensitive film and darkroom.
- It is non-toxic and harmless, and does not pollute the environment (while developing and fixing are toxic to certain extent, and the film has heavy metal contamination.
- Easy to operate (traditional darkroom exposure has higher requirements for experimenters, many steps, and troublesome).
- The result is electronic image for long-term storage (traditional film is prone to be yellow after a long time).
- The marker image can be directly synthesized on the image, and the result is more reliable.

Functional Description

1. Internal camera lens assembly, which is the core component of the imaging system.
2. 10.4-inch industrial computer with user software operating interface.
3. High-quality light-shielded imaging dark box.
4. Sample tray, removable, used for placing samples to be photographed.
5. LED white light source for illumination.
6. Power socket and switch.
7. Cooling device.
8. External USB 3.0 interface.

Specifications

Product Model	CIS-M-20M
Size	345mmx310mmx757mm
Camera	Deep-cooled high-sensitivity camera, integrated with an efficient cooling module and anti-fogging structure, ensures that the sensor surface does not fog at low temperatures. This unique technology greatly reduces image noise and ensures the acquisition of high-quality images. The temperature of the camera sensor can be controlled through software to maximize the photoelectric conversion quantum efficiency with minimal video or image noise. It supports software-triggered operation mode, allowing for single or multiple image capture with a single trigger. It also supports long exposure mode, with a maximum duration of up to 1 hour
Refrigeration Temperature	Relative ambient temperature:-40°C
Resolution	5440x3648, 20 million pixels
Pixel Size	2.4umx2.4um
Quantum Efficiency	≥87%
Shooting Area	230mmx154mm
Light Source	2 LED white light sources, located around the camera obscura
Control Computer	10.4 inch, 1024x768, windows operating system
External Interface	2 pcs of USB 3.0
Operating Voltage	100V-240V
Product Power	100W
Product Net Weight	25kg
Application Range	Chemiluminescent detection of blotting membranes in western, Southern, Northern etc. experiments