

VISQUE® InVivo Smart-LF

Compact Preclinical In Vivo Fluorescent
& Bioluminescent Imaging and Analysis System



VISQUE™ InVivo Smart-LF is an ideal *in vivo* imaging system for bioluminescent and fluorescent imaging as it provides outstanding performance at a reasonable price. The scientific CMOS camera developed solely for **VISQUE™ InVivo Smart-LF** provides high sensitivity with a quantum efficiency up to 94% at 550 nm. Its high sensitivity and low noise capabilities allow you to precisely detect and quantitate very weak signals in bioluminescent and fluorescent imaging. For multispectral fluorescent imaging, the system is equipped with a filter wheel providing four filter slots for GFP, PE, Cy5.5 and ICG fluorescent dyes and five filter slots for customized filters. For precise pharmacokinetic analysis and biodistribution studies, **VISQUE™ InVivo Smart-LF** not only allows real-time imaging of up to 37 frames per second but also provides 10 patented algorithms to analyze kinetics of drug distribution.

VISQUE™ InVivo Smart-LF featuring a compact size also allows you to save valuable laboratory space and to simply operate it with a laptop computer.

VIEWWORKS

www.viewworks.com

Main Features

- Highly sensitive imaging from 300 – 940 nm
- Intelligent image analysis software
- Real-time imaging
- Space-saving compact design
- Reasonable price with outstanding performance

Applications

- Pharmacology and toxicology
- Oncology
- Cardiovascular function
- Photo-stability test of molecules
- Cell therapy test
- Biodistribution of nanoparticle

Specifications

System				
Model	VISQUE™ InVivo Smart-LF			
Imaging Capability	In Vivo Imaging, Bioluminescence, Fluorescence, Real-time Imaging			
Weight and Dimension	About 22 kg (48.5 lb), 40 cm × 40 cm × 57 cm			
Camera				
Sensor	1.2" Backside Illuminated sCMOS			
Cooling	-50°C below ambient temperature, Thermoelectric Peltier Cooling			
Resolution (H × V)	1824 × 1824			
Pixel Size	6.5 μm × 6.5 μm			
Exposure Time	25 ms – 15 min			
Maximum Frame Rate	37 fps			
Digital Output	16 bit			
Binning	1 × 1, 2 × 2, 4 × 4			
Fluorescence				
Light Source	LED			
Fluorescence Filter	Up to 9 (optional)			
Lens				
Control	Motorized Iris / Zoom / Focus			
Zoom (Field of View, H × V)	15 cm × 15 cm (1×) – 5 cm × 5 cm (3×)			
CleVue™ Software				
Image Acquisition Mode	Single-frame, Accumulation, Time-lapse			
Supported File Format	cif (exclusive file format), tif, bmp, jpg, png			
Kinetic Analysis	Dynamics graph and 10 kinds of algorithms for kinetic analysis			
Image Analysis	Autofluorescence removal, Spectral unmixing, Merge of multi-spectral images			
Stage				
Stage Type	Sliding stage, up to 3 mice			
Optional Accessory	Heating Stage, Anesthesia Ventilator Adaptor			
Representative Detectable Fluorophores				
Imaging – Filter	Imaging – Light	Excitation (nm)	Emission (nm)	Fluorescent Dyes
GFP	Blue	390 – 490	500 – 550	GFP / EGFP / Alexa 488 / FITC / QD 525
PE	Green	530 – 570	575 – 640	RFP / DsRed / PE / Alexa 568 / TRITC / QD 585 / QD 605 / QD 625
Cy5.5	Red	620 – 650	690 – 740	Cy5.5 / PKE680 / Alexa 680 / Alexa 700 / QD 705
	HyperRed	630 – 680		
ICG	NIR	740 – 790	810 – 860	ICG / QD 800