



# NEWTON 7.0 VIVO

In Vivo Optical Imaging

## NEWTON 7.0 FT100

- Bioluminescence detection
- Fluorescence detection (400nm > 900nm)
- 3D Optical Tomography (BLI)

## Camera & Optics

- Scientific Grade 16-bit CCD camera
- Grade 0, 400-900nm / 4.8 O.D.
- -90°C Delta Cooling
- 4-stages Peltier Thermoelectric Coolers
- Lens aperture: f/0.70 Motorized
- Image Resolution: 10 megapixels
- Native Resolution: 2160x2160
- Peak Quantum Efficiency: 80%
- FOV Max: 12x12cm (1 to 3 mice or 1 rat)
- FOV Min: 6x6cm (ex-vivo BLI imaging)
- NIST Calibrated Camera

## Fluorescence imaging

- Software controlled lighting
- 8 excitation channels included (tight LED spectrum)  
420nm / 480nm / 520nm / 580nm / 640nm / 680nm / 740nm / 780nm
- 11-positions motorized filter wheel
- 8 narrow bandpass emission filters included  
(less than 35nm bandwidth)  
500nm / 550nm / 600nm / 650nm / 700nm / 750nm / 800nm / 850nm

## Hardware Capabilities

- Intelligent Darkroom concept
- Fully-Automatic System
- Motorized Optical Lens
- Automatic Visible lighting adjustment
- Auto-Focus (Fine Tuning available)
- Auto-Exposure
- Electrical Requirements 220-230Vac, 50-60Hz

## Animal Management

- Heated Mouse Pad (controllable temperature 20 > 40°C)
- Animal Breather for 1 or 3 mice
- Biosthesis Anesthesia Station (optional)
- Medical Grade Flow Meter (optional)
- Induction Box (optional)
- Waste Gas Savenger (optional)
- Charcoal Filters - box of 8 (optional)

## Software features

- All in One License-free Software
- Unlimited number of installations
- 3 Modes Capture (Auto / Manual / Serial)
- Image Analysis included (Quantification Module)
- Image Editing Functions
- Live 3D Dynamic Scan
- Analysis Report Generator (Excel, PDF)