pde-neo®

Near Infrared Fluorescence Imager

HAMAMATSU

PHOTON IS OUR BUSINESS

A new method of near infrared fluorescent imaging

Visualize blood vessels and tissue perfusion in real time by observing fluorescence emitted by ICG dye

Lightweight, compact design

(Patent pending)

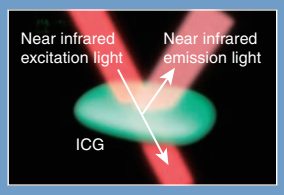
Handheld camera features manual adjustment options including excitation light and camera mode.

Observation by ICG fluorescence

When ICG is administered as a bolus intravenously, the pde-neo is able to visualize the ICG fluorescence to assess blood flow and tissue perfusion.

Fluorescence characteristics of ICG

After bonding with plasma protein in the blood, ICG will become excited with near infrared light and fluoresce at a slightly longer near infrared wavelength. The pde-neo's special sensor and filters will see this fluorescence clearly through a range of human soft tissue.

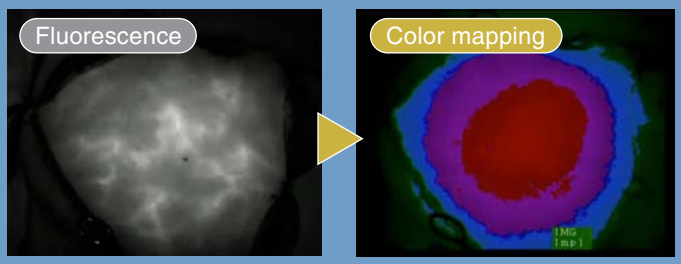


Various modes of visualization for more accurate observation

pde-neo

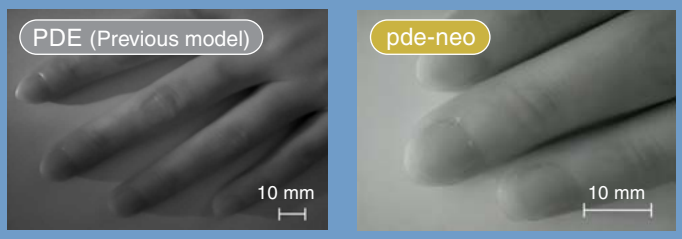
Color mapping function

The color mapping mode is a useful tool for analyzing fluorescent images. An artificial, multi colored gradient is applied to the image to show the brightest fluorescence (indicated by red coloring) and the least bright fluorescence (indicated by green coloring).



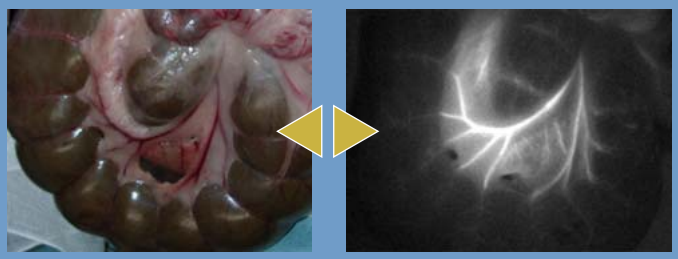
Focus adjustment (Near - Far)

By turning the focus ring of camera head, you may adjust the working distance to observe either near or far focused images.



Color and B/W image

Easily switch between a black and white fluorescent image to a full color image. This feature is helpful for comparing anatomy to the fluorescent image.

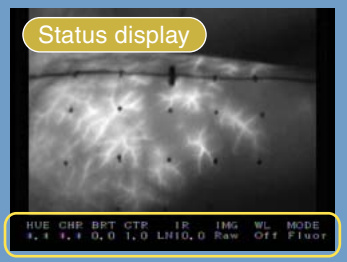


White LED

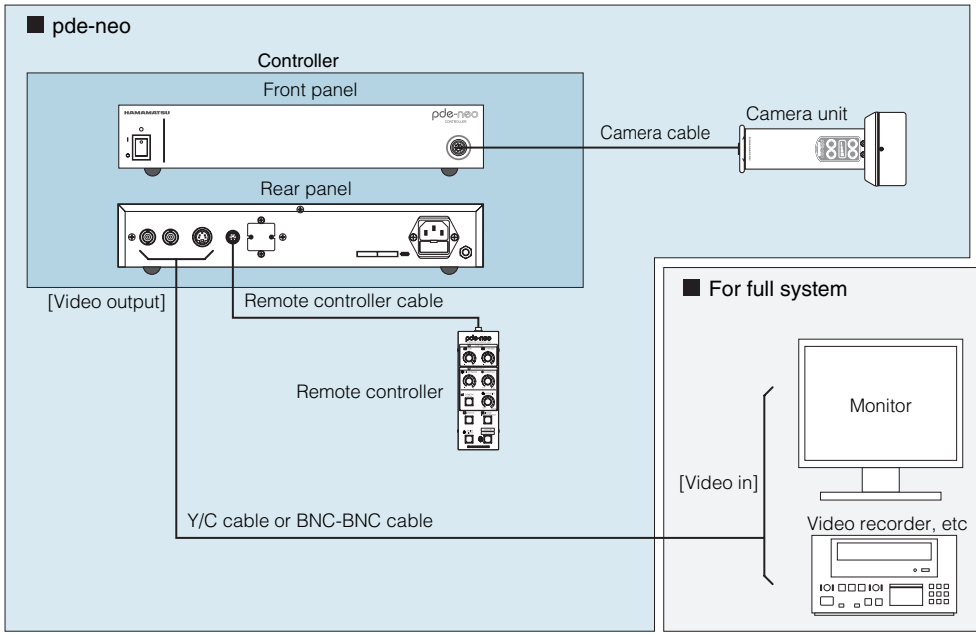
The white LED light feature illuminates the surgical field without compromising the fluorescent image. This is particularly helpful when OR lights have been turned off to prevent interference with the fluorescent image.

Status display

Turning on the status function will display the pde-neo settings in real time. Quickly reference current brightness, contrast, and excitation light settings.



Configuration



Camera unit	1
Controller	1
Remote controller	1
Camera cable	1
Remote controller cable	1
BNC-BNC cable	2
Y/C cable	1
BNC-RCA conversion connector	2
Power supply cord	1
Spare fuse T2 A 250 V	2

*Monitor, video recorder, ICG and drape are not included under the standard configuration of pde-neo, which should be prepared in local. Please prepare the monitor with image output in NTSC format by BNC, Y/C or RCA connector for image input.

Specification

Type No.		C10935-40
Power supply voltage		AC100 V to AC 240 V
Power frequency		50 Hz / 60 Hz
Power consumption		Max. 60 VA
Ambient operating temperature		+ 10 ˚C to + 30 ˚C
Ambient operating humidity		20 % to 70 % (with no condensation)
Ambient storage temperature		0 ˚C to + 40 ˚C
Ambient storage humidity		20 % to 70 % (with no condensation)
Dimension / Weight	Camera unit	Approx. 80 mm (W) × 182 mm (D) × 80 mm (H) (not including projections)
		Approx. 0.5 kg (not including cables and accessories)
	Controller	Approx. 322 mm (W) × 283 mm (D) × 55 mm (H) (not including projections)
		Approx. 2.6 kg (not including cables and accessories)
Controller function		Contrast enhancement
Output signal		NTSC
Video output		2 ch (BNC), 1 ch (Y/C)

LED SAFETY
The pde-neo is classified as a Class 1M LED product (IEC 60825-1, EN 60825-1, JIS C6802).

FDA 510(k) Cleared - K133719

HAMAMATSU PHOTONICS K.K. **www.hamamatsu.com**

Distributed in USA

Mitaka USA Inc.
2337 Lucky John Dr. Park City, Utah 84060, USA
Phone: +1(435)649-2236, Fax: +1(435)608-6397
E-mail: info@mitakausa.com
URL: www.MitakaUSA.com

Manufacturer

HAMAMATSU PHOTONICS K.K., Systems Division
812 Joko-cho, Higashi-ku, Hamamatsu-City, Shizuoka-Pref, 431-3196, Japan
Phone: (81)53-431-0124, Fax: (81)53-435-1574
E-mail: export@sys.hpk.co.jp

Initial Distributor/Importer

Hamamatsu Corporation
360 Foothill Road, Bridgewater. N.J. 08807-0910, U.S.A.
Phone: (1)978-764-1936
E-mail: HCID@hamamatsu.com

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