GrastGene™ FAS-Digi PRO





Touch the revolution

The FAS-Digi PRO is our newest imaging system for the detection of DNA and RNA in agarose gels. Equipped with a light-sensitive 24 MPixel camera, the FAS-Digi PRO is controlled completely by an innovative imaging software. With the live view mode, all changes of the camera, the exposure time, the lens' aperture, and a digital zoom are displayed in real-time. The FAS-Digi PRO is a fully networkable gel doc system, which allows a simple transfer of images when connected to a PC.



Blue/Green LED light for a safe detection of DNA and RNA

The FAS-Digi PRO is composed of a strong transilluminator equipped with the unique Blue/Green LED technology. These LEDs emit light at a wavelength of 470 nm – 520 nm without damaging nucleic acids. The Blue/Green LED light enables the detection of all common green dyes, such as MIDORI^{Green} or SYBR[®] Green, yellow dyes e.g. SYBR[®] Safe and red dyes, e.g. ethidium bromide or GelRed[®].

> Still destroying your DNA with UV-light? Try the new Blue/Green LED light!



The FAS-Digi PRO is composed of a huge transilluminator with an illuminated area of 26 x 21 cm. The dark hood can be easily removed, which allows a very easy excision of DNA bands.







Camera for high quality agarose gel

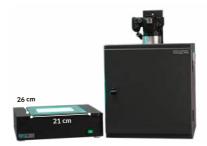
The documentation of agarose gels with the highest quality can be obtained using a 24 MPixel camera with an immense APS-C CMOS sensor. The sensor produces no visible noise from ISO 100 all the way up to ISO 1600. Furthermore, the 24 MPixel allows the detection of lowest light signals in agarose gels. The exposure time of the sensor can be set from 1/4000 sec up to 30 sec. The 3x zoom (focal length of 18 mm to 55 mm) allows a perfect enlargement of the area of interest.



The camera is directly connected to the power supply adapter of the Fas-Digi PRO. Replacing batteries is not necessary.

Huge and strong transilluminator

The imaging area of the transilluminator has a size of 26 x 21 cm, which allows the imaging of multiple agarose gels of various size. Because of the large illumination area and the possibility to remove the hood of the Fas-Digi PRO, it is very easy to excise DNA bands. The combination of our unique Blue/Green LED excitation technology with the high-end components deliver the best results with an easy-to-use gel doc system.



The hood of the FAS-Digi PRO can be easily removed. This allows a very easy excision of DNA bands.

SPECIFICATION		
Scientifc grade camera	~	24 MPixel (Resolution: 6000 x 4000), APS-C sensor, F/4-5.6 aperture, 18-55 mm zoom lens, 0.00025 to 30 seconds exposure time
Safe Blue/Green LED light	~	No damage of DNA, no risk of UV exposure for users
Imaging software	•	NIPPON Genetics Camera Studio, Windows 10,
Saved Image format	~	TIFF, JPEG
Huge transilluminator	•	View area: 260 x 210 mm
Integrated power supply	•	100-240 V~, 50/60 Hz,
Compact design	~	Painted aluminium metal 52 x 33.5 x 32.5 cm (14 kg)

Ordering information

Cat. No.	Product	Content
GP-07LED	FastGene® FAS-Digi PRO	LED imaging box, B/G transilluminator, imaging software, high resolution camera



Easy-to-use control imaging software

The FastGene® FAS-Digi PRO comes with the intuitive NIPPON Genetics Camera Studio software. With this software you can control all necessary parameters of the camera to analyze and optimize any gel image. These four settings will provide the highest quality images your lab has ever seen for DNA gels: aperture, exposing time, sensitivity and focus. Mouse-driven optimization makes image optimization a click away! Images are saved as TIFF and JPEG format, and can printed directly by a printer connected to your PC. Need higher quality prints? We offer the Mitsubishi Thermal Printer (P95D) which creates brilliant prints on high-glossy paper.

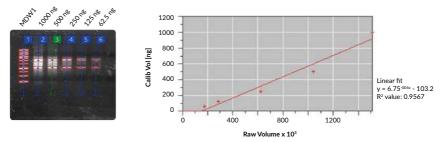


Optimize and analyse your images with the NIPPON Genetics Camera Studio software. In real time you can control all settings of the camera, the aperture, exposure time and sensitivity. Very easy zoom function of an agarose gel, by dragging a frame of the area of interest with the computer mouse.



Quantification of nucleic acids with the FAS-Digi PRO

For the quantification of DNA or RNA in agarose gels, it is nececassary that the light signals received by the camera are proportional to the DNA/RNA concentration. Usually researchers are using a gel doc system with an integrated CCD camera for the quantification of their DNA/RNA signals. However, modern scientific grade CMOS cameras are so accurate, that they also can be used for the quantification of nucleic acids. Although the price of a CMOS camera is much lower then a CCD camera. The FAS-Digi PRO have a very modern CMOS camera, able to generate pictures, which can be quantified by using the Total LAB 1D software (not part of the NIPPON Genetics Camera Studio software).



Quantification of RNA with the FAS-Digi PRO using the Total LAB 1D software (Cat. No.: GP-QSI). A 1% agarose gel was stained by using 3 µl of MIDORI^{Gem} Xtra in 50 ml of garose. After setting, the gel was loaded with MWDI (5 µl), and human total RNA (Agilent Cat No.: 750500) in different concentrations (1000, 500, 250, 125, 62.5 ng). The CMOS sensor of the Canon 200D scientific grade camera which is used in the FAS-Digi PRO is able to generate pictures, which can be quantified by using the Total LAB 1D software. The stain MIDORI^{Gem} Xtra shows a low background and crystal clear bands. This stain excels by a linear signal to noise ratio and is therefore suitable for quantification.



Enjoy a FAS-Digi PRO demo

Finding the right gel doc system can be difficult. We can help you! Just arrange an appointment with us and enjoy a product demonstration of the FAS-Digi PRO

+41 41 417 12 80
info@lubio.ch

www.lubio.ch