NEW

RUO Model

NanoZoomer® S60v2

Digital slide scanner

C16600-01

HAMAMATSU

PHOTON IS OUR BUSINESS

Compatible with fluorescent-stained specimens and mega slides

Digital slide scanner specialized for research

Maintaining the high-speed scanning capabilities of the NanoZoomer series, this model supports both brightfield and fluorescent imaging. It is designed for use with mega slides, allowing for the virtualization of larger tissue samples. This facilitates the digitalization of pathological tissue observation, enhancing research and drug discovery applications.

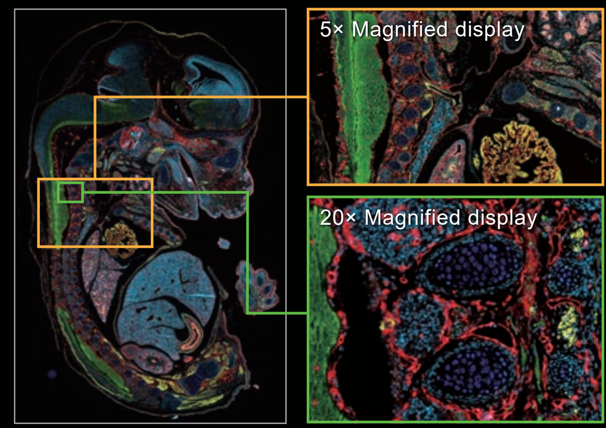
Fluorescent-Stained Specimens	Achieves multi-fluorescent scanning with up to 6 channels
Multi-slide Scanning Capacity	Up to **60** standard slides Up to **30** mega slides
High-speed Scanning* (Brightfield)	20× mode: **60** s/slide 40× mode: **75** s/slide

*Scanning times are based on a 15 mm × 15 mm area with 5 focus points.

Special functions for fluorescence scanning

In addition to our proprietary high-sensitivity camera, we have adopted an epi-illumination optical system with a filter-switching mechanism, enabling multi-fluorescent scanning across up to 6 channels. Image files are output for each channel, allowing for single-wavelength viewing or overlaying multiple wavelengths for comprehensive analysis.

Image 1



Example: Multi-stained mouse fluorescent specimen (6 channels) "Image 1"
- Scanning Speed (20× Mode): Approx. 16 minutes
- Scan Area: 7 mm × 12 mm
- Fluorescent Dyes: DAPI / Aqua / Green / Gold / Red / Far Red
- Exposure Times: 80 ms / 32 ms / 112 ms / 224 ms / 224 ms / 112 ms
- Scaling: 8× each

Functions

Scaling Function

By applying scaling processing to the fluorescence intensity values during scanning, bright fluorescent images can be obtained with shorter exposure times. The exposure time can be reduced to as short as 1/8 of the original time, resulting in faster scans and reduced risk of fluorescence fading.

Scaling 8×

Exposure time

800 ms ▶ 100 ms

Scan Area (40× mode): 10 mm × 10 mm
Fluorescence Filters: For DAPI / FITC / TRITC

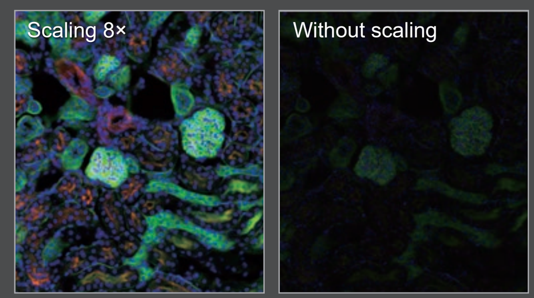
Reduced scan time*

Scan time

Approx. 40 minutes ▶ Approx. 15 minutes

* Scan time is based on actual measurements and includes the entire process from slide loading to scan completion.

Image 2



Example: Mouse kidney fluorescent specimen "Image2"
- Scanning Speed (40× Mode): Approx. 9 minutes
- Scan Area: 7 mm × 13 mm (The image is a partial field of view)
- Fluorescent Dyes: DAPI / Alexa 488 / Alexa 568
- Exposure Times: 10 ms / 5 ms / 5 ms

Focus Offset Function

As seen in Image 3, the focus offset function enables precise adjustment of the focus plane for each wavelength. By setting the focus offset value for each stained object, clear images with accurate focus can be obtained across all wavelengths.

Image 3

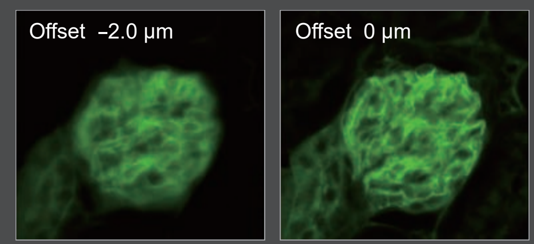


Image acquisition software : NZAcquire

Choose your preferred scanning mode

Fully Automatic Scanning

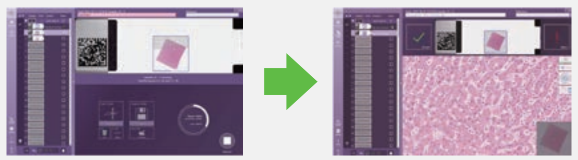
All scanning processes work automatically. As soon as you load the slides, scanning begins.

Semi Automatic Scanning

There is an option to set up scanning conditions such as scan area or resolution and to assign profiles for each slide.

Quality Check

The QC (Quality Check) mode is available to allow users to check image quality before finalizing the Whole Slide Image.



Scanning → Checking

System Configuration

NanoZoomer S60v2
Digital slide scanner
C16600-01

Control PC
C10076-xx

NZAcquire
Image acquisition software
U14297-01

NDP®.view2
Image viewing software
U12388-01

Options

• NanoZoomer S60v2 Fluorescent Option Set

Product name / Product number	Specifications	
Fluorescence imaging module for S60 L13820-041	Types of Sensors	CMOS Sensors for Scientific Measurement
	Number of Filter Cubes	3
	Number of Excitation Filters	6(Φ25 mm)
	Number of Emission Filters	6(Φ32 mm)
	NDP.view2 Plus Image viewing software U12388-02	5 License
Solid-State Illumination Unit L13820-07	Light Source	Semiconductor Light Source Unit

• Cart for NanoZoomer S60 A10071-04

• Barcode Reading Software

Product number	2D Barcodes
U14593-01	For Data matrix
U14594-01	For QR Code® *1

*1 Compatible with QR Code Model 1 and Model 2

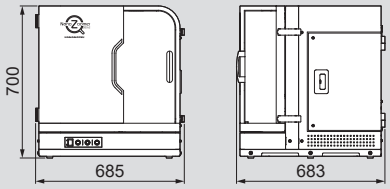
• Fluorescent Filter Sets

Product number	Product name	Compatible Fluorescent Dyes and Fluorescent Proteins
A11763-DAF1TR	Filter set Sedat for DAPI / FITC / TRITC for HT, RS and S60	Blue: DAPI, Green: FITC (Fluorescein), Orange: TRITC (Tetramethylrhodamine), Cy3
A11763-DAF1TX	Filter set Sedat for DAPI / FITC / TxRed, and for HT, RS, S60	Blue: DAPI, Green: FITC (Fluorescein), Red: Texas Red®
A11763-CFYFMCL	Filter set Sedat for LED-CFP / YFP / mCherry for S60	Cyan: CFP (cyan GFP), AmCyan, SYTOX Blue, BOBO-1, BO-PRO-1, Yellow: YFP (yellow GFP), Calcium Green-1, Fluo-3, Rhodamine 123, Red: mCherry, HcRed, Cy3.5™, Texas Red, Alexa Fluor 594™
A11763-C3C5	Filter set Sedat for Cy3 / Cy5 for HT, RS and S60	Yellow: Cy3™, DsRed Monomer, Alexa Fluor 555™, Red: Cy5™, SpectrumFRed (Far Red), Alexa Fluor 647™, Alexa Fluor 660™
A11763-DAF1TRC5L	Filter set Sedat for LED-DAPI / FITC / TRITC / Cy5 for S60	Blue: DAPI, Green: FITC (Fluorescein), Orange: TRITC (Tetramethylrhodamine), Cy3, Red: Cy5
A11763-DAF1TR57L	Filter set Sedat for LED-DAPI / FITC / TRITC / Cy5 / Cy7 for S60	Blue: DAPI, Green: FITC (Fluorescein), Orange: TRITC (Tetramethylrhodamine), Cy3, Red: Cy5, Far-Red: Cy7™

* We also offer single-color filter cubes. For more details, please contact the System Sales Promotion Department. Contact information below.

Dimensional Outlines (Unit: mm)

• Main unit: Approx. 84.0 kg



* The above sizes do not include protrusions such as screws

Specifications

Product name		NanoZoomer S60v2 Digital slide scanner
Product number		C16600-01
Scanning speed*1	20× mode	Approx. 60 s (15 mm × 15 mm)
	40× mode	Approx. 75 s (15 mm × 15 mm)
Objective lens		20× NA 0.75 (User can select 20× or 40× mode at start of scanning)
Compatible glass slides*2	Standard slide	25.0 mm to 26.0 mm × 75.0 mm to 76.0 mm (Thickness 0.9 mm to 1.2 mm)
	Mega slide (option)	51.0 mm to 52.0 mm × 75.0 mm to 76.0 mm (Thickness 0.9 mm to 1.2 mm)
Slide loader	Standard slide	Up to 60 slides (20 slides × 3 cassettes)*3
	Mega slide	Up to 30 slides (10 slides × 3 cassettes)*3
Scanning resolution	20× mode	Approx. 0.46 µm/pixel
	40× mode	Approx. 0.23 µm/pixel
Focusing method		Pre-Focus map
Z-stack feature		Included (Up to 99 layers, spacing 0.1 µm or more)
Fluorescence compatible		Option
Image compression		Compressed Images (JPEG), Uncompressed Images (8 bit)
Readable barcodes	1D Barcodes	Code 39, Code 128, Interleaved 2 of 5, Codabar, EAN-8 and UPC-E
	2D Barcodes*4	DataMatrix (ECC200), QR Code (QR Code Model-1 / QR Code Model-2)
Power supply		AC 100 V to AC 240 V
Power consumption (Scanner only)		Approx. 120 VA

*1 When it scans an area of 15 mm × 15 mm square with 5 focus points.
*2 Standard slide is a single slide, mega slide is a double-width, large slide.
*3 Up to 3 cassettes can be set with combination of standard and mega-sized slides.
*4 Optional software is required to read 2D barcodes.

LASER SAFETY
The NanoZoomer S60v2 is a Class 1 laser product. Hamamatsu Photonics classifies laser diodes and provides appropriate safety measures and labels according to the classification required for manufacturers by IEC 60825-1. When using this product, follow all safety measures as specified by the IEC.

Description Label (Sample)


Caution Label

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Cat. No. SBIS0150E01
FEB/2025 HPK
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