

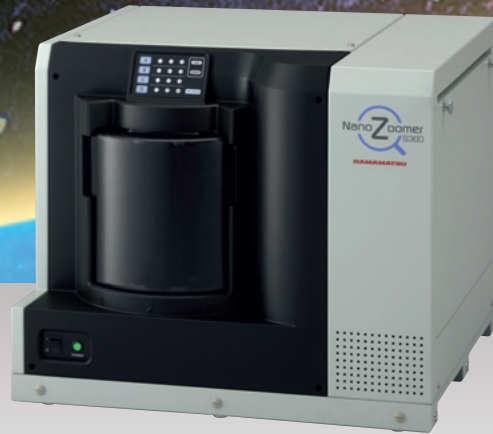
A composite image of Earth from space. The top half shows a bright sunset or sunrise over the horizon, with the sun's glow illuminating the atmosphere. The bottom half shows a night view of Earth with city lights and the aurora borealis visible in the northern hemisphere.

Hamamatsu Photonics

A World of Whole Slide Imaging Solutions

HAMAMATSU
PHOTON IS OUR BUSINESS

NanoZoomer



NanoZoomer S360

Revolutionary scanning technology for digitizing clinical routine pathology. Greatly improved throughput (more than 82 slides/h at 40x mode for 15 × 15 mm sample sizes) and slide capacity of 360 for high workload laboratories.



NanoZoomer S210

With a capacity of 210 slides in a single batch or the option for continuous loading, the NanoZoomer S210 is the ideal solution for small and medium sized hospitals or research departments.



NanoZoomer S60

The NanoZoomer S60 delivers the perfect combination of flexibility, excellent image quality and high speed scanning. It can scan up to 30 double size slides or up to 60 standard size slides. Supports brightfield and fluorescence imaging.



NanoZoomer SQ

The NanoZoomer SQ desktop single slide scanner is an easy to use, affordable solution ideal for telepathology applications.

Why NanoZoomer Whole Slide Scanners?

Hamamatsu Photonics has a decade of real world experience in delivering sophisticated whole slide imaging (WSI) solutions across the globe. Our NanoZoomer whole slide scanner series quickly transform entire histology and cytology glass slides into diagnostic-quality digital images for duplication, annotation, storage, retrieval, and image sharing.

With our NanoZoomer range, Hamamatsu have overcome multiple boundaries in pathology such as slide degradation, lack of resources, physical transportation, loss and damage of slides.

We are proud to have successfully integrated our systems and software into multiple institutions and continue to achieve the best solutions through strong relationships between our engineers and customers.

NanoZoomer Key Features:

- Ultra-fast, simple creation of high resolution digital slides
- Rapid image sharing for global remote consultation and collaboration
- Easy duplication, storage, archiving, retrieval, image analysis and annotations
- A digital pathology resource for education, research and clinical use



What is the NanoZoomer?

The NanoZoomer series is our solution for transforming histology/cytology glass slides into diagnostic quality digital slides.

Over thirteen years of experience manufacturing our own scanning technology has resulted in the NanoZoomer series becoming a leading device throughout the world.

NanoZoomer systems quickly capture high resolution digital images of entire slides for duplication, annotation, storage, retrieval and image sharing via a network to aid consultation, information dissemination and record keeping. Mundane tasks can be automated to make more effective use of the pathologist's time and expertise.

All of Hamamatsu's NanoZoomers' encompass the following features:

- State-of-the-art imaging technology for high speed, high resolution image capture
- Seamless image stitching technology
- Z-stack feature enabling multilevel scanning of cytology or thick histology slides
- Widely accepted colour fidelity and structural detail
- Optional fluorescence capability
- Effortless user experience
- Barcode capabilities for precision and traceability
- Scanning control software allowing operators flexibility to interrupt and manage urgent cases
- Fully automatic to manual pre-screening are available to meet the diverse quality and tissue samples encountered in modern laboratory environments
- Digital slide distribution and management software (NDP.serve3)
- Open image format compatible with multiple market leaders in Image analysis software

NanoZoomer in practice...

Clinical Pathology

> Helping patients through pathologists

According to Cancer Research UK, over 350,000 people are diagnosed with cancer in the UK each year. It has also been found that up to three times as many people will survive cancer if diagnosed early...

Hamamatsu NanoZoomers are currently implemented in medical institutions across the globe. Our scanners offer high throughput scanning which is now enabling pathologists to review more cases in given time periods resulting in faster patient diagnosis. The ability to automatically scan batches of slides and identify slides by their barcodes has offered pathologists the opportunity to allocate less resources and time in reporting.

Our NanoZoomer scanners enable an integrated approach to patient data collection, distribution, reporting and the seamless integration of different data types – images, text, database, statistics and quantitative analysis. Our approach aims to maximise technology to enable rapid access to diagnoses and increase the chances of effective treatments, ultimately improving patient care.

At Hamamatsu, we passionately believe this solution will not only help overcome the challenges pathologists are now facing, but it will also contribute towards the survival rate of cancer patients on a global level.

“Survival in patients is more than 3x higher when cancer is diagnosed early”.



Research

> Revolutionising scientific technology

Hamamatsu NanoZoomers have been used in a variety of exciting and critical research application areas and have contributed to a number of scientific publications. For example, as the use of Tissue Microarray Analysis (TMA) has now become a standard practice in some research pathology laboratories, our scanners have enabled data to be extracted and analysed more rapidly and efficiently enabling researchers to obtain data quicker than ever before.

Due to rapid scanning capabilities, our NanoZoomers have proven to be a useful tool across multiple departments allowing for better allocation of resources and cost justifications.

Education & Training

> Expanding possibilities for the next generation

Hamamatsu's software management NDP.serve3 allows viewing of virtual slides by large numbers of students or trainees over a computer network, thus avoiding the necessity of attending a teaching or training session. This can lead to a large reduction in the time and expense required to organise and run these sessions.

Traditionally, students and trainees would have viewed images generated by a digital camera mounted on a microscope. As a result, each individual would only be able to view a section of the slide at a selected objective magnification at one time, from one location. Using our web server software it is now possible to create a dynamic multimedia user experience. Not only are there significant cost savings to be made, but the quality of the learning experience has been enhanced.

Wireless networks extend the accessibility of teaching and training materials to make them available on portable and pocket computers/devices to facilitate 'anytime, anywhere' learning.



Whole Slide Viewing Software NDP.view2 & NDP.view2+

A powerful slide viewer created with elegance and simplicity

NDP.view2+

The fastest and most user friendly whole slide viewing software on the market for Windows and Mac. NDP.view2+ is designed to maximise the benefits of whole slide viewing and offers users additional tools to enable more precise analysis of tissues.

With multi-vendor file support, NDP.view2+ brings flexibility and simplicity to your fingertips. Our software is also available in multiple languages offering an improved user experience for our global customers.

NDP.view2+ also offers dual monitor capabilities to enrich the software experience.

NDP.view2

A low cost viewer option available to download from our website, NDP.view2 is designed specifically with the customer in mind with minimal training required.



Key Features of NDP.view2+

Case View

- The ultimate tool to enhance slide review times as users are able to view multiple images simultaneously increasing productivity and improving workflow

Enhanced Image Viewing

- Integrated counting and magnifier tools
- Regions of interest can be exported in JPEG, Bitmap or TIFF
- Slide review logging can be saved and exported to image files
- Full screen map option for multi-display systems
- Histogram and line profile displays

Compatibility

- Software is designed to support other Whole Slide Image formats including SVS, SCN, MRXS and many more
- Software can support 3Dconnexion's 3D mice and other external devices
- DICOM viewing capabilities

Quick Access to Annotation Tools

- Precise measurement tool is incorporated into the software enabling users to measure and annotate images
- Ability to store and save annotations
- An automatic list of annotations is created for the user to refer back to if needed

Creative Viewing Solutions

- Z-stack feature facilitating users to focus on different depths of tissue
- Synchronised viewing of multiple images
- Simple drag and drop feature for quick image viewing
- Access to Track Map which enables users to locate specific tissue areas of interest
- Bird's eye view function
- Multi-touch support, pinch to zoom (Windows)
- Alternative file formats, including JPEG, TIFF and PNG

Ergonomic Design

- Enables rapid review of images due to the simplicity of the software
- Seamless integration with NDP.serve3 image management software.



NDP.serve 3 Image Server Software

What is NDP.serve3?

Hamamatsu have developed a powerful solution to share and manage whole slide images (WSI) across the globe, either as a stand-alone solution or as an integrated enhancement of your current LIS/LIMS.

Why NDP.serve3?

Storage costs and accessibility limitations have become a common challenge in a number of application areas ranging from clinical to research. NDP.serve3 has been designed to help individuals overcome these barriers by providing a solution where digital images can be created from slides which can be stored and reviewed from anywhere in the world. This lowers the dependency on the physical fragility of glass slides.

NDP.serve3 also offers individuals the new ability to remotely access and share slides across a network enabling second opinions, MDT meeting preparations, intraoperative frozen sections, multisite clinical trials, education and training.

Key Features of NDP.serve3

- Secure database with enhanced security and functionality
- Intuitive simple to use graphical user interface
- Easy to share whole slide images
- Seamless integration with NDP.View2 and NDP.View2+ - the fastest MAC and Windows WSI viewer on the market
- Access to WSI available via all major internet browsers
- Easy set-up and administration
- Flexible modular software allowing easy integration of additional features

NDP.serve3 range

Hamamatsu offer three server software editions tailored to match your application needs and budget:

> NDP.serve3 Teleconsult

To meet a limited budget whilst still delivering the core benefits of our powerful server solution.

> NDP.serve3 Elementary

Capable of delivering users instant access to 1000 slides across a global network. This is ideal for a research group or educational environments.

> NDP.serve3 Professional

Hamamatsu's premium software solution is the ultimate solution for large research institutes and hospital departments.

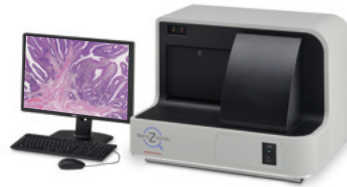
Nano **Z**oomer



A NanoZoomer model for all your whole slide imaging needs



NanoZoomer S360



NanoZoomer S210



NanoZoomer S60



Fluorescence Option



NanoZoomer SQ

For more information on NanoZoomer Systems contact us today

www.nanozoomer.com, europe@hamamatsu.de

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