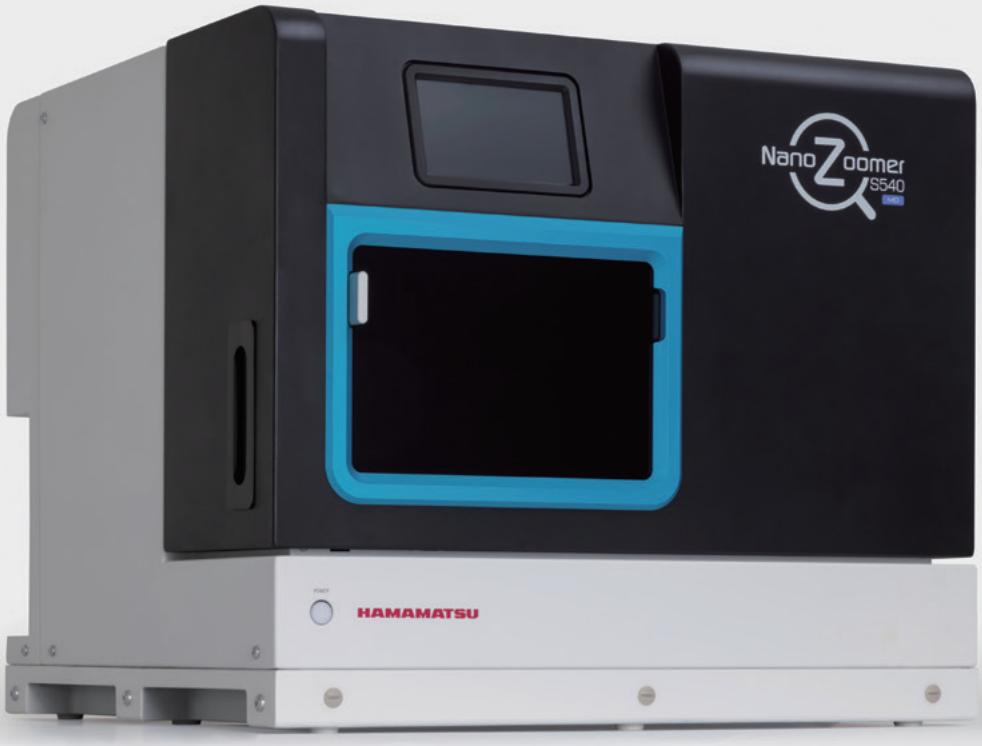
NanoZoomer® S540MD Slide scanner system

C17400-21MDEU

High-throughput model for reliable digital pathology



High-speed Scanning	Approx. 30 s/slide (20×/40× mode)	**High Throughput**	82 slides/h (20×/40× mode)
Slide Rack Compatibility	540 slides Rack for 30 slides 360 slides Rack for 20 slides	**Continuous Loading**	Load racks without interrupting scanning
Intuitive Touchscreen Interface	Easy to use interface for efficient operation	**Regulatory Compliant**	IVDR (EU) UK MDR2002 (UK) IvDO (CH)

HAMAMATSU

PHOTON IS OUR BUSINESS

A stable system for operational efficiency

The NanoZoomer S540MD by Hamamatsu is engineered with the lab in mind for a seamless workflow.

Featuring compatibility with staining racks, fast slide scanning, exceptional image quality, and an intuitive touchscreen interface, this high-capacity scanner is built to handle the needs of the clinical pathology laboratory.

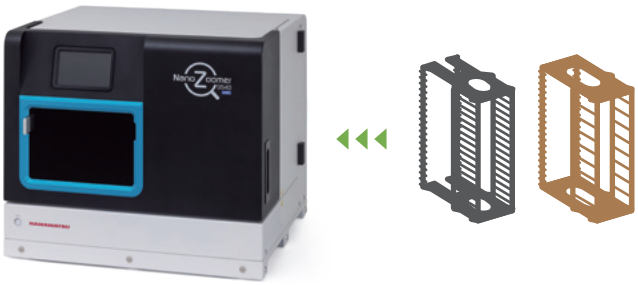
Up to **540** Slides*

82 Slides/h (20×/40× mode)

*Maximum capacity: 540 slides with a rack for 30 slides and 360 slides with a rack for 20 slides.

Rack Compatibility

The NanoZoomer S540MD can handle both rack for 30 slides and 20 slides simultaneously. Based on user needs, there is flexibility to select configurations with the rack for 30 slides or 20 slides to 18 slots at the factory.



Selectable Scanning Modes

Fully-Automatic Scanning

All scanning processes can be fully automated. Scanning begins immediately upon loading the rack, and the scanner's touch screen interface provides a clear visual indication of scan progress.

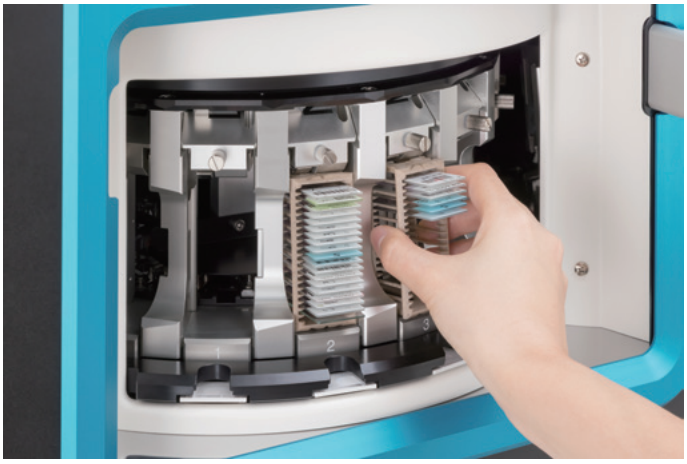
Semi-Automatic Scanning

Set-up scanning conditions such as the scan area, focus point placement, Z-stacking, and resolution and to assign bespoke profiles to each slide or rack.

Continuous Loading

Insert and exchange racks without interrupting scanning. Rack priority can be set either directly in the touchscreen interface or using the operation software (NZAcquireMD or NZConnectMD Scan*).

*Please refer to the datasheet of NZConnectMD Scan to see the full list of features.



Touch Screen Interface

The touch screen allows users to operate and monitor key scanning functions without accessing the operation software, including:

- Start/Stop Scanning and Remove Racks
- Set Scan Priority for Racks
- Display Scan Status

Start/Stop Scanning and Remove Racks

Set Scan Priority for Racks

Display Scan Status

AI Tissue Detection

AI tissue detection enables fast and targeted tissue identification, ensuring that only tissue areas are scanned accurately.

Profile Functions

Scan profile

Save scan conditions such as scan area and sample size threshold for tissue recognition.

Output profile

Assign output file conditions, such as save location and file type parameters.

Quality Check

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

System configuration

Hardware
- Scanner
- Slide rack (Rack for 20 slides)
- Dedicated cart

+

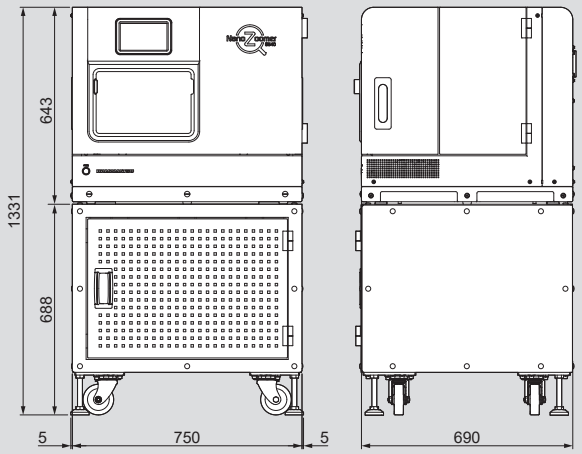
Software
NZAcquireMD
(For operation)

+

Software
NZViewMD
(For viewing)

Dimensional outlines (Unit: mm)

- Scanner: Approx. 125 kg
- Dedicated cart: Approx. 65 kg



Specifications

Product name		NanoZoomer S540MD Slide scanner system
Product number		C17400-21MDEU
Scanning speed*1 (20× mode/40× mode)		Approx. 30 s/slide
Throughput *1 (20× mode/40× mode)		More than 82 slides/h
Objective lens		20× NA 0.75 User can select 20× or 40× mode at start of scanning
Compatible glass slides		25.0 mm to 26.0 mm × 75.0 mm to 76.0 mm (Thickness 0.9 mm to 1.2 mm)
Slide loader	Rack for 20 slides	Max. 360 slides (20 slides × 18 cassettes)
	Rack for 30 slides*2	Max. 540 slides (30 slides × 18 cassettes)
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
Image compression		JPEG compression
Readable barcodes	1D Barcodes	Code 39, Code 128, Interleaved 2 of 5, Codabar, EAN-8 and UPC-E
	2D Barcodes	DataMatrix (ECC200) QR Code® (QR Code Model-2)
Power supply		AC 100 V to AC 240 V
Power consumption (Scanner only)		Approx. 200 VA

*1 When scanning, it scans an area of 15 mm × 15 mm square with 5 focus points.
*2 This configuration is provided with the rack for 20 slides.

Intended Use

NanoZoomer S540MD Slide scanner system (“NanoZoomer System”) is an automated digital slide creation, viewing, and management system. The NanoZoomer System is intended for in vitro diagnostic use as an aid to the pathologist to review and interpret digital images of surgical pathology slides prepared from formalin-fixed paraffin-embedded (“FFPE”) tissue. The NanoZoomer System is not intended for use with frozen section, cytology, or non-FFPE hematopathology specimens.
The NanoZoomer System comprises the Scanner and the NZViewMD Software. The NanoZoomer System is for creation and viewing of digital images of scanned glass slides that would otherwise be appropriate for manual visualization by conventional light microscopy. It is the responsibility of a qualified pathologist to employ appropriate procedures and safeguards to assure the validity of the interpretation of images obtained using NanoZoomer System.

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