

RUO model

NanoZoomer[®] S540

Digital slide scanner

C17400-01

High throughput scanner with rack compatibility and continuous loading



*The NanoZoomer S540 is designed for use with a dedicated cart. Images above shown without the dedicated cart.

High-speed scanning

Approx. 30 s/slide
(20×/40× mode)

High throughput

82 slides/h
(20×/40× mode)

Rack compatibility

540 slides
Rack for 30 slides
360 slides
Rack for 20 slides

Continuous loading

Load racks
without interrupting
scanning

Intuitive touchscreen interface

User-friendly design
supporting efficient
workflows

Reliable Scanning for Workflow Efficiency

The NanoZoomer S540 features compatibility with stainer rack, fast slide scanning, exceptional image quality, and an intuitive touchscreen interface—making it a high-capacity scanner ready to meet your needs.

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 S540 can handle both racks for 30 slides and 20 slides simultaneously. Before installation, users can select a rack configuration with either a 30-slide or 20-slide capacity, designed to fit into 18 slots.



*The NanoZoomer S540 is designed for use with a dedicated cart. Images above shown without the dedicated cart.

Selectable scanning modes

Fully-Automatic scanning

All scanning processes can be fully automated. Scanning begins immediately upon loading the rack, and the scanner's touchscreen 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 or exchange racks anytime—scanning continues without interruption. Set rack priority directly on the touchscreen or via the software.

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



Touchscreen interface

Operate and monitor key scanning functions directly from the touchscreen.

- Start or stop scans and remove racks
- Set scan priority for racks
- View current scanning status



Start or stop scans and remove racks



Set scan priority for racks



View current scanning 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

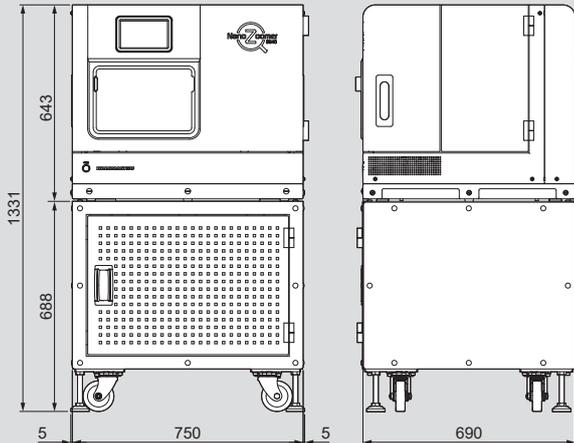
QC (Quality check) mode is available to allow users to check image quality before accepting the whole slide image.

System configuration



Dimensional outlines (Unit: mm)

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



LASER SAFETY

The NanoZoomer S540 is a Class 2 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.



Specifications

Product name		NanoZoomer S540 Digital slide scanner
Product number		C17400-01
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 racks)
	Rack for 30 slides*2	Max. 540 slides (30 slides × 18 racks)
Scanning resolution	20× mode	Approx. 0.46 μm/pixel
	40× mode	Approx. 0.23 μm/pixel
Focusing method		Pre-Focus map
Z-stack function		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.

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