

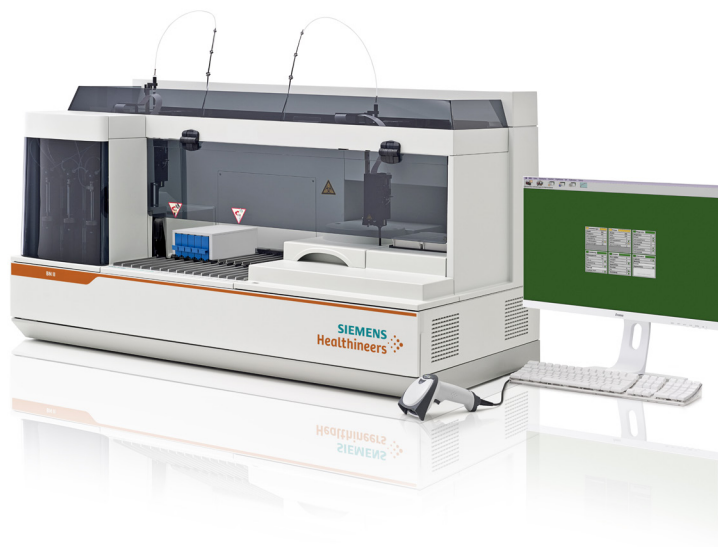
Technical Specifications

Next-generation BN II System

The nephelometric performance you trust.
The speed and workflow you need.

siemens-healthineers.com/BN-II

The next-generation BN II System combines the modern features that high-volume labs need – including onboard reagent cooling, a broad menu of plasma protein assays, and automation connectivity options – with proven nephelometric technology for confidence in results.



Product specifications

Description	Nephelometer; measurement of scattered light intensity at a fixed angle of 13–24°
Test Throughput	Effective: approximately 143 tests/hour, depending on the assay mix Nominal: 225 tests/hour

Reaction area

Reaction Cuvettes	60 disposable cuvettes
Reaction Temperature	37°C±1.5°C
Reaction Detection	Wavelength: 840 nm±25 nm Detector: photodiode with integrated preamplifier
Light Source	Infrared high-performance LED
Assay Result Calculations	Fixed-time kinetics, end-point measurement, VLin integral
Assay Times	6–18 minutes, assay dependent

Sample handling

Validated Sample Types	Serum, plasma, CSF, urine
Sample Integrity Control	Liquid-level sensing
Auto-repeat	Automatic repeat testing from the retained prediluted sample or original sample Auto-dilution and auto rerun to end result
Sample Dilution	1:1 to 1:160,000
Sample Carryover Prevention	Washing protocols help minimize carryover
Predilution Tray	2 frames for max. 264 dilution cups
Sample Volume per Test	10–100 µL (assay dependent)
Continuous Loading	Continuous access to samples without interrupting testing in progress
Size of Sample Tubes	Diameter: 11–16 mm Height: 65–100 mm For pediatric samples: Conical microtubes with a maximum filling volume of 1.5 mL
Rack Transport Unit	Standard and control rack: 8 positions Reagent rack: 7 positions Sample rack: 10 positions False bottom sample tube rack: 10 positions Pediatric rack: 10 positions
Barcode Reader	Automatic reading of different barcode types: 2/5 interleaved, Codabar, Code 39, Code 93, Code 128

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Reagent handling

Reagent Compartments	Up to 35 cooled positions for reagents and supplemental reagents; reagents cooled 12–15°C
Assays Onboard	More than 50 programmed assay protocols*
Reagent Packs	50–625 test per pack
Onboard Stability	Up to 10 days, varies by assay
Dispensing System	Two probes with liquid-level sensing
Reagent Volume per Test	Average consumption: 40 µL per test
Continuous Loading	Continuous access to reagents without interrupting testing in progress

Calibration/QC

Calibration Review	Graphical display of multi-point calibration curves
Calibration Interval	The reference curve is valid while QC results remain in range
Quality Control Review	QC statistics

Maintenance

Frequency	Weekly, monthly, biannually, annually, as needed (please see manual for additional periodic maintenance)
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Automation Connectivity

Track Connectivity Options	Aptio Automation, FlexLab™ and FlexLab™ X Total Lab Automation
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Software and IT

Operating System	Apple Macintosh
Laboratory Information System (LIS) Connectivity	Download mode, host query mode
Data Management	Atellica Data Manager†
Printer†	Standard laser printer
Ports	1 IDC D-Sub, 9-pole Type 1658612-4
Removable Media	USB

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FlexLab™ and FlexLab™ X are manufactured by Inpeco and distributed by Siemens Healthcare Diagnostics Inc. FlexLab is a trademark of Inpeco SA.

General specifications

Power Requirements	100–240 V, AC
Power Consumption	<140 VA (standby mode) 450 VA (operating mode)
Water Quality Requirements	Deionized water NCCLS Type 2 Microbial, count must not exceed 100 CFU/mL
Average Water Consumption	~0.5 liters (.13 gallons) per hour, depending on the assay mix ~0.6 liters (.16 gallons) per 100 tests, depending on the assay mix
Dimensions	Analyzer (W x H x D): 124 x 92 x 63 cm (49 x 36 x 25 in.) Computer and monitor dimensions (W x H x D): Approx. 43 x 43 x 17 cm (17 x 17 x 7 in.)‡ Printer‡ dimensions (W x H x D): Approx. 41 x 27 x 37 cm (16 x 11 x 15 in.)‡
Weight	Analyzer: 150 kg (331 lb) Computer and monitor weight: Approx. 14 kg (31 lb)‡ Printer weight: Approx. 7 kg (16.1 lb)‡
Compliance	Complies with international environmental, health, safety, and sustainability standards, including CE and RoHS
Noise Emission	Average sound pressure level: 53 dBa at operator's position 51 dBa at a distance of 1 m
Processing Heat Output	340 BTU/hour in standby mode 975 BTU/hour in operation mode
Ambient Operating Temperature	18–32°C (64–89°F)
Ambient Operating Humidity	30–85% noncondensing
Operating Altitude	0–2000 m (6561.68 feet)
Overvoltage Classification	Category II
Pollution Classification	Class 2 (according to IEC 664)
Traceability of Results	Complete traceability, including operator's name, test date and time, reagent lot and expiration date, framing controls, release details, calibrations and kinetics

*Assay availability varies by country.

†Sold separately.

‡Dependent on model.

This specification sheet is intended for use in the U.S. only.

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