

NS-200; NS-200C

Nano Scan Microplate Reader 200

Versatile Microplate Readers for Scalable Biotech, Life Science & Diagnostic Research

The **Nano Scan Microplate Reader NS-200 series** are next-generation microplate readers engineered for high-throughput, high-precision absorbance measurements, making it an essential analytical platform for modern biotech laboratories. Optimized for ELISA, enzyme kinetics, and nucleic acid / protein quantification, the system integrates a high-resolution grating monochromator covering **200–1000 nm with 1 nm step accuracy**—supporting full-spectrum scanning for a wide range of biochemical and molecular assays.

NS-200 designed to streamline complex workflows, the NS-200 series accommodates both 96- and 384-well microplates, features programmable orbital shaking, and offers precise temperature control up to 45 °C—ideal for temperature-sensitive reactions and cell-based assays. An integrated cuvette slot further expands assay capabilities for NS-200C, enabling endpoint, kinetic, and spectral measurements without external modules. Additional quantification application can be supported through the optional Nano-plate module, available as a separate purchase.

The NS-200 series ensure exceptional data stability and repeatability—meeting the rigorous standards of biotech research, diagnostic research, food safety and agriculture, as well as assay development environments; delivers the performance, flexibility and reliability modern laboratories demand.

HIGHLIGHTS

- Equipped with 10-inch capacitive touchscreen
- Support standalone operation & PC-connectivity through ReaderIt-II software with advanced data management
- Adopts xenon flash lamp as light source, which covers wide wavelength range 200-1000nm wavelength with 1nm increments with High-Resolution Monochromator
- Features incubation up to 45°C and three adjustable shaking speeds
- Compatible with 96- & 384-well microplates
- Separated sold unit of Nano-plate – quantification of nucleic acid and protein
- Includes an independent cuvette slot for NS-200C only
- Uses an optical double beam system with a reference channel; paired with automatic calibration of all critical components for consistent and reliable results



APPLICATIONS

- ELISA
- Protein quantification
- Enzyme kinetic assay
- Endpoint method
- Kinetics scanning
- Spectral scanning
- Nucleic Acid quantification (using Nano-plate)

TECHNICAL DATA

Specifications	Nano Scan microplate Reader, NS-200, with monochromator wavelength 200-1000nm, AC 100-240V	Nano Scan microplate Reader, NS-200C supplied with cuvette, with monochromator wavelength 200-1000nm, AC 100-240V
Display	10 inch high-resolution capacitive touch screen	
Detection system	2 silicon photodetectors (measurement & reference)	
Light source	Xenon flash lamp / number of flashes > 10 ⁹	
Wavelength range	200 - 1000nm	
Wavelength accuracy	2nm	
Wavelength repeatability	0.2nm	
Optical filter	Monochromator, 1nm step	
Half-bandwidth of filters	<2.5nm	
Dynamic range	0 - 4 Abs	
Compatible plate type	96- & 384-well plate	96- & 384-well plate; cuvette
Function	96- & 384-well plate	Cuvette
Linearity (450nm)	R ² ≥ 0.999, (0.0 - 3.0Abs)	N/A
Accuracy (450nm)	±(1.0% + 0.003 Abs) @ (0.0 - 2.0 Abs) ±2.0% @ (2.0 - 2.5 Abs)	N/A
Precision (450nm)	CV < 0.5% (Precision mode); CV < 1.0% (Fast mode)	CV < 0.5%
Stability (450nm)	< 0.005 Abs, (0.0 - 2.0 Abs) < 2%, (2.0 - 2.5 Abs)	< 0.005 Abs, (0.0 - 2.0 Abs) < 2%, (2.0 - 2.5 Abs)
Reading speed	< 8 seconds at Fast mode (96-well plate) < 28 seconds at Precision mode (96-well plate)	N/A
Reading mode	End point, Dual Mode, Kinetic	
Incubation range	RT+ 4°C to 45°C	
Temperature accuracy	± 0.5°C @ 37°C	
Temperature uniformity	± 0.5°C @ 37°C	
Shaking mode	Linear, 3 speeds adjustable	
User interface	Built-in software, independent use	
Input Voltage	AC 100-240V, 50-60Hz	
Storage	16GB storage, can store more than 20,000 data files	
Ports	2 type A USB interfaces, 1 Type B USB interface, 1 ethernet port	
Dimension	300mm (W) x 500mm (L) x 260mm (H)	
Net weight	15.5kg	

ORDERING INFORMATION

Cat. No.	Nano Scan Microplate Reader, NS-200
NS-200	Nano Scan microplate Reader NS-200, with monochromator wavelength 200-1000nm, AC 100-240V
NS-200C	Nano Scan microplate Reader NS-200C supplied with cuvette, with monochromator wavelength 200-1000nm, AC 100-240V

Cat. No.	Accessories for Nano Scan Microplate Reader, NS-200
NS-200-NanoP	Nano-plate
NS-200-VBoard	Optical Performance Validation Board for NS-200 series
NS-200-SII	ReaderIT-II PC software of NS-200 series

