

URINANALYSIS

- Urinalysis has been an important diagnostic tool for more than hundred years.
- It can reveal diseases that have gone unnoticed, because they do not produce striking signs or symptoms, for instance diabetes mellitus, various forms of glomerulonephritis, and chronic urinary tract infections.
- NeoMedica manufactures high-end NUA series Urine analyzers, combining the chemistry method of urine strip testing and the traditional microscopic method through a digital high-resolution imaging system for enhanced, fast, reliable results and lab personal safety.
- Fully automated measurement process with NUA100 and NUA1500 has been based on traditional microscopic method and reliable chemical analysis.



NUA-1000

NUA Series

FULLY AUTOMATED URINE SEDIMENT ANALYZERS

Fully automated measurement process based on traditional microscopic method

NUA 1000 is an automated urine sediment analyzer which provides whole field of view microscopic images of urine sediment and detects sediment particles.

This analyzer is using a high definition imaging system, combined with sophisticated optics, achromatic high quality lens and optical fiber lighting.

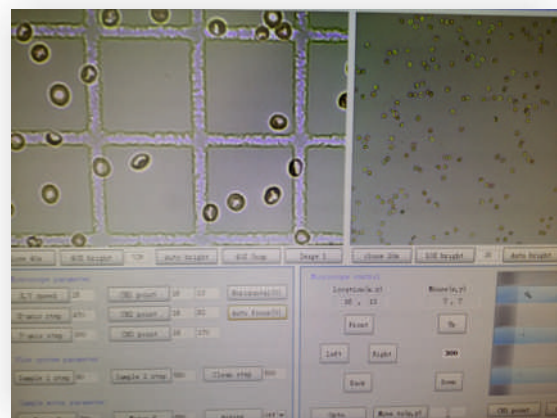
Particles are automatically classified, eliminating the need for manual microscopic examination.

Dedicated software simplifies on-screen result verification, including clear view of each recognized particle, size information, and full image database of microscope viewfield.

Bridging NUA-1000 with NUA-1500 (fully automated chemistry urine analyzer), makes NeoMedica NUA urinalysis station a powerful tool for high-volume automation.



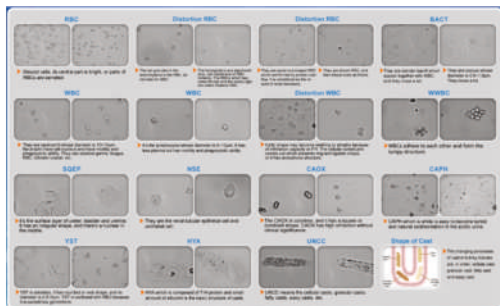
4 test modes (Intelligent, Fast, Normal and Fine)



Qualitative and quantitative analysis of the urine sediment

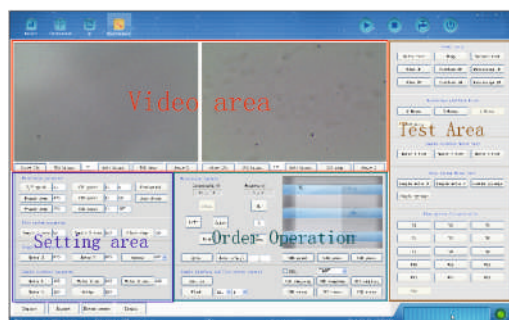
Constant assistance

Urine Sediment Atlas shows as pop up software.



Flexible

- Picture can be printed and added into the report.
- User can classify unrecognized particles at all times.
- Analyzer will automatically calculate and refresh every item result.



- Special grid for automatic microscope calibration
- Quality Control: L-J QC diagram, mean, SD and CV etc.
- User password control
- Auto sampling: Auto match conditions: "Tube", "ID" and "Barcode"
- Bridge with NUA1500
- Samples: emergency sample, Bar-coded tube, Batch mode, Open tube



TECHNICAL SPECIFICATIONS

- Parameters:
 - Red Blood Cells (RBC); White Blood Cells (WBC); Hyaline Casts (HYA); Squamous Epithelial Cells (EPI); Non-Squamous Epithelial Cells (NSEC); bacteria (BAC); Yeast (YEA); Crystals (CRY); Sperm (SPRM). Pathological Casts (PAT); Mucus (MUC); etc...
- Technology: Automated microscopy and image processing
- Counting cell:
 - triple channel (3 flow cells)
 - 0,1 mm thickness of inner chamber
- Throughput: up to 100 tests/hour
- Batch size: 50 Test tubes
- Min. sample volume: 2,5 ml non-centrifuged urine
- Sample: Native urine samples or sediment urine samples
- Interface: USB, RS232 serial port, LPT, LAN
- Data memory stores more than 50.000 results with images
 - Easy data handling: Data backup, Data recovery and data export to excel file
- Features: Stat function, Advanced identification, Bar code reader (built in), Modular system
- Conection with NUA-1500, Auto loader, LIS data transfer, High resolution imaging, 12 categories of formed elements
- No chemical dye required, Level sensors,
- Dual lens and cameras
- Ports
 - DVI-D video port
 - internet port 1, internet port 2
 - USB 1, USB2, USB3, USB4, COM port
- Supply: AC 100V ~240V
 - Frequency: 50/60Hz
 - Fuse: T3.15AL250V
 - Power: ≤ 150~220 VA
- Dimensions and Weight
 - Dimension: L650× W640× H560mm
 - Weight: 60Kg

REAGENTS

2 main reagents - detergents

Advanced optics

Faster sampling: Triple Counting Channel - 3 flowcells

Quality and speed: Dual lens and dual cameras

NUA-1500

NUA Series

FULLY AUTOMATED URINE BIOCHEMISTRY ANALYZERS

NUA 1500 is a high throughput, automated urine biochemistry analyzer



300 samples/hour

Automatic Sample Dispension

Automatic Sample Transfer

Automatic Strip Feed

Bar Code Reader

STAT Analysis

- Maintenance-free sample handling system dispenses samples precisely on each pad on urine strip, eliminating cross contamination of individual chemical pads.

Multi Strip Loader

Automatic sampling (autoloader)
Reading of tube rack number

3 ways to verify quality

QC", "CHECK STRIP", "CALIBRATION"

Advanced Analysis Component

CIS technology
for more accurate sample analysis

Data Export. LIS transfer

SAMPLE COLOR IDENTIFICATION

SG, Color and Turbidity measurement by Refractometer module.

LIQUID LEVEL DETECTION TECHNOLOGY

The instrument with the mixing function ensures mixing of samples which have been stored for longer period of time, and guarantees accuracy of test results.

MULTI PARAMETERS

Bilirubin, Urobilinogen, Ketones, Ascorbic acid, Glucose, Protein, Blood, pH, Nitrite, Leukocytes Microalbumine, Specific Gravity, Creatinine, MA/CR, Calcium, Color, Turbidity

REAGENTS

CODE	PRODUCTS	PACK	ANALYSIS ITEMS
N21830	Neocheck 1A	100strips/pack	Nitrite/pH/glucose/protein/Occultblood/ketone/bilirubin/Urobilinogen/SG/leukocytes/ ascorbic acid
N21831	Neocheck 12	100strips/pack	Nitrite/pH/glucose/protein/Occultblood/ketone/bilirubin/Urobilinog/SG/leukoc/ asc. acid/Microalb.
N441302	Detergent US	500 mL	

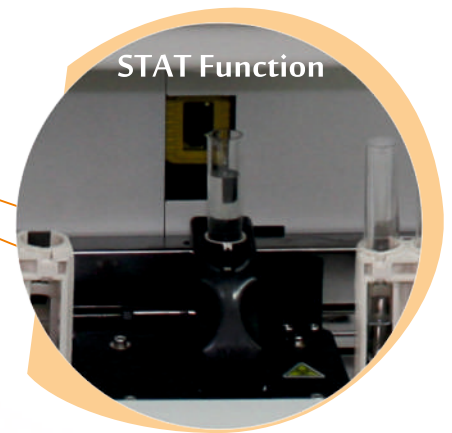
TECHNICAL SPECIFICATIONS

- Evaluated parameters:
Bilirubin, Urobilinogen, Ketones, Ascorbic acid, Glucose, Protein, Blood, pH, Nitrite, Leukocytes, Microalbumine, Specific Gravity, Creatinine, MA/CR, Calcium, Color, Turbidity
Via urine strips: Neocheck 1A, 12.
- Technology:
reflectance photometer
(wavelengths: 505, 530, 620, 660 nm)
- Throughput:
300 samples/hour
- Batch size:
110 Test tubes
- Memory capacity:
up to 300.000 results
- Display: 8" TFT Colour Touch Screen
- Printer:
Built-in thermal printer
External printer-optional
- Interface:
USB, RS232 serial port, LPT, LAN, PS2
- Operating system:
Linux
- 2 ml Min. sample volume:
Stat function

Urine test strips with **14 parameters AVAILABLE!**

- Strip capacity:
>200 strips

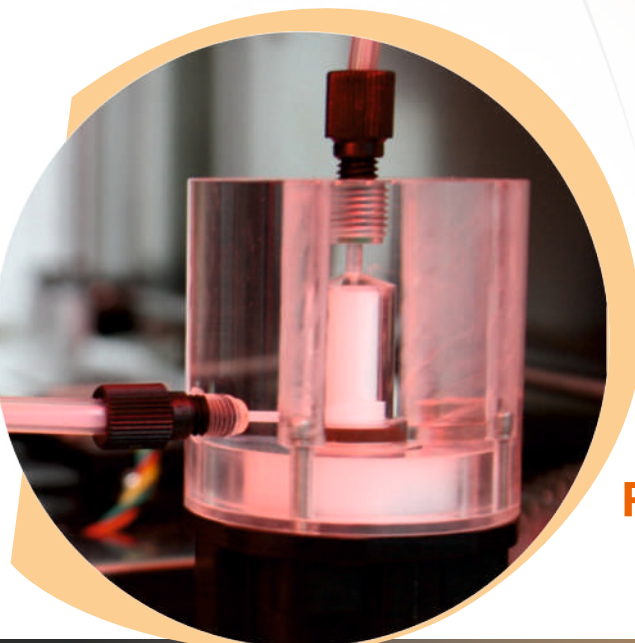
STAT Function



FEATURES

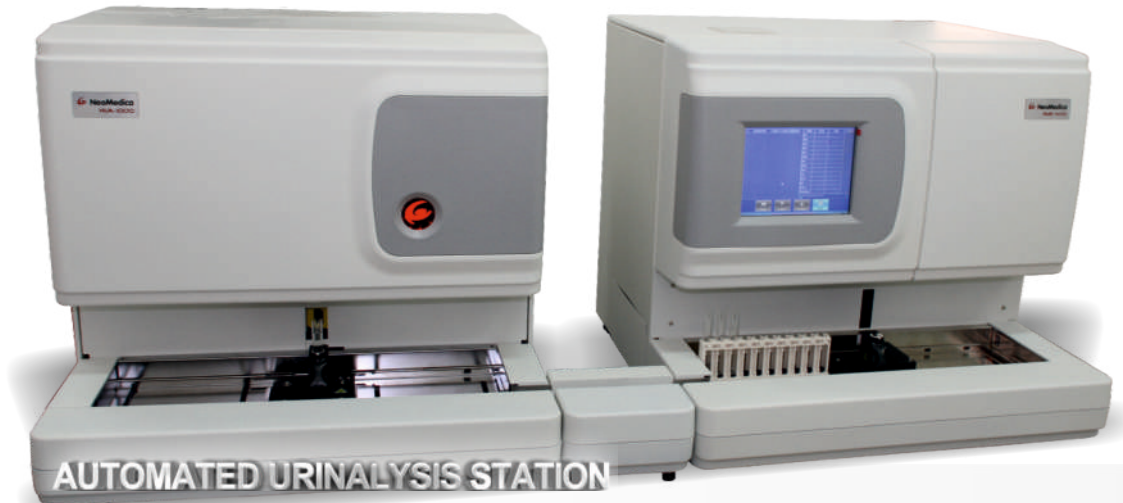
- Modular system
- Connect with NUA-1000 to form Fully Automated Urine Station
- Bar code reader (built in)
- LIS data transfer
- Level detection
- Advanced QC

Reliable ceramic pump



NUA-1000 & NUA-1500

FULLY AUTOMATED CHEMISTRY AND SEDIMENT ANALYSIS SYSTEM



BRIDGED NUA = EFFICIENCY

NUA-1000 bridged with NUA-1500 provides standardisation and productivity with automatic validation

Easy to correlate results with the Gold standard method (manual microscopy)

NUA-1000 bridged with NUA-1500 provides optimized workflow and maximizes work efficiency.

Smart bridging option (conditional bridging) for optimal Urine Station utilization, increases throughput and reduces operation cost, by running sediment analysis on NUA-1000 only for those samples that showed out of range chemistry parameters.

Low operation cost - only 2 detergents for the entire system.

Sample mixing by air on both units.

■ ENHANCED TECHNOLOGY SYSTEM FOR URINE ANALYSIS

Bridging NUA-1500 with NUA-1000 (fully automated sediment urine analyzer), turns NeoMedica NUA urinalysis station into powerful automated tool for high-volume sample processing.

Using advanced technology, every lab can decrease the operating budget together with increasing staff efficiency.

High walk away capabilities: 110 samples in 11 racks

Easy to trace patient data and QC results



NUA-150

FULLY AUTOMATED URINE SEDIMENT ANALYZER

Fully automated measurement process based on traditional microscopic method

NUA-150 urine sediment analyzer recognizes the visible components of urine through the imaging and saves the test results to provide the necessary reference to clinical diagnosis.

- Auto-particle recognition :
 RBC, WBC, SQEP (squamous epithelial cells), NSE (non-squamous epithelial cells), HYA (cast), UNCC, CAOX (calcium oxalate crystal), BACT (bacteria), yeast, and etc.
- RBC phase detection
- Receive NEOMEDICA series urine dry chemistry analyzer's test data

TECHNICAL SPECIFICATIONS

- Technology: Automatic microscopy and image processing
- Throughput: more than 50 samples / hour
- Sample: native urine samples or urine sediment samples
- Sample volume: minimum volume: 1.2 ml
- Testing principle: automatic sampling, diluting, blending, screening, image acquiring, particle counting, data saving, flow cell and probe washing, printing
- Counting cell: double channel
- Accuracy: over 95%
- Memory capacity: more than 50,000 results
 Printer: thermal printer (other: laser printer or ink printer)
- Interfaces: RS-232 SERIAL PORT, USB, TCP / IP Ethernet
- Power supply: AC 100V - 240V; Frequency: 50/60Hz
 Fuse: T3.15A L250V; Rated power: 150VA

State of The Art technology in image recognition

By combining computer science, image processing and pattern recognition, our State of The Art technology in image recognition can automatically recognize and analyze images from digital microscopes. NUA-150 analyzes the shape and size of RBC and gives distribution histogram of RBC in urine, MCD and RRATE

Comprehensive Calibration System

Auto calibration function ensures stability of the system.

High-precision Test System

The use of Olympus flat-field achromatic objective lens and automatic continuous zoom optical lens ensures the perfect quality of microscopic images.

Automatic calibration without using chemical reagents.

The infinite adjustment of the microscope light intensity ensures the clarity of images. Japanese Nanotechnology quartz counting chamber with smooth inner wall and uniform a thickness of the inner diameter.

Powerful Interface

Urine sediment images, results of analysis and dry chemistry results are displayed on the same screen.

This allows immediate comparison in order to improve the accuracy of the obtained results.

Reliable Quality Control system



NUA -50

- Compact design
- Convenient maintenance
- Easy operation
- Measurement Principle: Dual wavelength reflectance photometer and spherical integrator
- Two test modes:
 Normal mode, 60 samples / hour
 Continuous mode, 120 samples / hour
- Memory capacity: 5000 samples
- Low cost, small volume, easy to use
- Cold light source, less interference and long life
- Internal thermal printer, external printer and bar code reader applicable
- Standard serial interface Rs232, parallel interface and PC/2 port
- Display: Back light LCD
- Number of parameters: 10&11
- Tested items: pH, Nitrite, Specific gravity, Ascorbic Acid, Blood, Glucose, Bilirubin, Urobilinogen, Ketone, Leucocytes, Protein
- Work condition: Environmental Temperature: 15-30°
- Dimensions: 290x200x100mm, Weight 2 kg



NUA -500

- Strong, fast and accurate urine analyzer.
- Ideal for extensive sample laboratory (Automatic continuous test mode 510 samples/hour)
- Measurement Principle: Dual wavelength reflectance photometry
- Wavelength: 4 LED (470nm, 550nm, 620nm, 720nm)
- Throughput: 510 samples/hour
- Memory capacity: 10000 results
- Easy maintenance design for daily cleaning
- High test speed, ideal for extensive sample laboratory
- LCD back light display
- Internal calibration for sensitivity of strips
- Durable and stable cold light source
- Bar code interface, RS 232, USB
- Power supply: 100~240V AC,50/60Hz, 35W~50W
- Dimension: 390mm x 340mm x 290mm

NUA -30



- Point of Care analysis
- Small and compact, accurate urine analyzer.
- Battery operated - suitable for doctors' offices and on field use.

- Measurement Principle: Dual wavelength reflectance method
- Measuring wavelength: 3LED (550, 627,720nm)
- Sample supply: manual dipping
- Reaction time: 60 seconds per test, LCD screen
- Data memory: 100 tests; Output: RS-232C
- Smart design and multifunction, Easy operation
 Accurate & reliable test results
- Flexible parameter configuration: pH, Nitrite, Protein, Special Gravity, Blood, Glucose, Bilirubin, Urobilinogen, Ketone, Leucocytes, Ascorbic Acid, Calcium, Creatinine, Microalbumin
- Dimensions: 124x81x36mm, Weight 200 g

NEOCHECK Urine test strips



HIGH QUALITY, EASY READABLE URINE TEST STRIPS FOR FAST AND RELIABLE QUALITATIVE RESULTS

- Available for manual reading
- Available for use on NUA Urine analyzer series

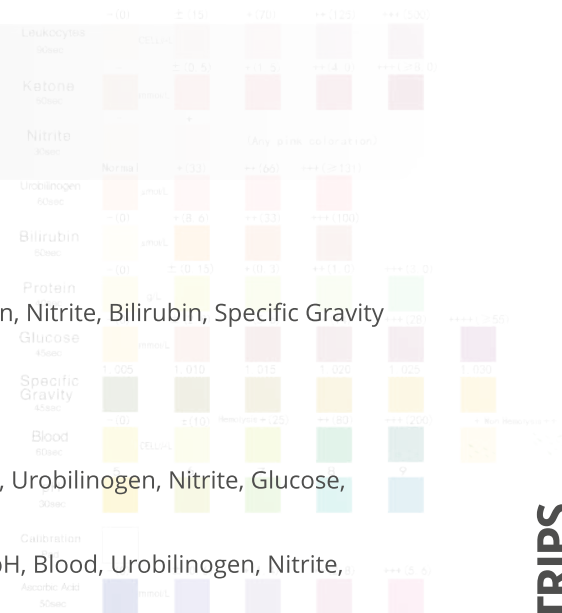
- **NEOCHECK Urine reagent test strips** are used for quick determination of Glucose, Protein, pH, Leukocytes, Nitrites, Ketones, Bilirubin, Blood, Urobilinogen, Specific Gravity and Ascorbic Acid (Vitamin C) levels in urine.
- These are the diagnostic reagent strips used by physicians and laboratories (in clinics and hospitals) to perform initial screening for suspected or existing health conditions.
- Simple to use, NEOCHECK reagent strips provide early indications of developing health problems and identify any potential abnormal functions requiring more extensive testing.
- Additionally, routine use is frequently recommended by physicians for monitoring certain existing and chronic health conditions.

NEOCHECK 12 Urine Test Strips
NEOCHECK 14 Urine Test Strips

NEW

with Microalbumine and Creatinine

- **NEOCHECK 1:** Glucose
- **NEOCHECK 9:** Ketone, Protein, Glucose, pH, Blood, Urobilinogen, Nitrite, Bilirubin, Specific Gravity
- **NEOCHECK 3:** Protein, Glucose, pH
- **NEOCHECK 3A:** Protein, Glucose, pH, Specific Gravity
- **NEOCHECK 5:** Ketone, Protein, Glucose, pH, Blood
- **NEOCHECK 10:** Leukocytes, Ketone, Bilirubin, Protein, pH, Blood, Urobilinogen, Nitrite, Glucose, Specific Gravity
- **NEOCHECK 10A:** Leukocytes, Ketone, Bilirubin, Protein, Glucose, pH, Blood, Urobilinogen, Nitrite, Specific Gravity
- **NEOCHECK 11:** Leukocytes, Ketone, Bilirubin, Protein, Glucose, pH, Blood, Urobilinogen, Nitrite, Specific Gravity, Ascorbic Acid



URINE TEST STRIPS