



MIRA PLUS

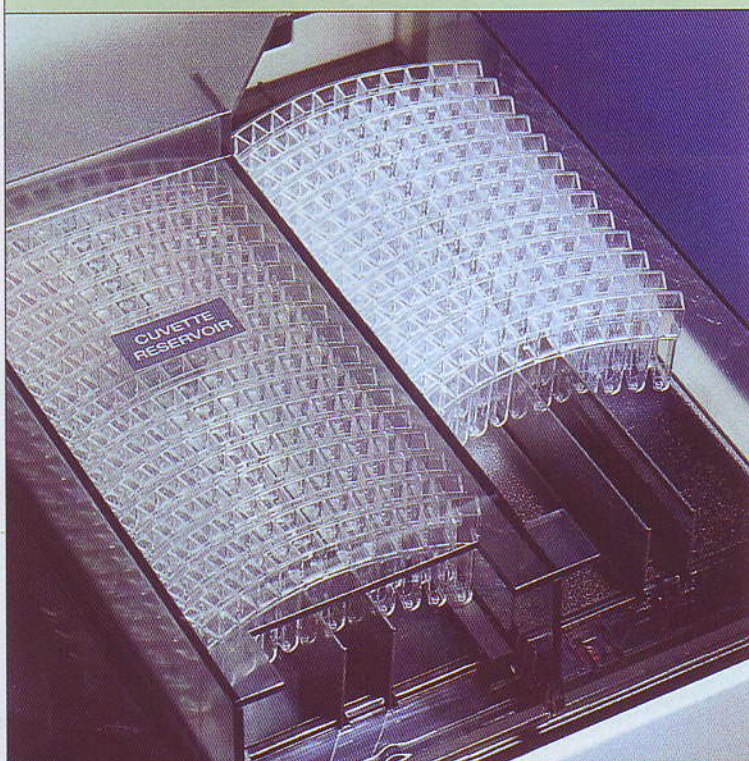
THE MULTI-TALENTED SYSTEM FOR DIAGNOSTIC TESTING



*Combining excellence
in performance
with proven reliability,
MIRA offers unmatched
capabilities for
diagnostic testing
or specific applications*

FLEXIBILITY

- Wide range of applications
- Adaptable sample/reagent rack configuration
- Multiple sample tube acceptance (primary tubes or sealed MIRA sample cups)
- STAT testing at any time
- Host computer connection
- User definable parameters



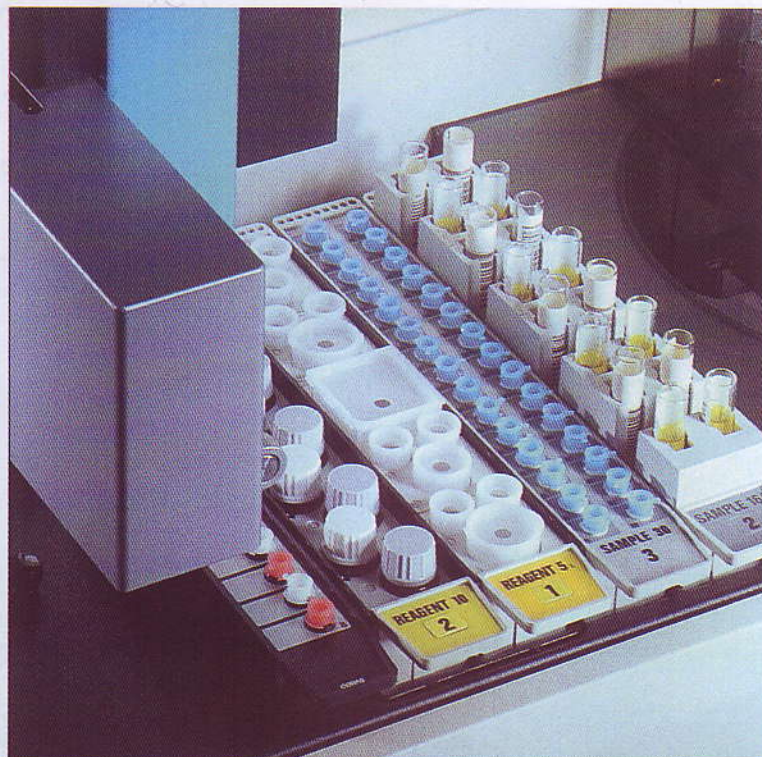
The automatic cuvette changer enables a continuous loading and unloading of the analyser with cuvette segments for more than two hours of uninterrupted operation.

USER FRIENDLINESS

- Fast start up (less than 1 minute)
- Automatic cuvette changer*
- Low reagent costs
- Advanced QC program
- Ease of operation
- Minimum maintenance requirements

Thanks to its flexible sample and reagent handling, MIRA works efficiently in random access or batch mode.

Single key access to the STAT worklist ensures immediate treatment of urgent samples.

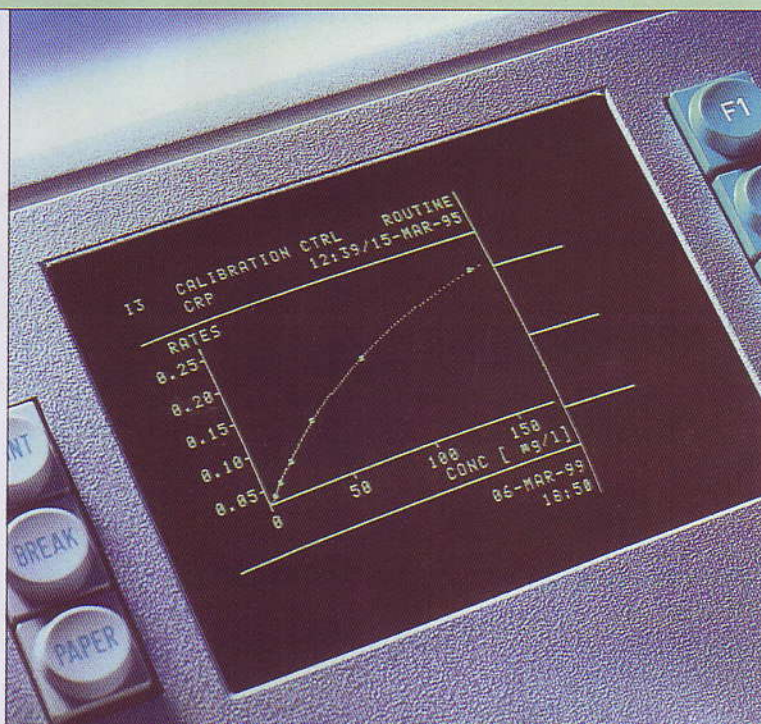


RELIABILITY

- Barcode labelled primary tubes
- Positive patient identification
- Sample level detection and reagent level detection
- Automatic pre and post dilution
- Onboard reagent cooling*
- Extended calibration intervals

* MIRA S PLUS

For non-linear calibration, MIRA offers a choice of five curve-fitting models with up to eight standards. The calibration data is stored and accessible at any time as a display, printout or plot.



COBAS[®] MIRA[®] Plus Reliability

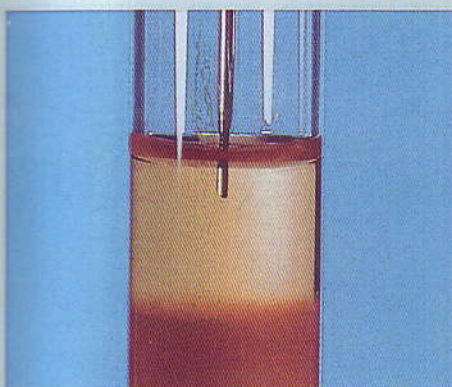
MIRA Plus sets new standards in reliability. It performs consistently and produces dependable results.

Primary tubes and barcode reader

Barcode labelled primary tubes can be placed directly onto MIRA Plus. The barcode reader on the instrument ensures positive patient identification while the direct use of primary tubes eliminates errors through manual pipetting.

Sample level detection

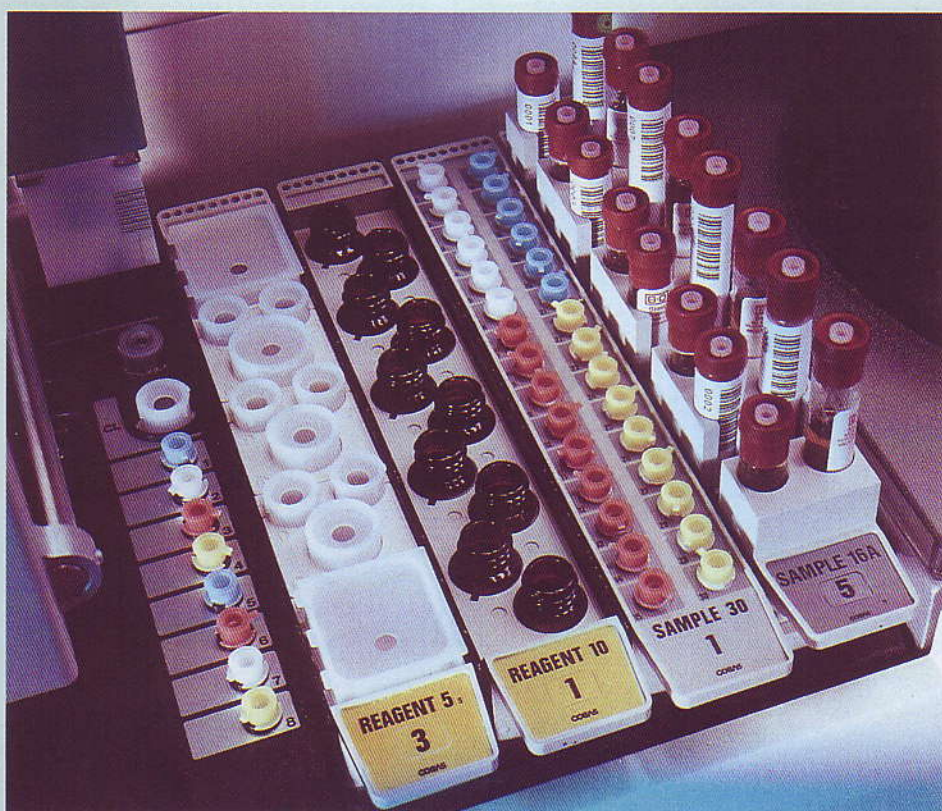
Through a sophisticated system of level detection MIRA Plus ensures reliable sampling – even from closed primary tubes. This leads to a high degree of precision: sampling of blood clots is virtually eliminated.



Optimal positioning of the sample tip

Reagent cooling

MIRA Plus offers on-board reagent cooling to extend reagent stability. This ensures result integrity while reducing calibration frequency and reagent handling.

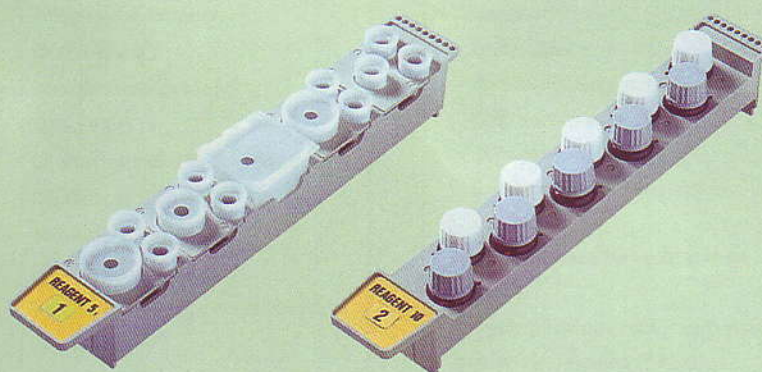


COBAS[®] MIRA Plus.
The Roche response to future standards

THE WIDEST RANGE OF CHEMISTRIES - INCLUDING ENZYMES, SUBSTRATES, SPECIFIC PROTEINS, DIABETES MONITORING, THERAPEUTIC DRUG MONITORING AND DRUGS OF ABUSE TESTING - MAKES THE MIRA IDEAL AS BOTH A BROAD-BASED CLINICAL CHEMISTRY ANALYSER AND A DEDICATED SYSTEM FOR SPECIFIC APPLICATIONS.

CONVENIENT SYSTEM OPERATION WITH MIRA OPTIMISED REAGENTS

- Up to 30 reagents on-board capacity
- Flexible and user definable rack configuration
- Pack-to-rack convenience and ready-to-use reagents
- Extended stability and reduced calibration frequency
- Choice of pack size in accordance with MIRA micro-volume requirements and laboratory workload



ENZYMES & SUBSTRATES

The widest range of reagents and protocols for clinical chemistry in serum, plasma and urine

SPECIFIC PROTEINS

Comprehensive assay menu with automatic standard curve dilution and automatic Antigen excess check

TOXICOLOGY

The reference for drugs of abuse testing & therapeutic drug monitoring

DIABETES CARE

Complete monitoring with HbA1c, Fructosamine, Micro-albumin and Glucose

MIRA PLUS: THE MULTI-TALENTED SYSTEM FOR DIAGNOSTIC TESTING

System principle

- Random access, sample selective analysis

Sample handling

- Primary and secondary tubes with integrated barcode reader (optionally)
- Up to 48 samples onboard (2 to 10 mL tubes) or 90 MIRA sealed cups (700 µL)
- Capacitive level detection.
- Dedicated racks for calibrators and controls
- Sample volume: 2 - 95 µL (in steps of 0.1 µL)
- Automatic pre and post dilution
- Automatic post concentration
- Automatic standard dilution series
Dilution ratio: 1/1.5 - 1/30 000

Capacity

- 104 channels for tests, 26 profiles, 26 ratios
- Substrates, enzymes, therapeutic drug monitoring and drugs of abuse testing in urine, specific proteins, hemostasis, industrial applications
- Up to 30 tests on line (33 with ISE module)
- Onboard reagent cooling; 20 tests (MIRA S Plus)
- Walkaway capacity > 2 hours (MIRA S Plus)
- Analysis rate:
MIRA S Plus: up to 132 tests per hour (215 with ISE)
MIRA Plus: up to 100 tests per hour (180 with ISE)



Reagents

- Reagent containers (4, 10, 15 or 35 mL)
 - Capacitive level detection
 - Up to 4 reagents per chemistry; reagent preheating
 - Onboard reagent cooling (MIRA S Plus)
- Reaction treatment:
 - 72 disposable cuvettes (acrylic plastic)
- Automatic cuvette changer (MIRA S Plus)
 - Cuvette volume: 150 µL - 600 µL
 - Dilution ratio: 1/4 - 1/150
 - Automatic mixing (mechanical + hydraulic)
 - Temperature control: heated air bath (25-40 °C)

Optical system

- Filter photometer, 5 interference filters (340-750 nm), wavelengths accuracy ± 3 nm
- Light source: Xenon flash tube
- Captor: photodiode
- Path length: 0.6 cm
- Linear absorbance range: 0 - 3.5 A
Reproductivity: 0.0005 A - 1 A

System environment

- Dimensions: 73 x 58 x 64 cm (W x D x H)
- Weight: MIRA Plus: 87 Kg
MIRA S Plus: 100 Kg
- Power requirements:
220 V (+ 10/-15 %) - 50 Hz
MIRA Plus: 800 VA
MIRA S Plus: 1000 VA
- Room temperature: 15 - 32 °C
- Relative humidity: maximum 80 % at 32° C
- Compact, bench-top analyser with minimal water volume requirements and easy waste management

Communication

- User oriented multitasking software
- CRT monitor (12 cm)
- Integrated printer: 40 characters/line, 4 800 characters/minute
- Software:
 - Results validation
 - Workflow management
 - Calibration management
 - QC management
 - Raw data, statistics, conversion for a test
 - Mechanical and hydraulic system checks
- Integrated barcode reader for positive sample identification (P.S.I.D.)
- Barcode: code 2 of 5 interleaved, code 2 of 7 Codabar, code 3 of 9

Options

- Rack cooling and automatic cuvette changer: MIRA S Plus
- Electrolyte module: Direct (blood) or indirect (urine) measurement of Na+, K+, Cl-
- Barcode reader (integrated + pen)

