

# Microsemi CRP

Process efficiency in Hematology



# Microsemi CRP

**World exclusive concept for the most precious outcome, the smile of your patient.**



Simultaneous blood analysis + CRP measurement, along with data management

- **CBC+CRP results in 4 minutes (15 tests / hour)**
- **CBC results in 1 minute (55 tests / hour)**
- **Whole blood Micro-sampling**  
**CBC: 10µL / CBC+CRP: 18µL**
- **Cyanide-free reagent**

• **Compact and lightweight**

• **Easy to use and to handle**



## Elegant and convenient

- Incredibly compact for a dual purpose system
- Space saving: can be placed anywhere
- Attractively designed
- Extremely quiet



## Whole blood sampling

- Open tube (1)
- Tube adapters for standard and micro tubes (2)
- Holder cover for secure sampling (3)
- Easy handling

## A smile that comes from Japan

After a successful life in Japan, the Microsemi CRP is coming to you to make you benefit of its unique and exclusive performances.

“emi” refers to easy operation, maintenance free and information intelligence.

Also the phonetic “emi” means “smile” in Japanese, which may be written “笑み” or “えみ”.

The Microsemi CRP is the latest generation of the Micros CRP series that can, from a single and small volume of blood sample (18 µl), provide simultaneously a rapid complete blood cell count with a 3 part-differential analysis and CRP result, in only 4 minutes.

Information gathered from the Microsemi CRP is of great clinical value, especially when used to screen patient samples. The presence of significant inflammation, particularly when caused by bacterial infections, or other treatable inflammatory disease, is readily demonstrated, and the patient can be handled in appropriate manner.

The Microsemi CRP offers more benefits for conditions that require progressive observation, such as infection and inflammation. Indeed, the quality of the results given by the Microsemi CRP is comparable to any larger, more sophisticated laboratory analyser, and can be used as a baseline to monitor the progress of the patients throughout the term of their subsequent therapy.

Since the Microsemi CRP can complete its measurement within a short time frame, accurate treatment can be performed on the spot. Emergency response is greatest especially with children in whom condition such as inflammation and infection can advance quickly and require urgent countermeasures. Measurement is possible immediately after collection of the blood sample, which makes this analyser the best choice for emergency testing situations.

In addition, the Microsemi CRP is extremely easy to operate (no need for a specialized staff), is very robust and requires a minimum amount of maintenance. Also, in consideration of environment, a non-cyanide reagent is used for haemoglobin measurement.

More than 2000 Microsemi CRP are currently successfully used in Japan. They are particularly appreciated for their accuracy, convenience and above all, for the efficient and fast solution they provide to the physicians.

Trust shows with the smile of your patients!



### • Ideal for emergency, paediatrics and near patient testing

### • “Zero maintenance” concept



#### Ideal for small samples

- Capillary and venous blood
- No sample pre-treatment
- CBC mode on whole blood
- CBC+CRP mode on whole blood and serum



#### Ready and easy to use CRP reagent

- All-in-one: 3 reagents in the same cartridge
- Two cartridges per box
- Each cartridge offers 50 tests
- No need to take the cartridge out after use

# Unique and proven technology for your peace of mind

## RBC, PLT, WBC with 3 Part Differential Count

Precise cellular identification through electronic impedance variation method.

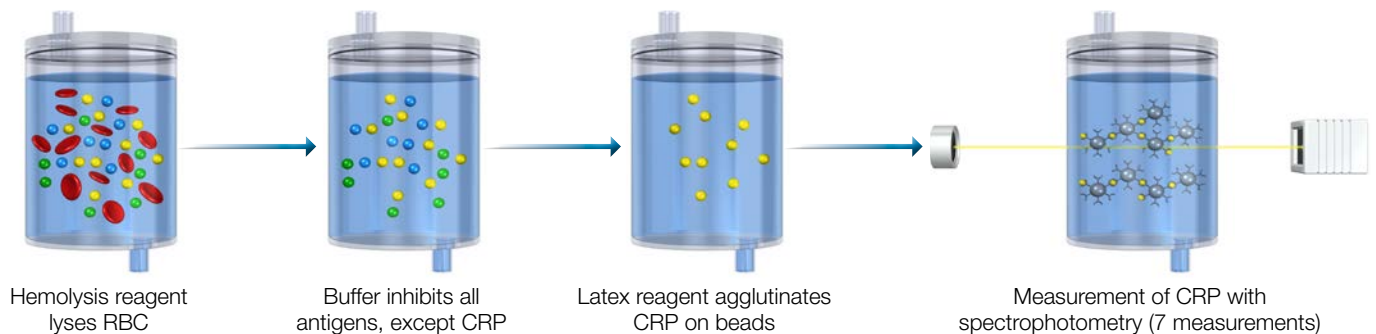
## Haemoglobin measurement

Photometry with ABX Lysebio reagent, a cyanide-free lyse



## CRP measurement

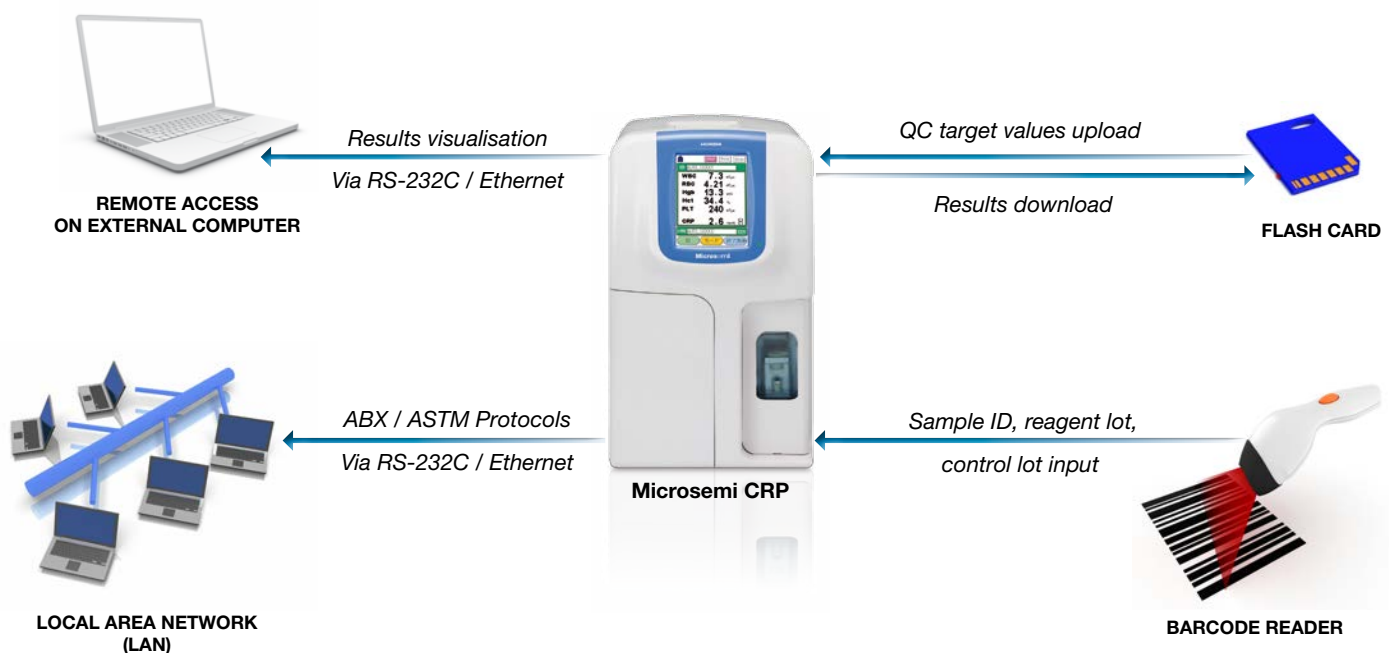
Proven and exclusive immunoturbidimetry technology for rapid and accurate patient diagnosis.



# Flexible network capability

Easy integration into laboratory information system

Perfectly adapted to point of care environment



# Easy and fast access to results

## Data transfer with flash card

- Easy archiving from flash card to PC hard disk
- Patient and QC results archive
- XB and calibration archive
- Upload of QC target values on to the analyser



## Integrated thermal printer

- Full data print-out in one minute
- 19 parameters for CBC and CRP
- WBC, RBC and PLT curves
- No need for ink cartridge

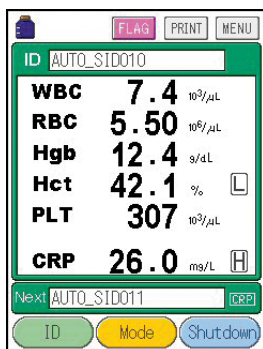


## Colour touch screen

- User-friendly interface
- Virtual keyboard
- 200 patients results stored
- 180 QC results stored



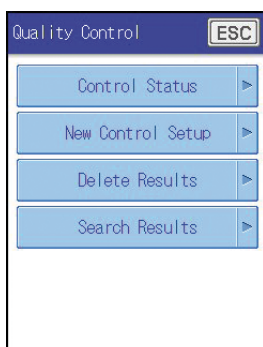
# Comprehensive and efficient data management



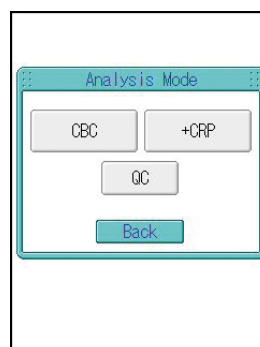
Summary with main parameters clearly displayed.



Reagents management : Lot, expiry date, real-time status for CRP reagent, logs.



QC traceability: Lot, 3 levels, 3\*60 results, Levey-Jennings, XB.



Simple and fast analysis mode selection: CBC or CBC+CRP or QC.





# Microsemi CRP

## Haematology Analyser



### PHYSICAL SPECIFICATIONS

#### Dimensions & weight of the analyser (approximate)

Height	Width	Depth	Weight
430 mm	262 mm	450 mm	19 kg
16.9 in	10.3 in	17.7 in	42 lbs

#### Printer

Built-in thermal printer

#### Throughput

CBC+CRP: 15 tests / hour  
CBC: 55 tests / hour

#### Sound level

< 65 dBA

#### Operating temperature

18°C to 30°C (65°F to 86°F)

#### Relative humidity

25% to 85% (no condensation)

#### Specimen volume

CBC 10 µL

CBC + CRP 18 µL

#### Power requirements

Power supply: 100 V to 240 V  
50 Hz to 60 Hz

Power consumption: 85 VA

#### Reagents

Diluent: ABX Minidil LMG (10L, 20L)  
Lyse: ABX Lysebio (0.4L, 1L)  
Cleaner: ABX Miniclean (1L)  
CRP: CRP Unit 50 (50 tests per cartridge, 2 cartridges per box)

#### Control blood for both CBC and CRP

ABX Minotrol CRP (3 levels)

#### Sampling mode

Open tube  
Two tube adapters (for standard and micro tubes)

#### Sensor

Reagent level, waste level, temperature.

### METHODS

#### Counted / Measured parameters

Abbreviation	Parameters
WBC	White Blood Cells
RBC	Red Blood Cells
HGB	Haemoglobin
HCT	Haematocrit
PLT	Platelets
LYM#	Lymphocytes absolute value
MON#	Monocytes absolute value
GRA#	Granulocytes absolute value
CRP	C-reactive protein

#### Calculated parameters

Abbreviation	Parameters
MCV	Mean Corpuscular Volume
MCH	Mean Corpuscular Haemoglobin
MCHC	Mean Corpuscular Haemoglobin Concentration
RDW	Red blood cells Distribution Width
PDW	Platelets Distribution Width
PCT	Plateletcrit
MPV	Mean Platelet Volume
LYM%	Lymphocytes percentage
MON%	Monocytes percentage
GRA%	Granulocytes percentage

### SOFTWARE SPECIFICATIONS

#### Data Processing

LCD colour touch screen, power indicator.

#### Memory:

- 200 patient results with histogram
- 180 QC result (CBC + CRP)
- 11 CRP calibrations + 11 CBC calibrations

#### Flags:

- Flag description is obtained when pressing the flag key
- Morphology flags are adjustable to accommodate specific populations and/or geographical locations.

#### Compact flash memory (CF):

- Patient and QC results archive
- XB and calibration archive
- Upload of QC target values on to the analyser

Transmission of patient & QC results to LAN (local area network)

Communication protocols: ABX and ASTM

External output: RS-232C and Ethernet

Optional barcode reader

#### Quality control management

- 60 results per level stored (3 levels are available)
- XB graphs: 20 samples are counted as 1 batch with summary calculations for MCV, MCH and MCHC. 60 batches stored.
- Levey-Jennings graphs: visualization of QC results in the order of measurement with repeatability alert.

#### Logs

Reagents, calibration, maintenance, errors, blank cycle.

### PARAMETERS & PERFORMANCE

#### 19 Parameters

Parameters			
CRP			
WBC	LYM# & LYM%	MCHC	
RBC	MON# & MON%	RDW	
HGB	GRA# & GRA%	MPV	
HCT	MCV	PCT*	
PLT	MCH	PDW*	
<b>Linearity</b>			
	Linearity Limits	Visible range	Unit
WBC	0 - 80	0 - 99.9	10 <sup>3</sup> /µL
RBC	0 - 7.5	0 - 10	10 <sup>6</sup> /µL
HGB	0 - 23	0 - 25	g/dL
HCT	0 - 65	0 - 75	%
PLT	0 - 999	0 - 2000	10 <sup>3</sup> /µL
CRP (whole blood)	0 - 200	0 - 230	mg/L
CRP (serum, plasma)	0 - 150	0 - 170	mg/L

#### Precision

	CV%	At
WBC	within 2.5	(7.5 x 10 <sup>9</sup> /µL)
RBC	within 1.5	(4.50 x 10 <sup>6</sup> /µL)
HGB	within 1.5	(13.5 g/dL)
HCT	within 2.0	(35.0 %)
PLT	within 5.0	(250 x 10 <sup>9</sup> /µL)
CRP	within 10.0	(10.0 mg/L)
CRP	within 4.0	(50.0 mg/L)
CRP	within 8.0	(120.0 mg/L)

### CERTIFICATION

CE IVD Directive  
WEEE Directive  
IEC 61326-2-6 : 2005 class B  
IEC 61000-3-2:2006  
IEC 61000-3-3:2005  
IEC 61010-1: Edition 2 or edition 3. Mandatory starting October 2013  
IEC 61010-2-81:2001 + A1:2003  
IEC 61010-2-101:2002

\* **RUO** parameters: **R**esearch **U**se **O**nly parameters

Valid for version CPU 1.00 / CNTmain 1.00 / CNTsub 1.02 / CNTsub2 1.06



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