

## Product Fact Sheet

# XR-2000



### Manufacturer information

Sysmex Corporation

### Summary

XR-2000 is a fully scalable, double-unit stand-alone haematology analyser. The combination of two analysis modules including Rerun & Reflex functionality transforms into a superb solution for basic and extended haematology testing. XR-2000 is most suitable for laboratories with a medium to larger workload or in need to cope with a short TAT at peak times.

Having two modules up and running provides you greater security for daily routines as you always have an integrated backup solution at your disposal. To diversify your system's analytical capabilities, you can equip your XR-2000 with all the available optional applications.

### Workflow automation





- The intelligent built-in reflex functionality of XR-2000 allows streamlining of the workflow and a significant increase in the walk-away time.
- Optimised balance between the processing of routine CBC+DIFF samples and samples in need of speciality testing.
- The two analysis modules of the XR-2000 achieve a high throughput of up to 220 samples/h by simultaneously processing all the samples in the rack.
- Routine operation continues in the one XR module while analysing a STAT sample or manual samples, or even while servicing the other XR module.
- Depending on the analytical applications installed on your XR-2000, the range of rule-based reflex tests can be enlarged and refined.

### Diagnostic support

- By using the XR-Series fluorescence flow cytometry measurement, you can minimise sample interferences. Diagnostic parameters such as nucleated red blood cell (NRBC) and Immature granulocyte (IG) counts are measured as standard.
- Results for advanced clinical parameters are either included in every differential or optionally available within a few minutes, saving precious time and decreasing manual work.
- Besides reticulocyte analysis including RET-He, the optional RET channel application enables measuring platelets by fluorescence flow cytometry, which resolves many interferences that may occur with impedance measurement of platelets.
- The optional PLT-F channel application offers an automated reflex method with a dedicated platelet channel for samples with either very low impedance platelet (PLT-I) counts or measurement interferences. PLT-F resolves most PLT-I interferences since the fluorescence marker specifically labels platelets. This channel also offers measurement of immature platelets IPF% and IPF#.

- In the [WPC] configuration, XR-2000 includes the WPC channel application on one analyser for the analysis of white precursor and pathological blood cells. By detecting white pathological and precursor cells, the WPC channel in combination with the WDF channel helps you separate suspect malignant and suspect atypical cells, which supports the assessment of reactive conditions.
- The optional body fluid analysis application allows quick and automated analysis of various body fluids within minutes, without any time-consuming preparation of the sample or the XR-2000 analyser.

## Configurations

No	Name	Applications	Description
1	XR-2000 XR-10 (B1-B4)		• 2 XR-10 units for CBC+DIFF
			• Optional RET, PLT-F channel and BF mode
2	XR-2000 XR-20 (A1-A2)		• 1 XR-10 and 1 XR-20 unit for CBC+DIFF+RET & WPC, advanced flagging performance and reflex testing
			• Optional PLT-F channel and BF mode

## Ordering information of main components

Item code	Item	Description	Qty
CF730361	XR-10 haematology module	Unit for (reflex) testing for configurations XR-2000 (B1-B4)	1 or 2
BQ559485	XR-20 haematology module	Unit for (reflex) testing incl. WPC for the configuration XR-2000 (A1-A2)	0 or 1
CL380251	Supply parts for XR-2000	XR-2000 supply parts (AP)	1
CM186605	Sampler for XR-2000	SA-20/SA-20 supply parts complete (SA-20)	1
01330061	PU-17	Pneumatic unit	1
BJ161395	Security master for the XR units	Security master (4) complete	1
BP050847	Optional wagon for XR-2000	WG-20 complete (EXP)	1

## Product specifications

Feature	Description
<b>Diagnostic parameters</b>	
• CBC+DIFF	• WBC, WBC-N, WBC-D, RBC, HGB, HCT, MCV, MCH, MCHC, PLT, PLT-I, RDW-SD, RDW-CV, MicroR, MacroR, PDW, MPV, P-LCR, PCT, NRBC#, NRBC%, NEUT#, LYMPH#, MONO#, EO#, BASO#, NEUT%, LYMPH%, MONO%, EO%, BASO%, IG#, IG%, AS-LYMP#*, AS-LYMP%*, RE-LYMP#*, RE-LYMP%*, NEUT-GI*, NEUT-RI*
• RET	• PLT-O, RET#*, RET%*, IRF*, LFR*, MFR*, HFR*, RET-He*, RBC-He*, Delta-He*, HYPO-He*, HYPER-He*
• PLT-F	• PLT-F*, IPF#*, IPF%*
• BF	• WBC-BF*, RBC-BF*, MN#*, MN%*, PMN#*, PMN%*, TC-BF#*
• HPC	• HPC#*, HPC%*

Research parameters			
<ul style="list-style-type: none"><li>CBC+DIFF</li><li>RET</li><li>PLT-F</li><li>BF</li><li>WPC</li></ul>	<ul style="list-style-type: none"><li>TNC, TNC-N, BA-N#, BA-N%, TNC-D, NEUT#&amp;, NEUT%&amp;, LYMPH#&amp;, LYMPH%&amp;, HFLC#, HFLC%, AS-LYMP%L*, RE-LYMP%L*, BA-D#, BA-D%, NE-SSC, NE-SFL, NE-FSC, LY-X, LY-Y, LY-Z, MO-X, MO-Y, MO-Z, NE-WX, NE-WY, NE-WZ, LY-WX, LY-WY, LY-WZ, MO-WX, MO-WY, MO-WZ</li><li>RBC-O*, RET-Y*, RET-RBC-Y*, IRF-Y*, FRC#*, FRC%*, RPI*, RET-UPP*, RET-TNC*, HGB-O*, MCHC-O*, Delta-HGB*</li><li>H-IPF*, PLT-F2*</li><li>HF-BF#*, HF-BF%*, NE-BF#*, NE-BF%*, LY-BF#*, LY-BF%*, MO-BF#*, MO-BF%*, EO-BF#*, EO-BF%*, RBC-BF2*</li><li>WPC-P*, TNC-P*</li></ul>		
Scattergrams & histograms			
<ul style="list-style-type: none"><li>Up to 23 scattergrams in 2D and 3D views and surface plots</li><li>Up to 4 histograms</li></ul>			
Profiles			
XR-10 <ul style="list-style-type: none"><li>Standard</li><li>Optional (depending on the configuration)</li></ul>		XR-20 <ul style="list-style-type: none"><li>Standard</li><li>Optional (depending on the configuration)</li></ul>	
<ul style="list-style-type: none"><li>CBC</li><li>CBC+DIFF</li><li>CBC+RET</li><li>CBC+DIFF+RET</li><li>CBC+DIFF+RET+PLT-F</li><li>CBC+RET+PLT-F</li><li>CBC+PLT-F</li><li>CBC+DIFF+PLT-F</li><li>Body fluid</li></ul>		<ul style="list-style-type: none"><li>CBC</li><li>CBC+DIFF</li><li>CBC+RET</li><li>CBC+DIFF+RET</li><li>CBC+DIFF+WPC</li><li>CBC+DIFF+RET+WPC</li><li>CBC+RET+PLT-F</li><li>CBC+DIFF+RET+PLT-F</li><li>CBC+DIFF+RET+PLT-F+WPC</li><li>CBC+PLT-F</li><li>CBC+DIFF+PLT-F</li><li>CBC+DIFF+WPC+PLT-F</li><li>Body fluid</li><li>HPC</li></ul>	
Technologies		<ul style="list-style-type: none"><li>RBC/PLT: hydrodynamically focused impedance</li><li>HGB: cyanide-free SLS haemoglobin</li><li>DIFF/RET/PLT-F/WPC: fluorescence flow cytometry</li></ul>	
Throughputs <ul style="list-style-type: none"><li>CBC</li><li>CBC+DIFF</li><li>CBC+DIFF+WPC</li><li>CBC+DIFF+RET</li><li>CBC+RET</li><li>CBC+DIFF+WPC+RET</li><li>CBC+PLT-F</li><li>CBC+DIFF+PLT-F</li><li>CBC+DIFF+WPC+PLT-F</li><li>CBC+DIFF+RET+ PLT-F</li><li>CBC+RET+PLT-F</li><li>CBC+DIFF+WPC+RET+PLT-F</li><li>Body fluid analysis</li><li>HPC analysis (CBC+DIFF+RET+PLT-F+WPC)</li></ul>		The values below are for one analyser. An XR-2000 has the processing power of two analysers. <ul style="list-style-type: none"><li>Up to 110 samples/hour</li><li>Up to 110 samples/hour</li><li>Up to 88 samples/hour</li><li>Up to 83 samples/hour</li><li>Up to 83 samples/hour</li><li>Up to 71 samples/hour</li><li>Up to 68 samples/hour</li><li>Up to 68 samples/hour</li><li>Up to 53 samples/hour</li><li>Up to 47 samples/hour</li><li>Up to 47 samples/hour</li><li>Up to 47 samples/hour</li><li>Up to 40 samples/hour (BF mode only)</li><li>Up to 16 samples/hour</li></ul>	
Sampler unit loading capacity		10 racks (100 samples)	
STAT function		Approx. 1 min by using the manual mode in one of the two modules	
Reagent management		<ul style="list-style-type: none"><li>Full traceability</li><li>Uniquely barcoded reagents</li><li>Reagent replacement history</li></ul>	

<b>Data storage</b> <ul style="list-style-type: none"> <li>• Analysis registration function</li> <li>• Samples (incl. graphics)</li> <li>• Patient information</li> <li>• Wards registered</li> <li>• Doctor names registered</li> <li>• Quality control files</li> <li>• Reagent replacement history</li> <li>• Maintenance history</li> </ul>	<ul style="list-style-type: none"> <li>• 2,000 records</li> <li>• 100,000 results (including histograms and scattergrams)</li> <li>• 10,000 records</li> <li>• 200 wards</li> <li>• 200 names</li> <li>• 99 files</li> <li>300 plots x 94 files (L-J control)</li> <li>300 plots x 5 files (XbarM control)</li> <li>• 5,000 records</li> <li>• 5,000 records</li> </ul>
<b>QC functions</b> <ul style="list-style-type: none"> <li>• Xbar and or L-J</li> <li>• Xbar M</li> </ul>	<ul style="list-style-type: none"> <li>• 300 plots x 94 files (L-J control)</li> <li>• 300 plots x 5 files (XbarM control)</li> </ul>
<b>Interface</b>	LP, DP, GP, host computer via LAN

\* The availability of these functions depends on your system configuration.

## Technical specifications

Feature	Description
<b>Operating temperature</b>	• 15 to 30 °C
<b>Operating humidity</b>	• 20 to 85 %
<b>Power supply</b> <ul style="list-style-type: none"> <li>• Main unit</li> <li>• Sampler</li> <li>• Pneumatic unit</li> </ul>	<ul style="list-style-type: none"> <li>• AC 100 to 240 V (50/60 Hz)</li> <li>• AC 100 to 240 V (50/60 Hz)</li> <li>• AC 100 to 117 V (50/60 Hz)</li> <li>• AC 220 to 240 V (50/60 Hz)</li> </ul>
<b>Power consumption</b> <ul style="list-style-type: none"> <li>• Main unit</li> <li>• Sampler</li> <li>• Pneumatic unit</li> </ul>	<ul style="list-style-type: none"> <li>• 270 VA or less</li> <li>• 110 VA</li> <li>• 50 Hz: 230 VA or less (100-117 V), 220 VA or less (220-240 V)</li> <li>• 60 Hz: 280 VA or less (100-117 V), 250 VA or less (220-240 V)</li> </ul>
<b>Noise level</b>	60 dBA or less
<b>Dimension</b> Main unit (including the sampler) Pneumatic unit	<ul style="list-style-type: none"> <li>• 960 x 880 x 855 mm (W x D x H)</li> <li>• 280 x 355 x 400 mm (W x D x H)</li> </ul>
<b>Weight</b> Main unit (incl. sampler unit) Pneumatic unit	<ul style="list-style-type: none"> <li>• Approx. 143 kg (2 x XR-10/XR-20 + docking base + SA-20)</li> <li>• Approx. 17 kg</li> </ul>

**Disclaimer:** This product fact sheet does not contain the complete information of the product as described in the 'Instructions for Use', and neither is it intended to replace the 'Instruction for Use'. The required information in the 'Instruction for Use' must be observed at all times.

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