XT-4000i
Adding value
to health
Technologies

- fluorescence flow cytometry:
  WBC extended DIFF, RET-Hb, IRF, PLT-O
- dedicated body fluid mode
- DC sheath flow: PLT, RBC, HCT
- SLS method: HGB

Diagnostic parameters (whole blood mode)

- WBC, RBC, HGB, HCT, MCV, MCH, MCHC, PLT, IG (%), NEUT (%), LYMPH (%), MONO (%), EO (%), BASO (%), RDW-SD, RDW-CV, MPV, P-LCR, PDW, PCT, RET-Hb, RET (%), LFR, MFR, HFR, IRF, PLT-O

Diagnostic parameters (body fluid mode)

- WBC-BF, RBC-BF

Linearity (whole blood mode)

- WBC: 0–440.0 x 10^9/L
- RBC: 0–8.00 x 10^12/L
- HGB: 0–25.0 g/dL (15.5 mmol/L)
- HCT: 0–60.0 % (0.6 L/L)
- PLT: 0–5000 x 10^9/L
- RET: 0–23.0 % and 0–0.72 x 10^11/L

Histograms

- RBC cell size distribution,
- PLT cell size distribution

Scattergrams

- WBC differential channel scattergram,
- WBC/BASO channel scattergram,
- RET channel scattergram,
- PLT-O scattergram

Throughput

- 100 samples/h (max.) auto mode
- body fluids: 30 samples/h (max.) manual mode

Sample volume

- 85µL/150µL (open/closed mode)
- 40µL for capillary mode

Data storage (IPU)

- 10,000 samples incl. graphics
- 5,000 patients/1,000 orders

Quality control

- 20 QC files, 300 data points, 42 parameters
- 1 XbarM file, 46 parameters
- optional: daily external QC

Interfaces

- LIS, line printer (serial)
- graphic printer (parallel)
- network (gigabit Ethernet)
- surr (sysmex Universal Interface)
- USB, memory drive

Configurations

- stand-alone or twin

Dimensions/weights

- 530x630x720x59 (main unit incl. sampler)
- 280x400x355x17 (pneumatic unit)
- 337x100x378x8.5 (IPU: information-processing unit)

Reportable research parameters (for laboratory use only)

- high-fluorescence lymphocyte count (HFLC) (%), #)
- fragmented red blood cells (FRC) (%)
- red blood cell haemoglobin equivalent (RBC-Hb) (pg)
- delta haemoglobin equivalent (DELTA-Hb) (pg)
- reticulocyte production index (RPI)
- eosinophil count in body fluids (EO-BF) (%), #)

SYSMEX X-CLASS expert instrument

- same technology as the XE-5000 ensuring the same quality of results and consistency in diagnostic interpretation
- focus on extended diagnostic capabilities improving the service delivery to the patient

Dedicated body fluid mode

- rapid automated analysis directly from the sample tube eliminates manual processing and the need for qualified interpretation
- standardised analysis removes the variability of manual methodology
- measures a considerable range of body fluids of human origin: CSF, synovial fluid, and others
- supports diagnostic interpretation by differentiating mononuclear and polymorphonuclear leukocytes
- outstanding performance even at low concentrations

Extended WBC diagnostic capabilities

- reliable and reproducible IG count reduces the need for blood smears while improving the detection and monitoring of inflammation and infection
- quantification of activated B-lymphocytes in certain clinical conditions

Extended diagnostic capabilities for RBC and PLT

- information on erythropoietic activity (IRF) and effectiveness (RET-Hb) to aid diagnostics and therapeutic measures
- optimised platelet counts excellently correlated to the reference method rendering manual counting unnecessary in difficult samples

Design and specifications may be subject to change due to further product development.