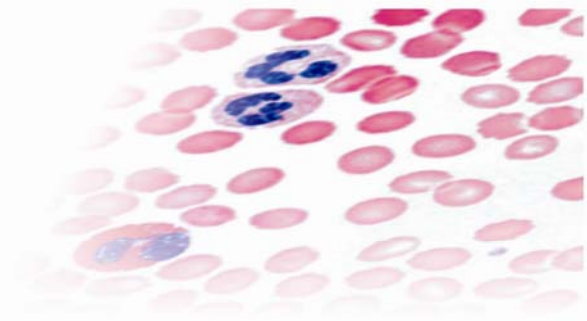


Orion 30

Hematology Analyzer



... Compact Powerhouse



- ❑ 3 Part Differential with 20 parameters with colored histograms
- ❑ Pre-Diluted Mode for analysis of Pediatric samples.
- ❑ Double convolution technology for better accuracy of PLT measurement
- ❑ Auto probe washing (internal and external) for repeated performance.
- ❑ Recoil Flush technology.
- ❑ Float discriminator for manual calibration of the analyzer
- ❑ Upto 12000 sample results in memory along with histograms.
- ❑ Provisions to enter demographical details like Patient Name, Age, Gender, Blood Group, Case History, Bed No., Patient ID, Operator ID, Department

Orion 30
Hematology Analyzer

Ocean
medical technologies

...because life is precious

Quality Control

- Extensive Quality Control Menu with L-J graph.
- Error alarms for Histogram abnormalities, bubble and clog in transducers, out of linearity, low and high results.
- Interactive Help menu for detailed guidance to the user.

Technical Specifications

Principle:

Electrical Impedance for counting and SFT method for Hemoglobin.

Parameters:

3 Part Differential with 20 parameters (WBC, LYM, MID, GRAN, LYM%, MID%, GRAN%, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-SD, RDW-CV, PLT, MPV, PDW, PCT, P-LCR).

Display:

8.4" color LCD display with 640x480 dots resolution.

Printout:

In-built thermal printer. Option to attach external printer. Eight reporting formats.

Sample Vol.:

Venous Mode - 9.6 μ l Capillary Mode - 9.6 μ l Pre-diluted Mode - 20 μ l

Measurement:

Transducers with 80 μ m aperture for measuring WBC, RBC and Platelets.

Throughput:

30 test/hr. Sleep mode for idle time.

Result Memory:

Up to 12000 sample results along with histograms can be stored.

Quality Control:

Extensive Q.C menu with facility to have L-J graph, Mean, S.D and CV.

Calibration:

Stable factory calibration. Manual calibration feature provided for user.

Performance:

Parameter	Repeatability (CV%)	Linearity Range
WBC	$\leq 2.5\%$ (7.0 - 15.0)	0.01 - 99.9 $\times 10^3/\mu$ L
RBC	$\leq 2.0\%$ (3.5 - 6.0)	0.01 - 9.99 $\times 10^6/\mu$ L
PLT	$\leq 5.0\%$ (200 - 500)	1 - 999 $\times 10^3/\mu$ L
HGB	$\leq 1.5\%$ (110 - 180)	1 - 30 g/dL
MCV	$\leq 0.4\%$ (80 - 110)	40 - 150 fL

Cross Contamination:

WBC, RBC & HGB : <0.5%; PLT <1%

Interface:

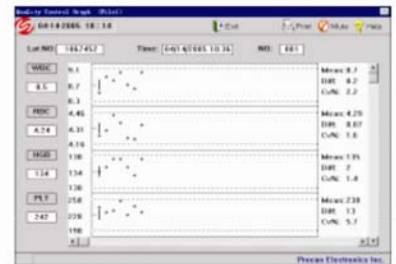
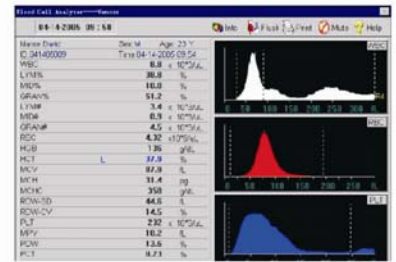
1 Parallel Port, 2 USB Ports, 2 PS2, 2 RS-232 and 1 VGA interface.

Working Environment:

Temperature : 15 $^{\circ}$ C – 35 $^{\circ}$ C Humidity: 30 % - 85%

Power Requirements:

AC 100-240V, 50/60 Hz.



The screenshot shows the Manual Calibration dialog box. It allows the user to set calibration parameters for WBC, RBC, HGB, MCV, and PCT. The parameters are set to 01-01-2000 and 100.0.

Parameter	TIME	CAL PQ
WBC	01-01-2000	100.0
RBC	01-01-2000	100.0
HGB	01-01-2000	100.0
MCV	01-01-2000	100.0
PCT	01-01-2000	100.0

The screenshot shows the Installation Guide document. It provides instructions for installing the software and using the device.

Chapter 1 Operation Guide

1. PREINSTALLATION CHECKS

- 1.1 Check for the availability of power connector, waste sensor cable, the connector of keyboard, mouse and printer (optional).
- 1.2 Check for the availability of the tube of the diluent, clean, dry and waste, confirm all the indicator count is correct.
- 1.3 Check for the availability of the tube of the diluent, clean, dry and waste, confirm all the indicator count is correct.
- 1.4 Clean all the tube in a neutral condition, without distortion.
- 1.5 Check for the availability of the host and printer power socket, switch on the socket.

2. START THE INSTRUMENT

- 2.1 Turn on the power of printer (optional), then turn on the power of host.
- 2.2 Wait for 2 minutes for the instrument startup and check network, then the system would display the main window when it has into ready status.

3. SAMPLE ANALYSIS

- 3.1 Background test
- 3.2 After the background starts, must carry on a background test before testing the blood sample, the result of background test would be as follows:

HEALTHY REQUEST OF (HEALTHY) TEST

TEST RESULT

WBC: 0.0 - 10³/ μ L