

Coulter Ac-T diff Hematology Analyzer



OVERVIEW

Ac-T diff is an affordable, compact system that features the power of Beckman Coulter's proven histogram differential technology. Ideal for labs performing up to 50 CBCs a day, the Ac-T diff is a popular choice for the low-volume needs of today's physician office labs and smaller laboratories.

FEATURES

- One step sample processing with touch screen user interface
- Automated probe wipe safely cleans the probe
- Small 12 μ L sample size permits whole blood analysis from both venous and capillary collections
- Compact design lets you put the Ac-T diff anywhere
- Results available in less than 60 seconds
- Zero routine maintenance requirements and high system reliability help contain costs
- Efficient data management with patient and control storage
- Optional veterinary software
- Automated ease for all operators
- Touch screen, user-friendly interface
- Language-independent icons
- One-step sample processing for fast, easy analysis
- Automated probe wipe provides safe probe cleaning
- Fully automated startup and shutdown
- No routine maintenance, the system is ready when you are
- Alternate between whole blood and prediluted samples with the touch of a button
- Small 12 μ L sample size allows analysis from venous or capillary blood collections
- Two reagent packaging configurations to meet your laboratory's workload needs
- Simple system design for maximum uptime
- Complete reagent system with market-specific quality control products developed for maximum performance
- Authentic COULTER technology: Triplicate counting, proven COULTER histogram differential, patented sweepflow technology and extended platelet counting provide accurate results
- Results available in less than 60 seconds
- The ultimate value, offering optimum balance between cost and features for real benefits
- Minimal routine maintenance requirements and high systems reliability help contain costs
- Small, tabletop design is ideal for laboratories where space is at a premium

Contact Us for More Information:

- info@techneal.com
- 909-465-6325
- www.techneal.com



Coulter Ac-T diff Specifications

Methods and Technologies

- Coulter Principle: counting and sizing
- Triplicate counting
- Extended platelet counting
- Cyanmethemoglobin

18 Available Parameters

WBC RDW
RBC MPV
HGB LY%
HCT LY#
MCV MO%
MCH MO#
MCHC GR%
PLT GR#
PCT* PDW*

Printed WBC, RBC, PLT Histograms

Sample Analysis Characteristics

- 12 μL whole blood
- 20 μL predilute, with onboard diluent dispense
- Automatic probe wipe
- Patient ID with autonumbering
- Single button operation
- User-definable patient sample flagging limits

Linearity

When tested using a stable sample having no interfering substances.

Parameter Linearity Range Difference

WBC 0.0 – 99.9 x 10³ cells/ μL ± 0.3 or $\pm 5.0\%$
RBC 0.0 – 7.00 x 10⁶ cells/ μL ± 0.05 or $\pm 5.0\%$
HGB 0.0 – 25.0 g/dL ± 0.2 or $\pm 3.0\%$
PLT 0.0 – 999 x 10³ cells/ μL ± 10 or $\pm 10.0\%$
(whichever is greater)

Precision

Imprecision is based on 31 replicate determinations of the same sample.

Parameter Range % CV/SD

WBC 6.0 – 15.0 x 10³ cells/ μL ≤ 3.0
RBC 3.00 – 6.00 x 10⁶ cells/ μL ≤ 3.0
HGB 12.0 – 18.0 g/dL ≤ 2.0
MCV 80.0 – 100.0 fL ≤ 3.0
PLT 200 – 500 x 10³ cells/ μL ≤ 7.0
MPV 5.0 – 20.0 fL ≤ 3.0
RDW 12.0 – 15.0% ≤ 3.0

LY 20 – 50% ≤ 1.5 (S.D.)

MO 2.0 – 10.0% ≤ 1.5 (S.D.)

GR 30.0 – 70.0% ≤ 3.0 (S.D.)

Background Counts

Parameter Units Count

WBC x 10³ cells/ μL ≤ 0.4

RBC x 10⁶ cells/ μL ≤ 0.04

HGB g/dL ≤ 0.2

PLT x 10³ cells/ μL ≤ 7.0

Carryover

High to low carryover is less than or equal to 2%

Printers

- Dot matrix graphics printer
- Single ticket printer
- Bubble jet printer

User Interface

- Touch screen
- Language-independent icons
- Single screen display of all results
- One button sample aspiration

Host Communication

RS232 with ASTM standards

Analyzer Dimensions/Weight

Height: 16.5 in (42 cm)

Width: 15 in (38 cm)

Depth: 15.4 in (39 cm)

Weight: 30 lb (14 kg)

Power Requirements

Power Input

100 V + 10% 50/60 Hz

120 V + 10% 50/60 Hz

220 V + 10% 50/60 Hz

240 V + 10% 50/60 Hz

Consumption Installation

Less than 120 W Category II

Throughput

- Minimum of 50 samples/hour
- Results in less than 60 seconds

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