



H18
light

A Windows® Modern, And Reliable Solution For Any Small And Mid-Size Laboratory! 20 Different Parameters In 60 Seconds



Low consumption reagents

Quality controls integrated

QC on blood samples

60 samples/hour

9.6 μ l sample volume

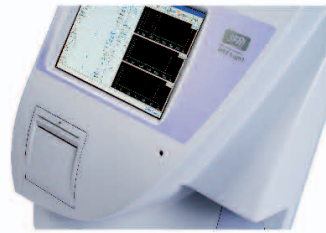
Windows® interface

8" LCD display

Built-in thermal printer

External keyboard & mouse included

H18 light



Specifications

Indicators	20 parameters and 3 color histograms Alarm indication with real-time display Indicator light Sound alarm	
Built-in Recorder	Rapid thermal recorder Recording width 48.0 mm Paper width 57.5 mm	
Sockets	1 Electrical input 1 Print socket 1 VGA monitor 1 RS-232 serial port 2 USB ports 1 PS/2	
Accuracy Specifications	Parameters	Accuracy CV%
	WBC	2.5%
	RBC	2.5%
	HGB	2.0%
	MCV	1.0%
	PLT	6.0%
Linearity Range	Parameters	Linearity
	WBC	0-99.9x10 ⁹ /L
	RBC	0-99.9x10 ¹² /L
	HGB	0-300 g/L
	MCV	40-150 f/L
	PLT	0-99x10 ⁹ /L
Quality Controls	9 Files Levey Jennings Charts Calculation of Mean, SD, CV	
Throughput	60 tests per hour	
Detection Principle	Blood cell count: Electrical resistance detection Hemoglobin: Cyanmethemoglobin optical detection	
Measured parameters	WBC, RBC, HGB, PLT, MCV & MPV	
Parameters given by histograms	Lym%, Mid%, Gran%, RDW-SD, RDW CV, PDW% & P-LCR%	
Calculated parameters	Lym%, Mid%, Gran%, HCT, MCH, MCHC & PCT%	

Sample Volume	Venous mode 9.6uL Capillary mode 9.6uL Pre-diluted mode 20.0uL
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Reagent Consumption by test	Diluent 20.0 mL Lyse 0.3 mL Detergent 1.7 mL
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Software & Interface

Display	Large 8" LCD screen 640mm x 480mm with High resolution color display
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Software	Windows®
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Printer	Built-in thermal printer
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Data	20 000 results
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Units	Selectable
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Range	8 patient normal ranges
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Operating Conditions

Temperature	18° C - 35° C
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Humidity	<70%
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Power input	220 (+1.0%); AC 50 +1Hz
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Power consumption	150VA max
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Voltage	110-230 VAC; 50/60Hz
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Fuse	AC 250V 2A
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Atmospheric pressure	86.0 kPa – 106.0 kPa
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Dimensions	43 x 33 x 38 cm (L x W x H)
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Weight	23 Kg
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Specifications subject to change without notification – non contractual pictures





COUNTENDER

80+

5 Part Differential
Blood Cell Counter



Features that rival any competitor!

The COUNTENDER 80 + is a must for all mid size labs !

The best CV's on the market !

The Best Five Part Differential Blood Cell Counter For Eosinophils And Platelets

SFRI COUNTENDER 80+ is a five part differential blood cell counter designed for the most demanding clinical laboratories. SFRI Countender 80+ provides the most accurate and consistent results on the market using a patented laser scatter technology for optimum differentiation of white blood cells.

SFRI COUNTENDER 80 + addresses the most demanding lab expectations regarding

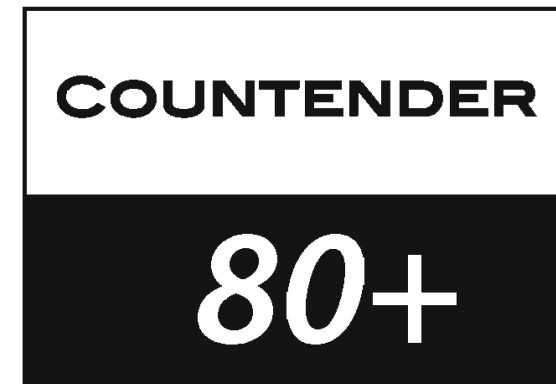
Results accuracy

Results repeatability

Working through put (80 tests per hour)

Instrument handling : COUNTENDER 80 + is really very easy to use and very user friendly

Design : SFRI continuously pays attention to its design instrument range



Patented Laser Scatter technology

4 dimension optical scattering for WBC differential

Morphological analysis of leucocytes

Impedance technology for counting (WBC, RBC and PLT) and sizing (PLT and RBC)

The PLT/RBC channel features the patented "Von Behrens" silencer that eliminates RBC recirculation which interferes with low counts in conventional aperture designs

22 Parameters

80 tests/hour

High Accuracy Results

Laser Scatter Technology

Parameters	Accuracy	Linearity
WBC	< 1.5% @ 8,000/ μ L	0.1 to 99.9 103/ μ L \pm 0.2 or \pm 2%
RBC	< 1.0% @ 5,000,000/ μ L	0.02 to 9.99 106/ μ L \pm 0.05 or \pm 2%
HGB	< 1.0% @ 8,000/ μ L	0.0 to 30 g/dl \pm 0.2 or \pm 2%
MCV	< 1.0% @ 90 fL	40 to 150 fL \pm 0.2 or \pm 2%
PLTS	< 3.0% @ 250,000/ μ L	10 to 2000 103/ μ L \pm 10 or \pm 5%

Bar code reading and auto sampling provided (optional)
 For greater patient safety (positive patient identification) and hassle free routine workloads for lab technicians, the bar code reading – together with the auto sampling process – allows for optimum time saving, daily efficiency and walk away operations.

The Reading Process
 The reading of blood cells is processed through an outstanding multi-angle optical scattering technology, enabling optimum differentiation and identification of abnormal samples.

Dilution System
 The high precision ceramic shear valve, computer controlled diluent dispenser and automatic rinse inside/outside the sample probe, prevents carryover and reduces the risk of transmission of bloodborne pathogens to operators.

Technology

Impedance for WBC, RBC & Plts counting and sizing
LASER flow cytometry for WBC differentiation
Optical absorbance for haemoglobin

Specifications

Parameters	22 Parameters WBC, lym %&#, Mon %&#, Neutro %&#, Eosino %&#, Baso %&#. RBC, HGB, HCT, MCV, MCH, MCHC, RDW, PLTS, MPV, PCT, PDW
Throughput	80 tests per hour
Reagents	All reagents are barcoded (codes to be inserted manually or via bar code reader)

Type	Packaging
Diluent	20 L
Lyse	0.5 L
Enzymatic cleaner	10 L
Leucoprotective sheath	10 L

Controls 3 levels: Low, Normal, High

Quality Control	Assay files : 12 lots, 3 levels each Printed log of QC data with automatic calculation of mean, SD, CV Monthly Levey Jennings plot of QC data, X-B, Bull's moving average, Westgard rules Diagnostic alerts to assist operator Maintenance log Errors log
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Standards	CE IVD 98/79 IEC 61010-1
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Sample volumes	Direct mode 180 µl Auto sampler 180 µl Sample saver 80 µl
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Software & Interface

Patient identification	PID 12 digits, name, first name, sex, Date of Birth, comments
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Workstation	Microsoft Windows XP® Monitor Keyboard, mouse, lightpen Optional bar code reader Two RS 232 serial ports and one parallel printer port
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Large Storage Capacity	User selectable report format Automatic or manual calibration Selectable units / MKS, SI, SI modified
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Patient data storage	100 000 results with scattergrams and histograms
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Patient normal range	8 sets, user modified
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Patient action limits	User defined
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Multilanguage capability	
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Operating conditions

Temperature	15° C - 32° C
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Humidity	10 – 90 %
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Voltage	90-250 VAC, 47-63 Hertz
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Dimensions	42 cm x 58 cm x 50 cm (LxWxH)
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Weight	32.5 Kg
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ESR
3000

A modern, easy to use, low cost analyzer that allows high accuracy sample analyses with random access



Easy to use sample processing

High accuracy results

Low cost per test

30min/60min measuring modes
(or 1h/2h in Westergren method)

Sample analysis at any time with random access

Excellent correlation with
Modified Westergren method

Throughput : up to 60 samples per hour

200 results in memory

Auto correction to 18°C

Built-in thermal printer

Technology

Reading principle Photometric infra-red reading principle,

Blood At intervals, the machine records the surface of separation between the plasma and the red blood cells, giving accurate positions

Specifications

Interval Reading Reading time selection 30 minutes or 60 minutes

Accuracy rate < 0.2 mm

Temperature accuracy < 0.3° C

Reproducibilit < 3% ; +/- 2 mm / H

Blood volume < 1.6 ml

Capacity 30 samples processed simultaneously with random access
ESR results could be automatically adjusted to 18° C
Results not affected by high concentrations of bilirubin and lipids

Software & Interface

Printer Built-in thermal printer with automatic print-out of sedimentation rate and the kinetic curve of sedimentation

User interface Large LCD touch screen dimensions 240mm x 128mm

Result Storage 200 samples in memort available at any time

Interface Possibility to connect with host computer ia RS 232

Operating Conditions

Temperature 10° C - 40° C

Humidity < 85%

Voltage AC 220 V +/- 10%

Frequency 50/60 Hz

Consumption 50 W

Dimensions 40 cm x 30 cm x 18 cm (L x W x H)

Weight 10 Kg

