

## Technical Specifications:

<p><b>Principles</b> Impedance method for RBC and PLT counting Cyanide free reagent for hemoglobin test Hydrodynamic Focussing + LED scatter for WBC differential analysis and WBC counting</p>	<p><b>Parameters</b> 25 reportable parameters: WBC, Lym%, Mon%, Neu%, Bas%, Eos%, Lym#, Mon#, Neu#, Eos#, Bas#, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, MPV, PDW, PCT, P-LCR, P-LCC.</p> <p>4 Research parameters include IMM%, IMM#, ALY%, ALY#</p> <p>3 histograms for WBC, RBC and PLT, 1 scattergram for 5 Part differential</p>						
<p><b>Reagent</b> Routine: Diluent, lyse, Cleaner Maintenance: Bleach</p>	<p><b>Sample Volume</b></p> <table border="0"> <tr> <td>Whole Blood (WB)</td> <td>15.6 µL</td> </tr> <tr> <td>Capillary (CAP)</td> <td>15.6 µL</td> </tr> <tr> <td>Pre-diluted (PD)</td> <td>20.0 µL</td> </tr> </table>	Whole Blood (WB)	15.6 µL	Capillary (CAP)	15.6 µL	Pre-diluted (PD)	20.0 µL
Whole Blood (WB)	15.6 µL						
Capillary (CAP)	15.6 µL						
Pre-diluted (PD)	20.0 µL						
<p><b>Display</b> 8.4 inch TFT Touch Screen</p>	<p><b>Throughput</b> 60 samples per hour</p>						
<p><b>Data Storage Capacity</b> Up to 35,000 results including numeric and graphical information, 12 QC files (100 data per file)</p>	<p><b>Communication</b> LAN Port supports HL7 protocol</p>						
<p><b>Input device</b> Built-in virtual keyboard, external barcode reader</p>	<p><b>Interface</b> 5 *USB, LAN, COM Support bi-directional LIS</p>						
<p><b>Printout</b> External printer / Inkjet printer</p>	<p><b>Operating Environment</b> Temperature: 18°C~32°C Air pressure: 70kPa~106kPa Humidity: ≤80%</p>						
<p><b>Power requirement</b> 100V-240V, 50Hz/60Hz</p>	<p><b>Dimension and Weight</b> 406mm(D)*275mm(W)*430mm(H), 15kg</p>						

ACCURATE | RELIABLE | CONSISTENT

# PCE - 525

5 PART HEMATOLOGY ANALYZER



- Efficient irrespective of workload
- Low cost per test
- Simple user interface

CE

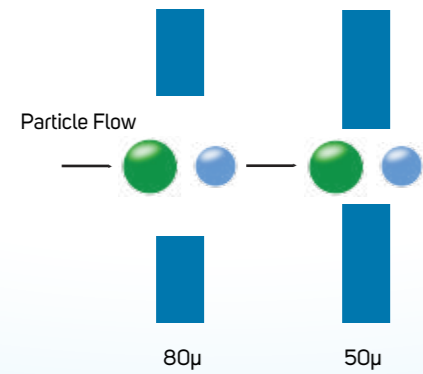


ERMA INC.  
Yushima 2-31-6,  
Bunkyo-ku,  
Tokyo, Japan

Tel. : 81-3-3818-6281  
Fax. : 81-3-3818-6934  
Email : international@erma.co.jp  
Web : www.erma.jp

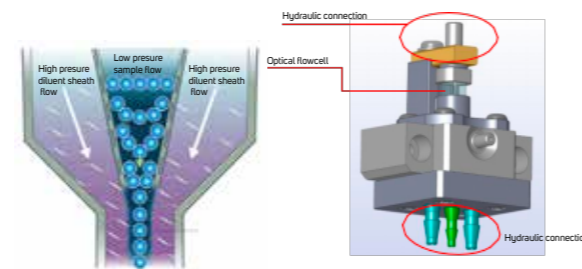
\*Specifications are subject to change without notice.

### Accurate platelet counting



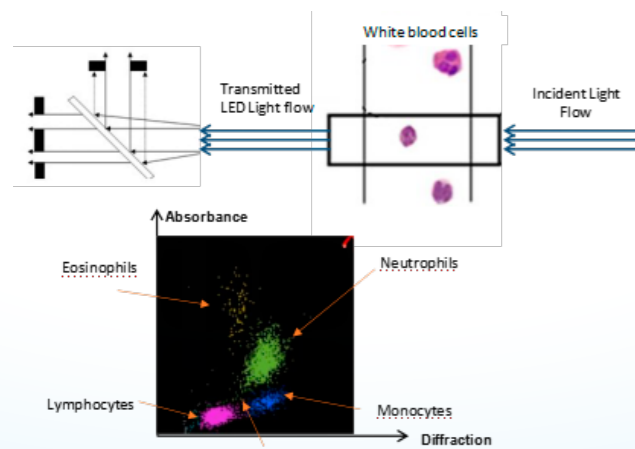
- RBC/PLT/WBC Counting by impedance measurements
- Smaller aperture of 50 microns leads to more sensitive & accurate measurement of platelets
- 80 microns aperture for WBC helps in proper segregation of cells

### Sheath flow technology



Combination of Hydrodynamic focussing & Electric impedance for accurate WBC counting

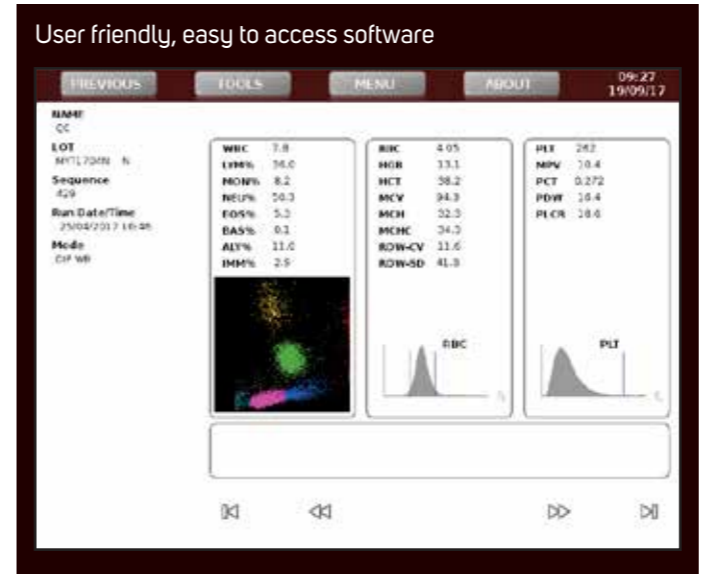
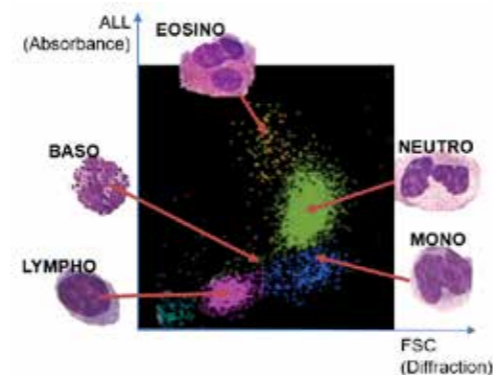
### Super blue LED



When super blue LED light is focussed on each cell entering into optical detection area, following measurements are performed  
 FSC ( forward light scatter ) → Cell volume ( Plotted on X axis )  
 A L L ( Axial light losses ) → Complexity of intracellular content ( Plotted on Y axis )

Super blue LED along with dynamic cluster separation algorithm leads to better differentiation of Eosinophilia samples as compared to existing laser technology.

### Scattergram



- Comprehensive analysis of results displayed in the form of scattergram and histograms
- Detailed description of flags and system alerts on screen if needed
- 'Zoom' in option available for better viewing of scattergram and histograms

Precision		
Measurement	Ranges Tested	Repeatability Limits Whole blood (%CV)
WBC (10 <sup>3</sup> /µL)	>6.0	< 2.5
RBC (10 <sup>6</sup> /µL)	>3.5	< 2.0
HGB (g/dL)	>11	< 1.5
MCV (fL)	>80	< 1.0
HCT (%)	>35	< 2.0
RDW-CV	>12	< 4.0
RDW-SD	>40	< 4.0
PLT(10 <sup>3</sup> /µL)	>200	<5.0
MPV (fL)	>8	<3.0
Lymphocyte (%)	>15	< 5.0
Monocyte (%)	>5.0	< 10
Neutrophil (%)	>40	< 3.0
Eosinophil (%)	>5.0	< 10
Basophil (%)	>1.0	< 40

Linearity				
Measurand	Units*	Measuring Range	Limit	Operating Range
WBC	10 <sup>3</sup> /µL	0.2-100	± 0.4 or ± 4%	0-150
RBC	10 <sup>3</sup> /µL	0.02-8.0	± 0.05 or ± 3%	0-15
		8.0-15	± 0.10 or ± 4%	
HGB	g/dL	0.2-24	± 0.2 or ± 2%	0-25
HCT	%	5-70	± 2 or ± 3%	0-80
MCV	fL	50-150	± 2.5 or ± 3%	50-150
PLT	10 <sup>3</sup> /µL	10-2000	± 10 or ± 10%	0-4000
RDW-CV	%	10-40	± 1.5 or ± 10%	0-70
RDW-SD	fL	15-150	± 6.5 or ± 10%	0-220
MPV	fL	5-25	± 1 or ± 10%	0-25
MCH	pg	N/A	N/A	0-99.9
MCHC	g/dL	N/A	N/A	0-99.9
PCT	%	N/A	N/A	0-9.999
PWD	%	N/A	N/A	0-99.9
PLCR	%	N/A	N/A	0-100
LYM, MONO, NEU, EOS, BASO, ALY, IMM#	10 <sup>3</sup> /µL	0-100	N/A	0-150
LYM, MONO, NEU, EOS, BASO, ALY, IMM %	10 <sup>3</sup> /µL	0-100	N/A	0-100

### Generation of morphological alarms and flags for a variety of abnormalities such as :

- Atypical lymphocytes
- Immature cells
- Nucleated RBCs
- Hypersegmented neutrophils
- Micro & macrocytes
- Schizocytes
- Platelet aggregates

\* Flags enhance accuracy in diagnosis and provide direction for further studies