





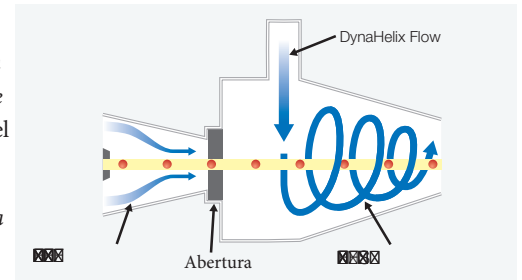


# Calidad en pruebas de hematología



La tecnología DynaHelix Flow alinea perfectamente los RBC y las PLT mediante un flujo hidrodinámico avanzado antes de pasar por la abertura, obteniendo una alta precisión en el recuento por impedancia. Además, el DynaHelix Flow evita totalmente el riesgo de re-entrada de las líneas sanitarias montadas en la abertura a re-entrar así el sistema del DynaHelix Flow.

Esta tecnología avanzada y de nuevo desarrollo DynaHelix Flow mejora enormemente la precisión y exactitud del recuento.



## Programa de Control de Calidad Integrado



- Control de calidad para VSG disponible
- El mismo control de calidad puede ser usado para CBC, diferencial de 3 partes y VSG
- Gestión de hasta 25 lotes de controles de calidad
- Registro de valores del ensayo de manera práctica mediante lector de códigos de barras (accesorio estándar)
- Función de evaluación automática (aprobado o rechazado)
- Gestión del control de calidad por valor de ensayo, valor medio o reglas Westgard
- Visualización e impresión de gráficos de control de calidad (impresora interna opcional)
- Cálculo automatizado de información estadística como la media y la SD

## Gestión de Reactivos



Foto: MEK-9100

Accesorio estándar, lector de código de barras



El sistema de gestión de reactivos en Celltac α+ facilita la gestión de estos mediante códigos de barras únicos etiquetados individualmente en cada reactivo. Gracias a este sistema y al uso de reactivos originales de Nihon Kohden, la calidad de las pruebas se mantiene siempre a un alto nivel.

## 31 parámetros incluyendo VSG y otros parámetros de investigación

Parámetros tradicionales de CBC, WBC parámetros diferenciales de 3 partes, índice de Mentzer y RDWI, los cuales se consideran útiles para el cribado de la talasemia. La VSG y otros parámetros relacionados están disponibles en Celltac α+.

# Operational excellence

Smart ColoRerun Assist helps to visually understand the reasons of re-measurement, by showing color-coded messages. This unique user-oriented function greatly improves workflow efficiency and maximizes productivity for faster test reports and clinical decision making.

## YELLOW

A panic value (far outside the normal range) needs to be reported to a doctor immediately

## ORANGE

Possibly incorrect data due to problems caused by the state of the blood sample or the measuring procedure

## RED

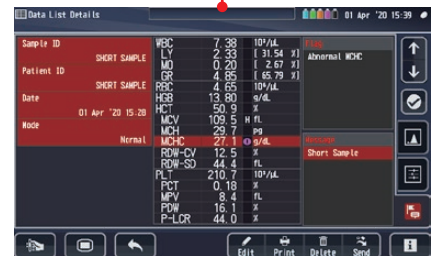
Possibly incorrect data due to a technical problem with the instrument or measuring procedure



Sample ID	WBC	LY	1.43	10 <sup>9</sup> /L	Panic
Patient ID	VBC FANIC	LY	0.47	( 31.54 )	WBC Panic Value
Date	VBC FANIC	GR	0.04	( 2.67 )	Leukopenia
Mode	VBC FANIC	RBC	0.98	( 6.79 )	
		RBC	4.65	10 <sup>9</sup> /L	
		HGB	13.48	g/dL	
		HCT	41.3	%	
		MCV	88.8	fl	
		MCH	29.0	pg	
		MCHC	32.6	g/dL	
		RDW-CV	15.5	%	
		RDW-SD	44.4	fl	
		PLT	210.7	10 <sup>9</sup> /L	
		PCT	0.19	%	
		MPV	8.4	fl	
		PDW	16.1	%	
		P-LCR	44.0	%	



Sample ID	WBC	LY	7.98	10 <sup>9</sup> /L	Flag
Patient ID	STORING ERROR	LY	2.33	( 31.54 )	
Date	STORING ERROR	GR	0.20	( 2.67 )	
Mode	STORING ERROR	RBC	4.65	( 6.79 )	
		RBC	6.22	H 10 <sup>9</sup> /L	
		HGB	16.99	g/dL	
		HCT	52.0	%	
		MCV	89.6	fl	
		MCH	27.3	pg	
		MCHC	32.7	g/dL	
		RDW-CV	12.5	%	
		RDW-SD	44.4	fl	
		PLT	210.7	10 <sup>9</sup> /L	
		PCT	0.18	%	
		MPV	8.4	fl	
		PDW	16.1	%	
		P-LCR	44.0	%	



Sample ID	WBC	LY	7.98	10 <sup>9</sup> /L	Flag
Patient ID	SHORT SAMPLE	LY	2.33	( 31.54 )	Abnormal WBC
Date	SHORT SAMPLE	GR	0.20	( 2.67 )	
Mode	SHORT SAMPLE	RBC	4.65	( 6.79 )	
		RBC	6.22	H 10 <sup>9</sup> /L	
		HGB	13.80	g/dL	
		HCT	50.9	%	
		MCV	109.5	H fl	
		MCH	29.7	pg	
		MCHC	27.1	g/dL	
		RDW-CV	12.5	%	
		RDW-SD	44.4	fl	
		PLT	210.7	10 <sup>9</sup> /L	
		PCT	0.18	%	
		MPV	8.4	fl	
		PDW	16.1	%	
		P-LCR	44.0	%	

## Seamless information transfer



## Seamless Information Transfer

Celltac α+ supports seamless data transfer\* to laboratory information systems through the LAN port or RS-232C port.

\* ASTM protocol is available

### Sister product

## Celltac $\alpha$ MEK-1301/1302

Innovative hematology platform offering

- High quality CBC measurement based on DynaHelix Flow technology
- Smart ColoRerun Assist visually showing the reasons of re-measurement
- 23 measuring parameters including WBC 3 part differential
- Up to 60 samples/hour throughput (open mode)
- Complete QC program for laboratory accreditation requirements



MEK-1301  
(open mode only)



MEK-1302  
(open and closed mode)

# Celltac $\alpha$ + MEK-1305

## Key Specifications

- **Number of measuring parameters:** 31  
WBC, LY%, MO%, GR%, LY#, MO#, GR#, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, PCT, MPV, PDW, P-LCR, P-LOC, Mentzer Index\*, RDWI\*, ESR, ESR HCT Corr.\* ESR TEMP Corr.\*, SA\*, AMP\*, AI\*, MIN\*, t1/2\*

\* Research parameters

- **Measuring mode:** Open mode

### Throughput

CBC + WBC 3 part differential: Approx. 60 samples/h  
CBC + WBC 3 part differential + ESR: Approx. 20 samples/h

### Sample volume

Normal mode: CBC + WBC 3 part differential 20 $\mu$ L  
: CBC + WBC 3 part differential + ESR 80 $\mu$ L  
Predilution mode: CBC 10 or 20 $\mu$ L  
Capillary mode: CBC

### Measuring method

WBC, RBC and PLT count- Electric impedance method  
(DynaHelix Flow technology)  
HGB: Colorimetric method  
HCT: Calculated from RBC histogram  
WBC differential: Calculated from WBC histogram  
ESR: Calculated from sylectogram, HCT and MCV

### Measuring range

WBC: 0.00 - 99.99 x 10<sup>3</sup>/ $\mu$ L, 0.00 - 299.90 x 10<sup>3</sup>/ $\mu$ L (High dilution mode)  
RBC: 0.00 - 9.99 x 10<sup>6</sup>/ $\mu$ L  
HGB: 0.00 - 29.90 g/dL  
HCT: 0.0 - 99.9%  
MCV: 20.0 - 199.0 fL  
MCH: 10.0 - 50.0 pg  
MCHC: 10.0 - 50.0 pg  
PLT: 0.0 - 1490.0 x 10<sup>3</sup>/ $\mu$ L  
ESR: 0 - 200 mm

- **Data storage capacity:** 50,000 data including histograms in the memory of the analyzer

## Reproducibility and Linearity

### Reproducibility

WBC: 2.0% or less (WBC: 4.00 x 10<sup>3</sup>/ $\mu$ L or more)  
RBC: 1.5% or less (RBC: 4.00 x 10<sup>6</sup>/ $\mu$ L or more)  
HGB: 1.5% or less  
HCT: 1.5% or less  
MCV: 1.0% or less  
MCH: 2.0% or less  
MCHC: 2.0% or less  
PLT: 4.0% or less (PLT: 100.0 x 10<sup>3</sup>/ $\mu$ L or more)  
ESR: 10.0% or less, or SD 1.5 mm or less

### Linearity

WBC: Within  $\pm$ 3.00% or  $\pm$ 0.30 x 10<sup>3</sup>/ $\mu$ L (WBC: 0.20 to 99.9 x 10<sup>3</sup>/ $\mu$ L)  
RBC: Within  $\pm$ 3.00% or  $\pm$ 0.08 x 10<sup>6</sup>/ $\mu$ L (RBC: 0.02 to 8.00 x 10<sup>6</sup>/ $\mu$ L)  
HGB: Within  $\pm$ 1.50% or  $\pm$ 0.20 g/dL (HGB: 0.10 to 25.0 g/dL)  
HCT: Within  $\pm$ 3.0% or  $\pm$ 1.0% (HCT: 20.0 to 60.0%)  
PLT: Within  $\pm$ 10.0% or  $\pm$ 20.0 x 10<sup>3</sup>/ $\mu$ L (PLT: 10.0 to 1490.0 x 10<sup>3</sup>/ $\mu$ L)  
(specifications above apply to normal mode)

## Physical Specifications

- **Dimensions:** 230 W x 450 D x 428 H mm
- **Weight:** 21 kg
- **Line voltage:** 100 V to 240 V
- **Line frequency:** 50 or 60 Hz
- **Power input:** 150 VA
- **External output:** LAN x 1, USB x 2, RS-232C x 3

## Environmental Conditions

- **Operating temperature:** 15 to 30°C
- **Operating humidity:** 30 to 85%
- **Operating atmospheric pressure:** 700 to 1060 hPa

## Reagent

- **Diluent:** Isotonac 3 or Isotonac 4
- **Hemolysing reagent:** Hemolynac 310
- **Detergent:** Cleanac 710, Cleanac 3

This brochure may be revised or replaced by Nihon Kohden at any time without notice.

