

Dry Clinical Chemistry Analysis

SPOTCHEM D-Concept

SD-9811,3810,4810,4820



A test system leading the way with excellent scalability and stylish design **Dry Clinical Chemistry Analysis**

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A test system with excellent scalability and stylish design

Proprietary technology molded into a compact form

ARKRAY's dry chemistry/immunological analysis technology, condensed.

The flexibility to combine the units you want

Separate operation and measurement units: measurement units can be added to fit your needs.

An innovation in stylish design

A novel, smart and functional design for clinical laboratory equipment



Simple key operation



Calibration by scanning a QR code

Operation unit

SPOTCHEM D-00 QR SD-9811

Once connected, measurement units can be collectively operated through this, the SPOTCHEMTM D-00 QR. It can readily be calibrated just by scanning a QR code with handy bar-code reader into SPOTCHEMTM D-00 QR.



Just set the Reagent pack, and you are ready to test.



Compact reagent pack

Mobile immuno-nephelometry analysis Measurement unit

SPOTCHEM D-01 SD-3810

Accurate measurement of CRP. Disposable reagent packs remove the need for waste liquid treatment meaning extra safety for you.



Electrolyte measuring reagent



Biochemistry measuring reagent



Choose necessary items to measure

Dry chemistry clinical analysis measurement unit SPOTCHEM D-02 SD-4810

Choose from 21 biochemistry items and 3 electrolyte items. Simultaneous measurement of up to 12 biochemistry items and 3 electrolyte items. Set the reagent, push the start key and you are ready to test. The solid phase reagent is individually-packaged, so you can perform measurements at your own pace.



Built-in centrifuge



Choose necessary items to measure

Dry Clinical Chemistry analysis Measurement unit $SPOTCHEM \ D\text{-}03 \ \text{SD-}4820$

Choose from 21 biochemistry items. Simultaneous measurement of up to 12 biochemistry items. A built-in centrifuge allows for whole-blood sample testing without pretreatment.

SPOTCHEM D-00 QR (SD-9811) specifications			
Number of connectable units	3 (Max.)		
Warm up time	Approx. 1 min.		
Screen	Full- color LCD 320×240 dpi		
Printer	58 mm thermal printer paper		
Data storage capacity	100 measurement results for each connected unit		
External output	RS-232C × 1 port		
Measurement	Temperature: 10-30℃		
environment	Humidity: 20-80% R.H. (with no condensation)		
Dimensions	408 (W) × 330 (D) × 103 (H) mm		
Weight	Approx. 5 kg		
Power supply voltage	AC100-240V, 50/60Hz		
(main device)			
Power input	Up to 300VA		

SPOTCHEM D-01 (SD-3810) specifications		
Sample types	Whole blood, serum, plasma	
Reagent	SPOTCHEM D reagent pack	
Measurement items	CRP	
Measurement principle	Latex immunological nephelometry (LPIA method), transmitted	
	light volume by coloring substance	
Measurement wavelengths	465nm, 550nm, 660nm	
Loaded reagents	2	
Processing speed	9-12 min. per sample, 14-18 min. required for simultaneous dual	
	sample measurement	
Minimum sample volume	50 μL	
Sample container	All-In-One Sample container	
Warm up time	Approx. 5 min. (from a room temperature of 25℃)	
Measurement environment	Temperature: 10-30°C	
	Humidity: 20-80% R.H. (with no condensation)	
Outer dimensions	408 (W) × 330 (D) ×132 (H) mm	
Weight	Approx. 8kg	
Power supply voltage	DC24V, 2A (supplied from operating unit)	

SPOTCHEM D-02 (SD-4810) specifications		SPOTCHEM D-03 (SD-4820) specifications	
Sample types	Biochemistry: serum, plasma Electrolyte: whole blood, serum, plasma and urine	Whole blood, serum, plasma	
Reagent	SPOTCHEM D single reagent, SPOTCHEM D multi reagent, SPOTCHEM D electrolyte plate	SPOTCHEM D single reagent, SPOTCHEM D multi reagent	
Measurement items	Biochemistry: ALB, ALP, ALT (GPT), AMY, AST (GOT), Ca, CK, CRE, FRA, GGT, GLU, HDL, IP, LD, Mg, T-BIL, TC, TG, TP, UA, UN (21 items in total) Electrolyte: Na, K, Cl Simultaneous measurement for a maximum of 15 items. (Biochemistry single 6 items + Biochemistry multi 6 items +	Biochemistry: ALB, ALP, ALT(GPT), AMY, AST(GOT), Ca, CK, CRE, FRA, GGT, GLU, HDL, IP, LD, Mg, T-BIL, TC, TG, TP, UA, UN (21 items in total) Simultaneous measurement with a maximum of 12 items (Biochemistry single 6 items + Biochemistry multi 6 items)	
Measurement principle	Electrolyte 3 items) Biochemistry: Endpoint method and rate method by	Endpoint method and rate method by dual-wavelength	
	dual-wavelength reflectance Electrolyte: potentiometry method by ion-selective electrode technique	reflectance	
Measurement wavelength	405, 550, 575, 610, 820nm		
Loadable reagent	6 single test strips, 1 multi test strip and 1 electrolyte plate	6 single test strips, 1 multi test strip	
Processing speed	Time required for 6 single test strips + 1 multi test strip is approx. 18 min. Measurement time for Electrolyte plate is approx. 4 min.	Time required for 6 single test strips + 1 multi test strip is approx. 18 min. Centrifuge time is 2.5 min.	
Minimum sample volume	30 μ L plus test consumption volume per measurement (Biochemistry: about 6 μ L per item Electrolyte: about 22 μ L)	Cuvette (serum, plasma) : $30 \mu L$ and test consumption volume per measurement (approx. $6 \mu L$ per item) Centrifuge cup (whole blood) : approx. $530 \mu L$	
Sample container	ARKRAY sample tube	ARKRAY sample tube, ARKRAY centrifuge cup	
Warm up time	Approx. 8 min. (from a room temperature of 25°C)		
Measurement environment	Temperature:10-30°C, Humidity: 20-80 %R.H. (with no condensation)		
Outer dimensions	408 (W) × 330 (D) × 132 (H) mm	408 (W) × 330 (D) × 160 (H) mm	
Weight	Approx. 10 kg	Approx. 11 kg	
Power supply voltage (main body)	DC24V, 2A (supplied from operation unit)	DC24V, 2A (supplied from operating unit)	

^{*}Design and specifications may be subject to change without notice.

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