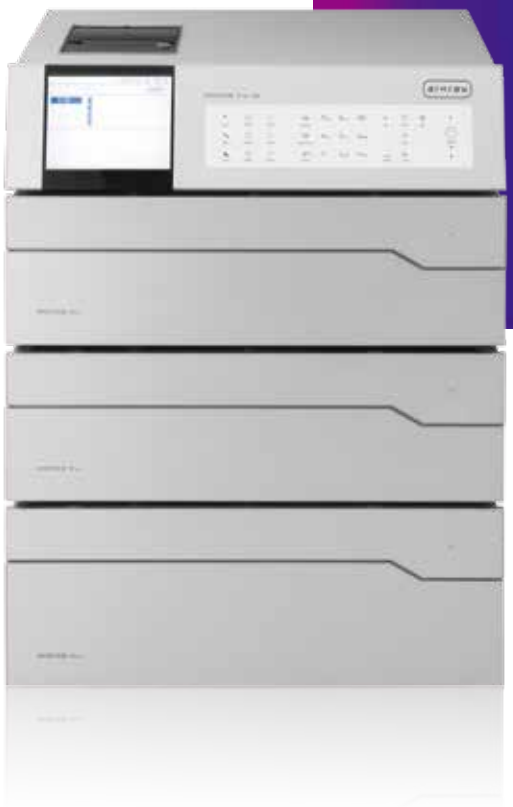
Measurement unit for Immunity Nephelometry
and Automated Dry chemistry system with operation unit

SPOTCHEM D-Concept

SD-9811,SD-3810, SD-4810, SD-4820



Selectively and expandability
to match customer needs

arkray,inc.

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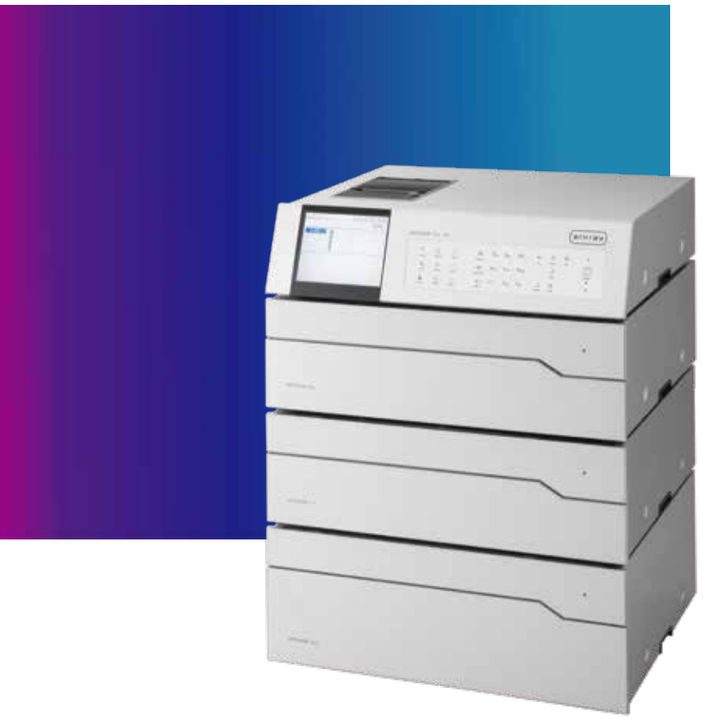

Proprietary technology molded into a compact form

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 SPOTCHEM™ D-00 QR. It can readily be calibrated just by scanning a QR code with handy bar-code reader into SPOTCHEM™ D-00 QR.

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

Compact reagent pack

Measurement unit for Immunity Nephelometry

SPOTCHEM D-01 SD-3810

CRP can be measured. 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

Measurement Unit for Automated Dry Chemistry System

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

Measurement Unit for Automated Dry Chemistry System

SPOTCHEM D-03 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.

Note：Not all products shown on this catalogue are offered in every market. Product features may vary by country and are subject to change.
For products specific to your area, please visit the website appropriate to your country or contact ARKRAY for more information.

SPOTCHEM D-00 QR (SD-9811) specifications	
Startup time	Approx. 1 minute
Display	Large, 320 × 240 - dot color LCD
Printer	58-mm-wide printing paper printer
Data storage capacity	Measurement results: 100 measurements for each connected device (Maximum 300)
External output	RS-232C (EIA-574) 1 port and Ethernet (10 BASE - T ethernet) 1 port (option)
Dimensions	408 (W) × 330 (D) × 103 (H) mm
Weight	Approx. 5 kg
Supply voltage (Instrument)	AC 100 - 240 V (Main power supply voltage variation must be within ±10 %), 50/60 Hz

SPOTCHEM D-01 (SD-3810) specifications	
Measurement objects	Serum, Plasma, Whole blood (Measurement target depends on reagent. For details, see the package insert of reagent.)
Reagent	SPOTCHEM D reagent pack
Measurement parameter	CRP
Measurement range	Listed in package insert of reagent
Measurement principle	Measurements of absorbance and turbidity by the transmitted light value measurement
Measurement wavelength	465 nm, 550 nm, 660 nm
Reagents measurable at once	2
Measurement time	Approx. 10 to 20 minutes per reagent
Sample consumption	Listed in package insert of reagent
Required sample volume	50 µL
Measurable samples	1 sample per reagent
Startup time	Approx. 5 minutes (at a room temperature of 25 °C)
Dimensions	408 (W) × 330 (D) × 132 (H) mm
Weight	Approx. 8 kg
Supply voltage (Instrument)	DC 24 V, 2 A (supplied from operation unit)

	SPOTCHEM D-02 (SD-4810) specifications	SPOTCHEM D-03 (SD-4820) specifications
Measurement objects	Single/multiple reagent: Serum, Plasma Electrolyte plate: Serum, Plasma, Whole blood	Serum, Plasma, Whole blood
Reagent	SPOTCHEM D single reagent SPOTCHEM D multiple reagent SPOTCHEM D electrolyte plate	SPOTCHEM D single reagent SPOTCHEM D multiple reagent µ
Measurement parameter	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 + Electrolyte 3 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 range	Listed in package insert of reagent	
Measurement principle	Single/multiple reagent: Endpoint method and reaction rate method using dual wavelength reflectance photometry Electrolyte plate: Potentiometric method using ion-selective electrode (ISE)	Endpoint method and reaction rate method using dual wavelength reflectance photometry
Measurement wavelength	405 nm, 550 nm, 575 nm, 610 nm, 820 nm	
Reagents measurable at once	6 single reagents, 1 multiple reagent, 1 electrolyte plate	6 single reagents, 1 multiple reagent
Measurement time	Approx. 18 minutes to measure 1 multiple reagent and 6 single reagents Approx. 4 minutes to measure an electrolyte plate	Approx. 18 minutes to measure 1 multiple reagent and 6 single reagents (for serum or plasma)
Sample consumption	Biochemical measurement: Approx. 6 µL per item Electrolyte measurement: Approx. 22 µL	Biochemical measurement: Approx. 6 µL per item
Required sample volume	30 µL + sample consumption volume per measurement	A cuvette: 30 µL + sample consumption volume per measurement Centrifuge cup: Approx. 530 µL per item
Sample container	SPOTCHEM D cuvette (for D-Concept only)	SPOTCHEM D cuvette, D centrifuge cup
Measurable samples	1 sample	
Startup time	Approximately 8 minutes (at a room temperature of 25 ℃)	
Measurement environment	Temperature: 10 to 30 ℃ Humidity: 20 to 80 % RH (no condensation)	
Dimensions	408 (W) × 330 (D) × 132 (H) mm	408 (W) × 330 (D) × 160 (H) mm
Weight	Approx. 10 kg	Approx. 11 kg
Supply voltage (Instrument)	DC 24 V, 2 A (supplied from operation unit)	

Legal manufacturer

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https://www.arkray.eu/english/

*Designs and specifications may be changed without prior notice.

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