

Dry Clinical Chemistry Analyzer

# SpotChem D-Concept 2

SD-4830, SD-4840

Automated Quantitative  
Measurement of  
Whole Blood, Serum,  
and Plasma



## Easy Reagent Information Detection

Two-dimensional information code attached to the reagent can be easily read.



## Accurate Measurements

Accurate measurements are made by optically measuring the reflectance intensity of the reagent coloration test using two-wavelength reflectance photometry.



## Simultaneous Testing of 3 Electrolytes

Concentrations of Na, K, and Cl are measured by the potentiometric method with ion-selective electrodes



Specifications

	SpotChem D-Concept 2c (SD-4830) (Built-in centrifuge )	SpotChem D-Concept 2e (SD-4840) (Built-in electrolyte measurement unit)
Measurement subject	Serum, plasma, whole blood	Biochemistry: serum, plasma Electrolyte: serum, plasma, whole blood
Reagent	SPOTCHEM D single reagent SPOTCHEM D multi reagent	SPOTCHEM D single reagent SPOTCHEM D multi reagent SPOTCHEM D electrolyte plate
Measurement items	ALB • ALP • ALT (GPT) • AMY • AST (GOT) • Ca • CK • CRE • FRA • GGT • GLU • HDL • IP • LD • Mg • T-BIL • TC • TG • TP • UA • UN	ALB • ALP • ALT (GPT) • AMY • AST (GOT) • Ca • CK • CRE • FRA • GGT • GLU • HDL • IP • LD • Mg • T-BIL • TC • TG • TP • UA • UN • NA • K • Cl
Measurement principle	Endpoint method and rate method using dual-wavelength reflectance photometry	Biochemistry: Endpoint method and rate method using dual-wavelength reflectance photometry  Electrolyte: Potentiometric method using an ion-selective electrode
Measurement time	Reagent reaction time + approximately 2 minutes and 30 seconds	Biochemistry: Reagent reaction time + approximately 2 minutes and 30 seconds  Electrolyte: approximately 4 minutes
Measurement wavelength	405 nm, 550 nm, 575 nm, 610 nm, 820 nm	405 nm, 550 nm, 575 nm, 610 nm, 820 nm
Minimum sample volume	When using cuvette: approximately 6 $\mu$ L x number of measured items + 30 $\mu$ L *Serum and plasma  When using centrifuge container: approximately 530 $\mu$ L *whole blood	Biochemistry: approximately 6 $\mu$ L x number of measurement items + 30 $\mu$ L *Serum and plasma  Electrolyte: approximately 22 $\mu$ L
Consumption volume	Approximately 6 $\mu$ L per item	Biochemical: approximately 6 $\mu$ L per item Electrolyte: approximately 22 $\mu$ L
Sample container	Specialized sample container and centrifuge container	Specialized sample container
Measurement conditions	Temperature 10 to 30 $^{\circ}$ C /Humidity 20 to 80% R.H. (non-condensation)	Temperature 10 to 30 $^{\circ}$ C / Humidity 20 to 80% R.H.
Display	Mobile terminal (Android)	Mobile terminal (Android)
Printer	Thermal Printer (Option) wireless	Thermal Printer (Option) wireless
External output	RS-232 C (EIA-574) 1 port Wi-Fi Ethernet 1 port (optionally changed from RS-232C) USB (Type-A): 1 port USB (Type-C): 1 port (for mobile terminal charging)	RS-232 C (EIA-574) 1 port Wi-Fi Ethernet 1 port (optionally changed from RS-232C) USB (Type-A): 1 port USB (Type-C): 1 port (for mobile terminal charging)
External dimensions	Analysis section: 360 (W) x 290 (D) x 160 (H) mm	Analysis section: 360 (W) x 290 (D) x 160 (H) mm
Weight	Analysis section: approximately 10 kg	Analysis section: approximately 11 kg
Input power	AC 100~240 V $\pm$ 10 %, 50/60 Hz (AC adapter)	AC 100~240 V $\pm$ 10 %, 50/60 Hz (AC adapter)
Power consumption	200 VA or less	200 VA or less