

Technical Specifications

Measured Parameters			
Parameter	Unit	Measuring range	Resolution
Na ⁺	mmol/L	20 ~ 250	1
K ⁺	mmol/L	0.5 ~ 20.0	0.1
Cl ⁻	mmol/L	20 ~ 250	1

Operating Parameters	
Sample type	Whole blood, Plasma, Serum
Sample volume	60 µl
Sample introduction	Aspiration
Sample container	Syringe, Capillary
Time to Analysis	35 seconds
Measuring temperature	37.0 ± 0.2 °C
Measuring method	Electrochemistry (Direct ISE)
Calibration	Automatic 1-2-point calibration Manual calibration is available if necessary
Temperature	15 ~ 35 °C
Relative humidity	5 ~ 85 %

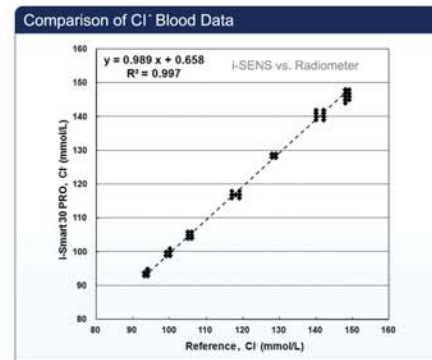
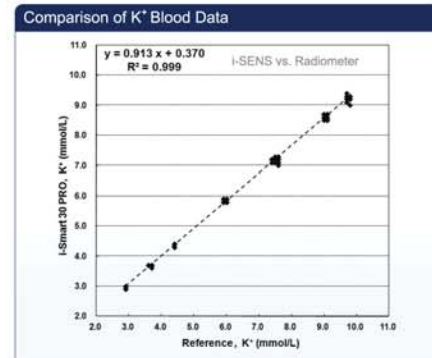
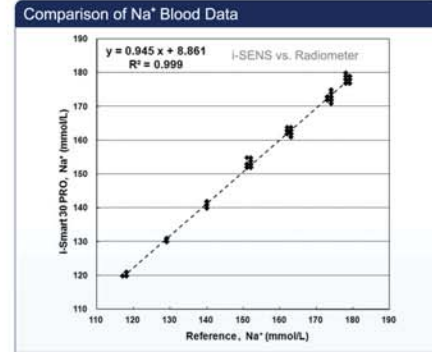
Cartridge	
No. of samples / Onboard lifetime	50 samples / 4 weeks 100 samples / 4 weeks 200 samples / 4 weeks 300 samples / 4 weeks
Dimensions / Weight	138 mm x 139 mm x 80 mm / 0.8 kg
Storage temperature	10 ~ 30 °C
Shelf life	18 months

Instrument	
Computer	1 GHz process Mobile PC / 1 GB RAM / 4 GB Flash Memory
Operating system	Microsoft® Windows® XP Embedded
Display	7 inch TFT LCD, Touch screen
Printer	2 inch thermal printer (internal printer)
Interface	USB (3 ports), Serial (RS-232), LAN (RJ45 Ethernet) USB type external barcode scanner

Dimension / Weight	
Height	292 mm
Width	256 mm
Depth	177 mm
Weight	5.5 kg

Power Requirement	
Voltage / Frequency	100 ~ 240 VAC 50/60 Hz (±10%)
Power adapter	AC-DC power supplies (output: +24 VDC, 2.7 A, 65W)
Battery operation	Max. 2 hours (Li ion cells)

Clinical Performance



Innovative and Convenient



Fast Analysis



Small Sample Volume



All in One Cartridge



4 Week Use life



Touch Screen Operation



Convenient Quality Control

i-Smart³⁰ PRO

ELECTROLYTE ANALYZER

- Measures Na⁺, K⁺, and Cl⁻ concentrations with 60µl of blood.
- Reports patient results in 35 seconds on a big color screen.
- Eliminates maintenance by use of all-in-one cartridge.
- Cartridge can now be used for up to 4 weeks.
- Operates on battery for max. two hours without being plugged in.
- Allows fast and error-free data entry using barcode scanner.

01 Maintenance-Free Cartridge



- All-in-one cartridge contains all reagents & consumables such as electrodes, calibration solutions, tubing, waste bag, and sampler.
- Replacing a cartridge is all you have to do for maintenance!
- Each cartridge offers an extended use life of 4 weeks!

Available Cartridge Types :

- 50 Samples / 4 weeks
- 100 Samples / 4 weeks
- 200 Samples / 4 weeks
- 300 Samples / 4 weeks

Comparison of Maintenance Schedule

Other Brand Analyzers	i-Smart 30 PRO
Cleaning daily	<p>→ Replace cartridge Monthly</p>
Conditioning daily	
Clean sample probe/fill port weekly	
Clean ref. electrode housing monthly	
Change pump tubing Semi-annually	
Change main tubing harness annually	
Replace electrodes as needed	
Replace reagent packs as needed	

35 Sec
Fast Analysis



02 User-Friendly Interface



- Offer intuitive & easily accessible screen menus.
- Display analyzer's status and upcoming event.
- Reports analysis results along with reference ranges.
- List and search saved patient results.
- Easy network interface setup to LIS/HIS.

03 Convenient Quality Control



- QC range setup in seconds by barcode scanning.
- Up to four levels of QC available to set up.
- Option to discard unwanted QC results.
- QC statistics of n, mean, SD, and %CV available.
- i-Smart QC material available in three levels.

