

### Technical Specifications

Measured Parameters				
Parameter	Unit	Measuring range (Blood)	Measuring range (Urine)	Resolution
Na <sup>+</sup>	mmol/L	20 ~ 250	10 ~ 400	1
K <sup>+</sup>	mmol/L	0.5 ~ 20.0	1.0 ~ 120.0	0.1
Cl <sup>-</sup>	mmol/L	20 ~ 250	10 ~ 400	1

Operating Parameters	
Sample type	Whole blood, Plasma, Serum, Urine
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 %

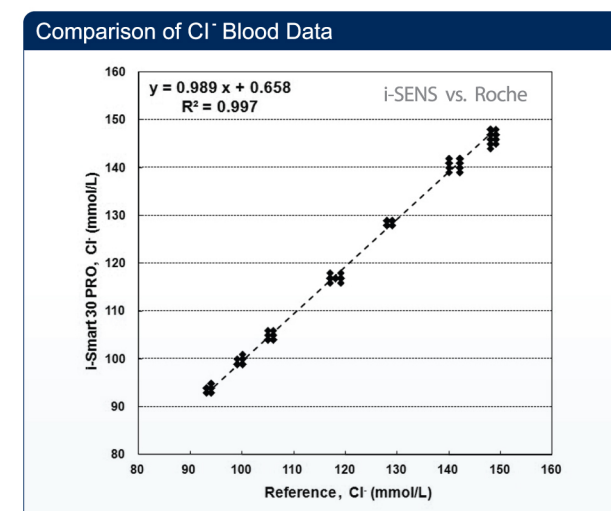
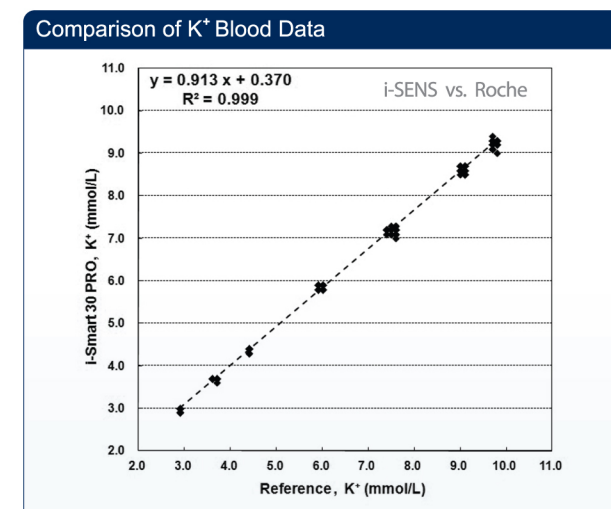
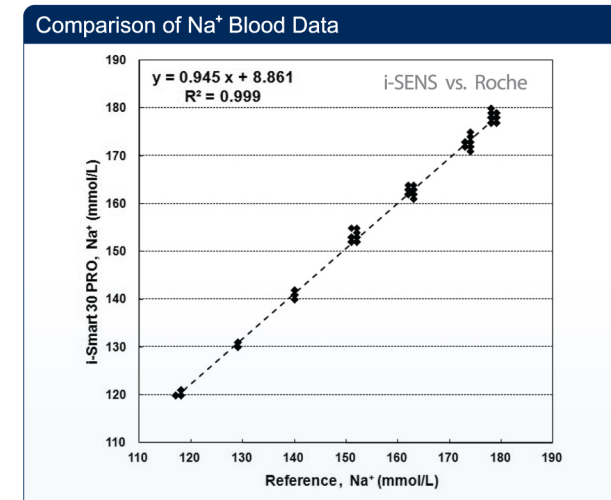
Cartridge	
No. of samples / Onboard lifetime	50 samples / 4 weeks 100 samples / 4 weeks 200 samples / 4 weeks 300 samples / 4 weeks
Dimensions / Weight	138 mm x 139 mm x 80 mm / 0.8 kg
Storage temperature	10 ~ 30 °C
Shelf life	18 months

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: +24VDC, 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 Uselife



Touch Screen Operation



Convenient Quality Control

# i-Smart 30 PRO

## ELECTROLYTE ANALYZER

- Measures Na<sup>+</sup>, K<sup>+</sup>, and Cl<sup>-</sup> concentrations with 60µl of blood or urine.
- 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

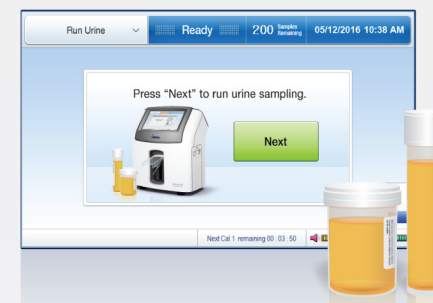
Other Brand Analyzers	i-Smart 30 PRO
Cleaning ..... daily	<p><b>Replace cartridge Monthly</b></p>
Conditioning ..... daily	
Clean sample probe/fill port ..... weekly	
Clean ref. electrode housing ..... monthly	
Change pump tubing ..... Semi-annually	
Change main tubing harness ..... annually	
Replace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

**35 Sec**  
Fast Analysis



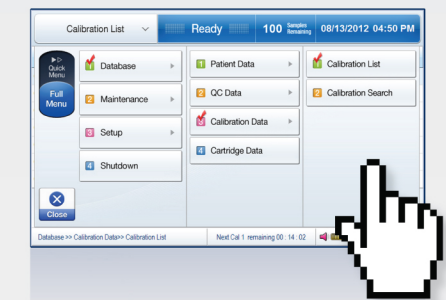
### 02 Urine Test without Dilution

- Wide sensor detection can measure high levels of "K<sup>+</sup>" in urine samples.
- No sample dilution provides accurate test results.
- Results displayed immediately on the screen.



### 03 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.



### 04 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.

