

CombiSep *pK_a Analyzer PRO™* Specifications

pK_a Determination Method:	Plot of compound ionic mobility (from migration time vs. neutral DMSO marker) vs. buffer pH value
Detection:	UV Absorbance at 214 nm; other wavelengths available (chromophore does not have to be in proximity of ionization center)
Detection Sensitivity:	~10 µg/ml (ppm) depending on chromophore; typical working concentration 50 - 100 µg/ml
Sample Volume Required:	Typical volume 50 µl/well (minimum volume 20 µl/well); 24 wells per 24 pH point analysis; 12 wells per 12 pH point analysis
Sample Format:	Typical DMSO concentration 0.1-0.2% (v/v); higher concentrations can be tolerated at higher wavelengths
Sample Purity Requirements:	Compound of interest should be major species present; impurities and degradants can often be separated
Maximum Sample Throughput:	12 – 24 compounds/h (24 or 12 pH points/sample)
pK_a Determination Range:	1.8 – 11.2
System Control/Data Analysis:	<i>pK_a Analyzer™</i> software
Data Export Format:	Microsoft Excel spreadsheet
Environmental Conditions:	Indoor use, normal laboratory environment
Recommended External Temp:	15 – 25° C
Relative Humidity Range:	< 80% (non-condensing)
Power Requirements:	100 – 200 VAC; 50 -60 Hz (200 – 230 VAC; 50 – 60 Hz available); 15 Amps
Instrument Dimensions:	36 ¼ "L x 25 "W x 23" H (92 cm x 63.5 cm x 58.4 cm) With top hood open: H 39" (99.1 cm)
Fully Configured Dimensions:	96" L x 30" W x 39" H (243.8 cm x 76.2 cm x 99.1 cm)
Instrument Weight:	195 lbs. (88.6 kg)

