



Kyoto Electronics

Automatic Potentiometric Titrators



AT-500N-1



AT-500N-2



KYOTO ELECTRONICS

Automatic Potentiometric Titrators

Options

■ Standard system

IDP-100 Printer

#430-0036 Propeller stirrer

SOFT-CAP_E

■ Burette Units
 APB-510-01B (1mL)
 APB-510-05B (5mL)
 APB-510-10B (10mL)
 APB-510-20B (20mL) Standard
 APB-510-50B (50mL)

MW-510 Manual washing unit

MTA-118 Microtitration cell unit

Sealed cell unit SCU-118

AE-118DR Electronic balance (with a connecting cable)

CHA-500 Multiple Sample Changer

connecting cable #030-3388

■ Preamplifiers
 Preamplifier for 2-way system titration, STD-510
 Preamplifier for photometric titration, PTA-510
 Preamplifier for polarization titration, POT-510

Applications

Typical measurement examples are as shown below. For other types of analysis, contact your local dealer or visit KEM website:

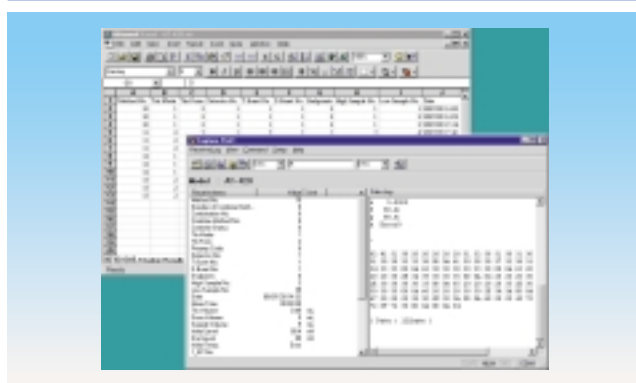
Petroleum products, oils and fats:	Determination of total acid, base or bromine number / Determination of mercaptan / Acid number of palm oil and fish oil / Amine value of fats and oils / Determination of acrylic acid / Determination of ester
Pharmaceutical products:	Determination of sodium chloride, magnesium and calcium in Dialysis solution / Determination of iodine, ascorbic acid and chloride ion in medicine / Determination of sodium acetate, benzalconium chloride, sodium carbonate, methyl bencuchdium bromide / Purity of chitosan / Determination of vulcanate bromide, benzoic acid
Cosmetics, Detergents:	Acid number, saponification value and hydrogen peroxide volume of cosmetics and fragrance / Determination of sodium sulfate and surfactants in synthetic detergents and shampoo
Foods, Beverages	Acidity of fruit juice / Determination of vitamin C / Chlorine and acidity in sauces and vinegar
Chemical products, Paints	Determination of phosphate ester, sodium hydroxide, ammonium carbonate / Fractional determination of Mixed acid of phosphoric acid and sulfuric acid, sodium sulfide and aqueous sodium sulfide, nitric acid and acetic acid / Determination of phosphoric acid, succinic acid, sodium carbonate, oxiran, scopolamine hydrobromide, NCO (isocyanate), concentration of sulfuric acid, halogen ions, sodium acetate
Plating and etching fluid	Determination of chromic acid, nickel chloride in plating bath, boric acid, chloride ion / Determination of silver and free cyanogens in silver plating bath, lead and tin in solder bath / Concentration of alkali defatted solution / Concentration of activated acid / Concentration of hydrochloric acid and ferrous ion in plating bath / Concentration of zinc in zinc plating bath
Environment, Industrial water:	Concentration of chloride ion, calcium hardness and total hardness of river water / M alkali and P alkali on industrial water
Power generation/Atomic energy:	Concentration of boric acid / Concentration of trace chloride ion / Acid number of transformer oil and turbine oil
Electronic parts and plastics	Concentration of chlorine ion in resins / Determination of TMAH / Concentration of hydrogen peroxide / Concentration of chlorine in solder flux / Determination of anhydrous maleic acid in resins, carboxyl group in PET resin
Ceramic and metal industry	Trace chlorine ion in cement / Determination of calcium oxide and magnesium oxide / Fractional determination of nitric acid and hydrofluoric acid in pickling solution / Concentration of ferrous ion / Concentration of hydrochloric acid and ferrous ion in pickling solution / Concentration of chrome in washing solution

Specifications

Model	AT-500N-1 (Single burette type)	AT-500N-2 (Twin burette type)
Measuring range	-2000 to +2000mV, 0.00 to 14.00pH, 0 to 100°C	
Titration mode	1) Blank titration, 2) Auto speed control titration, 3) Auto intermittent titration 4) Constant speed or intermittent constant-speed titration	
Number of method	4 standard methods, 16 user defined methods (total 20 methods)	
Types of titration	Potentiometry : Acid-base, Redox, Precipitation titration Photometry and Polarization titration	
Titration form	Full titration, EP Stop titration, Level Stop titration	
Display	16 digits x 2 lines LCD with back light	
Displayed contents	Titration potential and volume, measurement result, and etc.	
Number of burette	1 built in burette	2 built in burettes
Burette capacity and precision / reproducibility	50mL burette : - 0.05 mL / - 0.02 mL, 20mL burette : - 0.02mL / - 0.01mL 10mL burette : - 0.015mL / - 0.005mL, 5mL burette : - 0.01mL / - 0.003mL 1mL burette : - 0.005mL / - 0.001mL, (standard 20mL)	
Preamplifier	1) STD-510 : pH(mV) and mV 2way input amplifier (standard) 2) PTA-510 : pH(mV), mV and photometry 3way input (option) 3) POT-510 : pH(mV), mV and polarization 3way input (option)	
Interface	Standard for Balance, Printer and RS-232C	
Sample changer	Optional multiple sample changer CHA-500	
Printer	Optional printer IDP-100 and others	
Power source	AC100 ~ 240V, 50/60Hz	
Power consumption	25W	30W
Dimension	Main unit : 288(W) x 468(D) x 481(H)mm Stirrer unit : 118(W) x 225(D) x 336(H)mm	
Weight	10kg	12kg
CE marking	EMC (noise) and LVD (safety)	
Standard accessories	Operation manual -----1 Stirrer spinner (25mm) -----#500-3141 -----1 Piston rod -----#551-5002 -----1 Electrode cable -----#429-0012 -----1 Combined glass electrode -----#100-C172 -----1 Temperature comp. electrode -----#100-T111 -----1	

Data Capture Software

SOFT-CAP_E



■ SOFT-CAP_E the Data Capture Software for AT-500N Automatic titrator (Option)

- Data Capture Software can control Automatic titrators.
- Measurement results of Automatic titrators can be downloaded directly to workbook in Microsoft[®] Excel or filed in CSV format.
- Windows[®] with Excel must be installed on the connected personal computer.



**KYOTO ELECTRONICS
MANUFACTURING CO.,LTD.**

Overseas Division : 8-3 Niban-cho Chiyoda-ku TOKYO 102-0084,
JAPAN Fax : +81-3-3237-0537, Phone : +81-3-3239-7333

URL : <http://www.kyoto-kem.com>

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