HITACHI



Automatic Titrator

COM-1700 /1750 series



Automatic Titrators designed to meet your needs now and in the future!

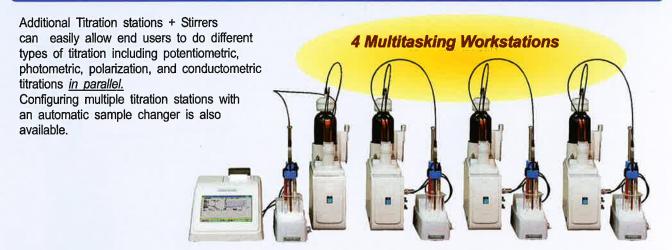
Our most Intelligent and advanced titrator ever produced, the

COM-1700 and COM-1750 series

Now you have a choice! A stand-alone or PC-controlled system



Easily control up to 4 independent multitasking workstations.



Configuration example) Max. four titration station configured with COM-1700

A new compact design of the buret & the titration station.



New Buret B-1700

The new design reduces bench space by 25% compared to the previous model. The new buret of the B-1700 is compatible with conventional COM series titrators.

left:: New B-1700 right: B-2000 (conventional type)



New syringe Conventional type

New Buret Head

Burette reagent bottle buret-tip combination features and all-in-one snap change buret head for easy assembly and maintenance.



The structure of the new syringe has a minimized

dead volume for easy

reagent exchange.

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Easily control up to 4 independent multitasking workstations.

Additional Titration stations + Stirrers
can easily allow end users to do different
types of titration including potentiometric,
photometric, polarization, and conductometric
titrations in parallel.
Configuring multiple titration stations with
an automatic sample changer is also
available.

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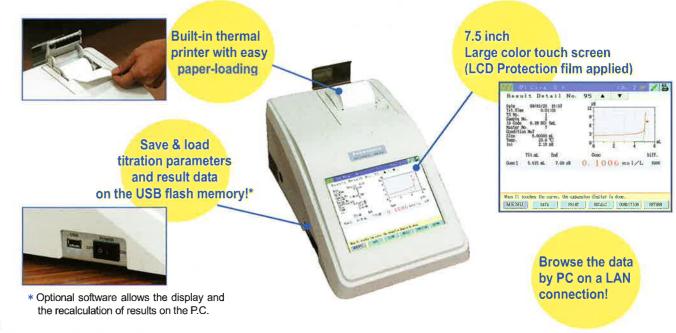
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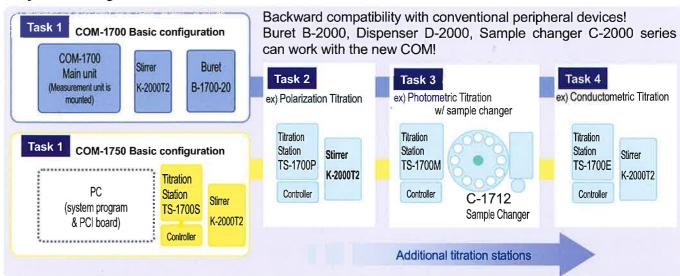
reagent exchange.

(10mL, 20mL sizes)

Advanced functions and excellent operational performance of the COM-1700!



■ System Configurations



- X For the PC system, the system program and PCI board interface for the Titration Station TS-1700 are provided.
- X The main unit of COM-1700 and/or TS-1700 in the configurations shown in the photo of the catalog is equipped with each measurement unit for each titration type.

■Buret Head

- ●H-1700-1K
- [1mL, glass (brown)]
- ●H-1700-5

[5mL, glass (clear), UV shield cover]

- ●H-1700-10
- [10mL, glass (clear), UV shield cover]
- ●H-1700-20 (※ Standard type)
 [20mL, glass (clear), UV shield cover]
- ●H-1700-50K

[50mL, glass (brown)]

■ Dot impact printer

●PR-302B

Durable paper print Roll paper width: 58mm includes signal cable



■ Measurement unit

- ●S-1700 for Potentiometric titration
- [Potentiometry: 3 inputs/ Thermistor: 1 input]

 M-1700 for Photometric titration
- [Potentiometry: 2 inputs/ Photometry: 1 input/ Thermistor: 1 input]
- ●P-1700 for Polarization titration
- [Potentiometry: 2 inputs/ Polarization: 1 input/ Thermistor: 1 input]
- E-1700 for Conductometric titration [Potentiometry: 2 inputs/ Conductometry: 1 input/ Thermistor: 1 input]

■ Automatic Sample Changer

●C-1712

[100, 200mL standard beakers, 12 specimens, turntable system]

COM-1700 with C-1712 Automatic Sample Changer

Standard container: 100mL-, 200mL-standard beakers

Customizable for a 300mL Erlenmeyer flask, and other different-shape container (option)



■COM-1700/1750 series Standard Specifications

Main control section

Main control unit	COM 1700 paries - COM 1700 Titrator main unit
iviain control unit	COM-1700 series: COM-1700 Titrator main unit
	COM-1750 series: PC (system program & PCI board)
Multitasking function	Up to 4 parallel titration stations
Titration methods	Potentiometric titration, Polarization titration, Photometric titration,
	Conductometric titration
	(»Each titration method requires a proper measurement unit
	respectively)
Titration mode	Learn titration, Auto inflection-point detection, Set-point detection,
	Set/Auto end-point detection, Cross-point (F, B, V1, V2) detection,
	Dispensing, Neutralization value in Petroleum product (Oil1/Oil2),
	pH measurement, pH-Stat, pKa measurement, Calculation mode
Number of	Lean titration: Up to 5 points
end-point detection	Linked CONDITIONs: Up tp 5 points
Master File	Titration run file: 50 files Number of linked CONDITION files: Up
	to 9 files* (XUp to 5 files for titration)
Condition File	Titrator parameter files: 50 files (Method, Constant, Mode files)
Method parameters	Parameters for each titration mode: 50 files
Constant parameters	Parameters for concentration calculation: 50 files
Control Mode file	Standard file: 50 files Neutralization value in petro. File: 50 files
	Manufacturer preinstalled modes (0~11), Blank mode (12~19),
	User-defined mode(20~49)
Sample File	99 files (Sample No., ID code, Master file and Sample size)
Auto-input function	Automatic input of blank, factors, concentration measurement
	results, etc
Calculations	Concentration calculation, statistics calculations, pH automatic
	Compensation
Data capacity	[COM-1700] Main unit memory: 100 data
	USB flash memory (≥256MB), Max. capacity approx. 9,900 data
	[COM-1750] 255 data/ folder (※ For total memory data, if hard
	disc space is 1GB or more, Max. capacity approx. 9,900 data)
GLP	Buret precision check, electrode check, Buret use frequency,
support function	
	electrode maintenance, remaining reagent level
Buret	Expandable up to 10 burets (X per 1 titration station)
Automatic	[COM-1700, TS-1700] 1 set of C-1700 Sample changer can be
sample changer	attached.
Printer	[COM-1700] Built-in thermal printer (paper width 58mm)
	[COM-1750] Color printer for A4-size paper
External output	[COM-1700] RS-232C; 1 port / LAN: 1 port / USB(*1): 1 port
	[COM-1750] RS-232C: 1 port / LAN: 1 port / USB (depends
	on PC)
Attached electrodes	GE-101B Glass electrode, RE-201 Reference electrode
	(※ provided with COM-1700 / TS-1700)
Power requirement	COM-1700: AC100~240V 50/60Hz 60VA
	COM-1750: AC100 ~ 240V 50/60Hz 220VA
Dimensions · Weight	[COM-1700] 250W × 400D × 150H (mm) approx. 6.0kg
Dimonorio rroigiti	[COM-1750] *depends on PC configured with
	Loom 1.004 dobotto on 1 o configuros ma.

●B-1700 Buret / TS-1700 Titration Station	
Display Operation	B-1700: Purge switch, LED lighting-up during dispensing
	TS-1700: Operation switch (LCD touch panel, wired remote
- E	controller)
Buret capacity	20-mL clear glass syringe (standard) (Options: 1,5,10,50mL syringe)
Cylinder cover	UV shield (material: acrylic) for 5, 10, 20-mL cylinder only
Fabrication method	5, 10, 20, 50mL: Inner cylinder precision polishing
	1mL: Outer cylinder precision polishing
Wet material	PTFE, hard glass, ceramic
Connection tube	Ø2 x Ø3 PTFE tube (brown)
Reagent bottle	500mL-glass bottle (brown)
Selector valve	Automatic switching with ceramic joint,
	Drive motor: pulse motor
Dispensing rate	Full volume: 50~250 sec., in 50 sec. step setting (20mL cylinder)
Aspirating rate	Full volume: 25 sec.
Minimum volume of	1.25µL (20mL cylinder)
titrant	
Buret precision	Accuracy: ≤ ±0.1% (full discharge of 20mL cylinder)
	Repeatability: ≤0.01mL (full discharge of 20mL cylinder, SD for n=6)
Linkable buret number	【TS-1700】Connectable up to 9 units of B-1700
Measurement unit	[TS-1700] Any one of S-1700, M-1700, P-1700, or E-1700 attached
Automatic	[TS-1700] 1 set of C-1700 can be attached.
sample changer	
Attached electrodes	[TS-1700] GE-101B Glass electrode, RE-201 Reference electrode
Power requirement	AC 100~240V 50VA
Dimension · Weight	[B-1700] 104W×240D×410H (mm) approx. 4.0kg
	※w/ Buret head (without reagent bottle)
	【TS-1700】104W×325D×410H (mm) approx. 5.5kg

●K-2000T2 Stirrer

Beaker	Up tp 500-mL standard beaker
Stirring method	Magnetic stirrer
Stirring bar	Ø8x30mm PTFE-coated magnet (1piece attached)
Rotation speed setting	Adjustable resistor
Number of attachable	① Electrodes: Up to 2 ② Thermistor electrode: 1
electrode & buret tip	③ Buret tip: Up to 3 ④ Dispensing nozzle: 1
Power requirement	DC12V (power supplied from the titrator main unit)
Dimensions · Weight	110W×210D×350H (mm) approx. 1.0kg

* 1: The USB port on the COM-1700 main unit is only for use of USB flash memory for data storage. Please do not connect other USB-type devices.

The product color may vary from the actual product due to printing qualities.

• Appearance, specification, etc. are subject to change for improvement without prior notice.

[Note] For safe and appropriate use, please be sure to read the "Instruction Manual" before using the product.

Your local distributor is

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