## **TITRATION SYSTEMS**

## 1) TitraLab® AT1000 & KF1000 Series

The Titralab AT1000 Series laboratory analysis systems are one touch, automatic analysers, covering both Potentiometric Titration (AT1000 Series) and Karl Fischer volumetric Titration



(KF1000 Series) with pre-set methods that can quickly deliver accurate and reliable results straight from the box, allowing anyone in the laboratory to immediately perform accurate and reproducible titrations.

A Titralab 1000 Series system is composed of two elements: The Application Package and the Titrator (AT1000 or KF1000). The Titrator is delivered preassembled for quick setup, and the application package includes all specific elements to make it quick and easy for anyone to set up and operate a test without need for any complex programming.

Part Number	Burette for Titrant	Pumps	Measurement method	Required Application Package/s
AT1102.98	1	0		AP0001.AT1102
				AP0002.AT1102
				AP0006.AT1102
				AP0008.AT1102
				AP0015.AT1102
				AP0016.AT1102
AT1112.98	1	1		AP0003.AT1112
				AP0004.AT1112
				AP0009.AT1112
				AP0010.AT1112
				AP0017.AT1112
AT1122.98	1	2		AP0007.AT1122
				AP0012.AT1122

By providing automatic titrations that reduce testing complexity, the Titralab AT1000 Series increase confidence in results and eliminates operator interpretation commonly associated with manual titration.

Part Number	Burette for Titrant	Pumps	Measurement method	Required Application Package/s
AT1222.98	2	2		AP0005.AT1222 pH, Alkalinity & Hardness in Water
				AP0011.AT1222 pH, Total Acidity & Chlorides in Food & Beverage
				AP0013.AT1222 pH, Total Acidity, Free & Total SO <sub>2</sub> in Wine
KF1121.98	For Titrant 1	2	Volumetric Karl Fischer, AC or DC imposed current	AP0014.KF1121 Moisture Content

## 2) AT1000 Application Packs



Application Packages for use with Titralab 1000 Series titrators from Hach contain all elements except reagents to make it quick and easy for everyone to set up and operate a test. Each Application Package is specifically designed for unique parameters to ensure accurate and reproducible measurements at a glance, including\*:

- Adapters
- Glass bottle
- Magnetic stirring bars
- Polypropylene beakers
- Bottle stopper with desiccant tube
- Electrode(s) (Digital Intellical or Analogue)

- High precision glass syringe (Hamilton)
- USB key containing application notes and applications to automatically program titrators forselected parameters.

Setting up your application has never been so simple.

\* Application package content varies depending on application/parameters.

Part Number	Application	Parameter	Compatible instruments	Туре
AP0025.AT1102	Food & Beverage	pH, Total Acidity	AT1102	Application Pack
			AT1112	
			AT1122	
			AT1222	
AP0026.AT1222	Food & Beverage	pH, Total Acidity	AT1222	Application Pack
AS1000.98.20090				Sample Changer
AS1000.98.30050				Sample Changer

AS1000.98.12150				Sample Changer
AP0009.AT1112	Water Applications	Chloride	AT1112 AT1122 AT1222	Application Pack

Part Number	Application	Parameter	Compatible instruments	Туре
AP0005.AT1222	Water Applications	pH/Alkalinity & Hardness	AT1222	Application Pack
AP0001.AT1102	Water Applications	pH/Alkalinity	AT1102	Application Pack
			AT1112	
			AT1122	
			AT1222	
AP0002.AT1102	Water Applications	pH/Alkalinity & Conductivity	AT1102	Application Pack
			AT1112	
			AT1122	
			AT1222	
AP0003.AT1112	Water Applications	Ca & Mg Hardness (ISE)	AT1112	Application Pack
			AT1122	
			AT1222	
AP0011.AT1222	Food & Beverage Applications	pH, Total Acidity & Chloride	AT1222	Application Pack
AP0013.AT1222	Food & Beverage Applications	pH, Total Acidity, Free & Total SO <sub>2</sub> in Wine	AT1222	Application Pack
AP0008.AT1102	Food & Beverage	pH, Total Acidity	AT1102	Application Pack
	Applications		AT1112	
			AT1122	
			AT1222	

AP0010.AT1112	Food & Beverage Applications	Salt in food products	AT1112	Application Pack
			AT1122	
			AT1222	
AP0012.AT1122	Food & Beverage Applications	Free & Total SO <sub>2</sub> in Wine	AT1122	Application Pack
			AT1222	
AP0006.AT1102	Environmental Applications	FOS/TAK (Biogas)	AT1102	Application Pack
			AT1112	
			AT1122	
			AT1222	
AP0007.AT1122	Environmental	Free & Total Chlorine,	AT1122	Application Pack
	Applications	Chlorine Dioxide, Chlorite, Sulfite (Autocat)	AT1222	
Part Number	Application	Parameter	Compatible instruments	Туре
AP0015.AT1102	Petrochemical	TAN (Total Acid	AT1102	Application Pack
	Applications	Number)	AT1112	
			AT1122	
			AT1222	
AP0016.AT1102	Petrochemical	TBN (Total Base	AT1102	Application Pack
	Applications	Number)	A11102	rppheaton r dex
	Applications		AT1102 AT1112	Approation 1 dex
	Applications			Approation 1 dok
	Applications		AT1112	Apprication r ack
AP0014.KF1121	Applications Moisture Content Application		AT1112 AT1122 AT1222	Application Pack
	Moisture Content	Number) Moisture Content (Karl	AT1112 AT1122 AT1222 KF1121	
AP0014.KF1121 AP0004.AT1112	Moisture Content Application	Number) Moisture Content (Karl Fischer)	AT1112 AT1122 AT1222 KF1121	Application Pack



AP0017.AT1112	Petrochemical Applications	R-SH (Thiol)	AT1112	Application Pack
			AT1122	
			AT1222	
AP0018.AT1102	Petrochemical Applications	BR <sub>2</sub> /I <sub>2</sub> Number	AT1102	Application Pack
			AT1112	
			AT1122	
			AT1222	

## 3) Manual Titrators



Get accurate  $(\pm 1\%)$ , convenient manual titrations performed without the bulk, fragility, or waste of a conventional glass burette, using the Hach Digital Titrator. Test for eighteen parameters including chlorine, hardness, and iron. Uses interchangeable titrant cartridges.

Part Number	Reagents included	Includes	Carrying case included	Accessories included	AED Price
1690001	No	Digital Titrator only	No	No	

