

TITRALAB AT1000 SERIES AUTOMATIC TITRATORS

Applications

- =Drinking=water
- =Wastewater
- =Food=and=beverage
- =Petrochemical=industry
- =



Automatic titration without all the complications

Titration can be easy. The TITRALAB AT1000 from HACH LANGE uses pre-set functions that eliminate complex programming and provide accurate results.

The Karl Fischer version TITRALAB KF1000 requires only small sample quantities to deliver accurate and precise results for water content applications.

Reliable titration results

Eliminates operator interpretation and manual processes with automatic titration to quickly deliver accurate and repeatable results.

Pre-programmed titration methods detect end points and eliminate manual calculations to make results easier to achieve without advanced programming.

Simple setup and titration

Application-specific functions to eliminate complex titration setup and analysis.

HACH LANGE's unique application kits make it quick for anyone to set up and operate a test.

Technical Data*

Titration types	Potentiometric=(zero=&=imposed= current),=amperometric,=colorimetric
Titration modes	Sample,=blank,=sample=with=blank,=QC=sample,=QC=sample=with=blank
Parameter	mV/pH,=Conductivity,=Temperature
Resolution	mV/pH: =±0.1=mV/=±0.001=pH Conductivity: =±0.5%=of=reading Temperature: =±0.3=°C=
Sample stand	Integrated,=magnetic=stirring,=beakers=up=to=250=mL
Electrode	INTELLICAL=(“Plug=&=Play”=digital),=analogue,=photocolorimetric;=2=inputs=available
Burette volumes available	2.5/5/10/25=mL,=ISO8655J3
Burette motor resolution	20,000=steps=with=electronic=‘stepping=technology= (128=‘steps/step)
Calibration	Electrode=&=titrant=(up=to=5=bu=ers=in= Auto=Mode,=fi=xed=&=user=defi=ned)
Calibration intervals/alerts/reminder	Yes,=user=defi=ned=period=
Data storage	Last=100=samples,=QC=&=blank=analyses,=last=10=calibrations
Data logger	On=USB=fi=ash=drive,=CSV=format,=Excel=compatible
Operating Interface	Soft=keypad=(silicone)
Display type	5,7”:=Graphic=colour;=VGA
Calibration curves display	Direct=&=derivative=titration=curves,=electrode=calibration=curve

Accessories	Supported=peripherals:=printer,=PC=software,=balance,=sample=changer,=keyboard,=mouse,=barcode=reader,=sampling=pump,=propeller=stirrer
Data Storage	Date,=Time,=Operator=IDs,=Sample=IDs
Maintenance scheduler	Yes,=user=defi=ned
Embedded procedures	Tubing=bubble=purging,=reagent=priming,=burette=and=pump=replacement
Password Protection	Yes,=user=defi=ned=protected=elements
Languages user interface	English,=German,=French,=Italian,=Spanish
Output	Electrode=ports=(x2),=USB=(x2),=serial=(x1),=Ethernet=(x1)
Dimensions Metric (H x W X D)	220=mm=x=400=mm=x=360=mm
Weight	4=kg
Material	Latene=(PP),=silicone,=hardened=glass,=POM,=stainless=steel
Power requirements (Voltage)	100/240=V=AC
Power requirements (Hz)	50/60=Hz
Operating conditions	15=J=35=°C,=20=J=80%=RH,=nonJcondensing
Storage conditions	J5=J40=°C
Certifications	Safety=IEC/EN=61010J1;=EMC=IEC/EN=61326J1
Warranty	2=years

*Subject to change without notice.



Robust and intuitive user interface



Application software delivered on USB key

AT1000 / KF1000 Series Titrator Models

Titrator Models		AT 1	1 0 2 AT 1	1 1 2 AT 1	1 1 2 2 AT 1	1 2 2 2 KF 1	1 1 2 1
Burette for Titrant		1	1	1	2	1	
Integrated Peristaltic Pump		0	1	2	2	2	
Maximum Number of Applications		5	5	5	10	5	
Water Applications							
AP0001.AT1102	pH/Alkalinity in Water	Q	Q	Q	Q	-	
AP0002.AT1102	pH/Alkalinity & Conductivity in Water	Q	Q	Q	Q	-	
AP0003.AT1112	Ca & Mg Hardness (ISE) in Water	-	Q	Q	Q	-	
AP0004.AT1112	Total Hardness (Colour) in Water	-	Q	Q	Q	-	
AP0005.AT1222	pH/Alkalinity & Hardness (ISE) in Water	-	-	-	Q	-	
AP0009.AT1112	Chlorides in Water	-	Q	Q	Q	-	
Food and Beverage Applications							
AP0008.AT1102	pH, Total Acidity in Food & Beverage	Q	Q	Q	Q	-	
AP0010.AT1112	Salt in Food Products	-	Q	Q	Q	-	
AP0011.AT1222	pH, Total Acidity & Chlorides in Food & Beverage	-	-	-	Q	-	
AP0012.AT1122	Free & Total SO ₂ in Wine	-	-	Q	Q	-	
AP0013.AT1222	pH, Total Acidity, Free & Total SO ₂ in Wine	-	-	-	Q	-	
Petrochemical Applications							
AP0015.AT1102	TAN (Total Acid Number) in Petrochem	Q	Q	Q	Q	-	
AP0016.AT1102	TBN (Total Base Number) in Petrochem	Q	Q	Q	Q	-	
AP0017.AT1112	R-SH (Thiol) in Petrochem	-	Q	Q	Q	-	
AP0018.AT1102	Br ₂ /I ₂ index in Petrochem	Q	Q	Q	Q	-	
Environmental Applications							
AP0006.AT1102	FOS/TAK (Biogas)	Q	Q	Q	Q	-	
AP0007.AT1122	Free & Total Chlorine, Chlorine Dioxide, Sulphite (AUTOCAT)	-	-	Q	Q	-	
Moisture Content Application (Karl Fischer)							
AP0014.KF1121	Moisture Content (Karl Fischer)	-	-	-	-	Q	

Order Information

Instruments

AT1102.98	TITRALAB=AT1000=Series=Potentiometric=Titrator,=1=Burette
AT1112.98	TITRALAB=AT1000=Series=Potentiometric=Titrator,=1=Burette,=1=Pump
AT1122.98	TITRALAB=AT1000=Series=Potentiometric=Titrator,=1=Burette,=2=Pumps
AT1222.98	TITRALAB=AT1000=Series=Potentiometric=Titrator,=2=Burettes,=2=Pumps
KF1121.98	TITRALAB=KF1000=Series=Volumetric=Karl=Fischer=Titrator,=1=Burette,=2=Pumps



Optional Accessories

LQV161.99.10000	DPUJS445=USB=Thermal=printer=kit
LZE127	TITRAMASTER=1000=Series,=PC=Software=with=Ethernet=Tablet
LZE142	External=pump=(sample=leveling),=for=AT=Titrator
LZE143	Propeller=stirrer,=70=mm=shaft,=for=AT=Titrator

Service Packages

TSE-CC-AT1000	Comfort=maintenance=contract=for=Automatic=Titrator=TITRALAB=AT1000/KF1000=Series.=Includes=one=on-site=visit=and=final=reporting.=Extended=warranty=up=to=5=years.
TSE-CAL-AT1000	In-house=verification=of=burette,=TITRALAB=AT1000/KF1000=Series
TSE-COM-AT1000	Commissioning=for=Automatic=Titrator=TITRALAB=AT1000/KF1000.=Includes=first=level=training.

Distributed By: Camlab Ltd
 Unit 24, Norman Way Industrial Estate
 Over, Cambridge, CB24 5WE, United Kingdom
 T: +44 (0) 1954 233 110 E: sales@camlab.co.uk

