

ATT-05

Long period accurate measuring of the carbon balance of the earth surface and the marine is necessary to predict ambient air CO₂ increase which is thought as a main cause of the global warming, as the marine is a big carbon sink. The carbon volume in the marine can be calculated by measuring 2 parameters at least of following 4 parameters, Alkalinity (Ar), Total CO₂ (DIC), CO₂ fugacity (fCO₂) and pH. Very high accuracy of these parameters is required, and less than 0.1% accuracy of total alkalinity is necessary especially.

This is first auto total alkalinity titration equipment in the world which enables to do accurate titration rapidly only by preliminary input of the sample weight and the salinity even by beginner, using the current most standard measuring method, open cell method (which is developed by Dr. Andrew Dickson of SCRIPPS institute of oceanography.). And more this equipment is small and compact, so it is possible to bring out this high performance equipment to small space of any field.

High Accurate At Titration

High repeatable titration is possible by the high accurate dispensing micro syringe pump and the combined electrode. High accurate total alkalinity is measured by the auto calculation software.

Auto Titration, Auto Calculation

The alkalinity can be obtained rapidly by the automatic titration speed control of the micro syringe pump, monitoring pH change in real time, and the auto calculation function at the titration end.



Simple Operation

Even beginner can do At titration easily by the interactive operation program in the large LCD display and sample weight and salinity reference function.

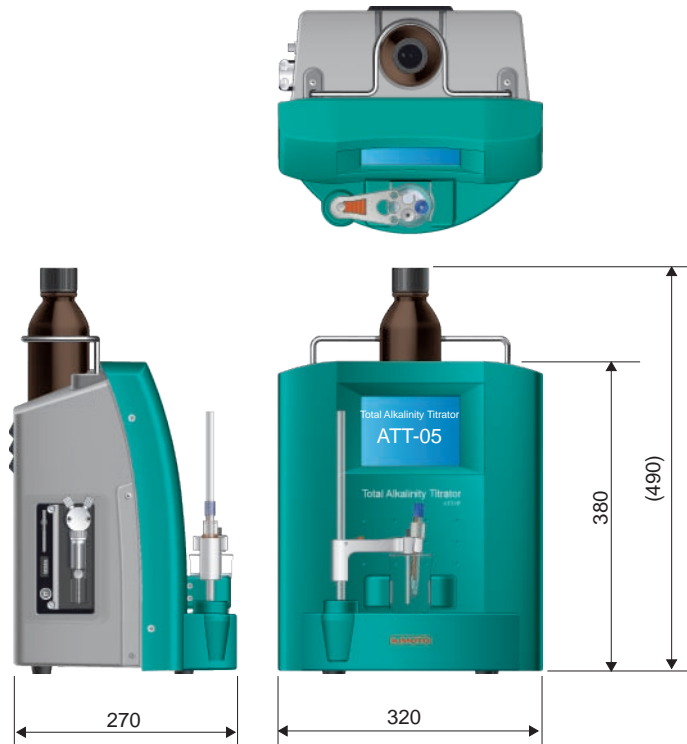
Compact Size

Total alkalinity titration is performed at only about 300 x 300 mm space, by putting a titration reagent bottle on all in one type equipment. So, it is very easy to transport this equipment to various fields like as the marine research ship etc..

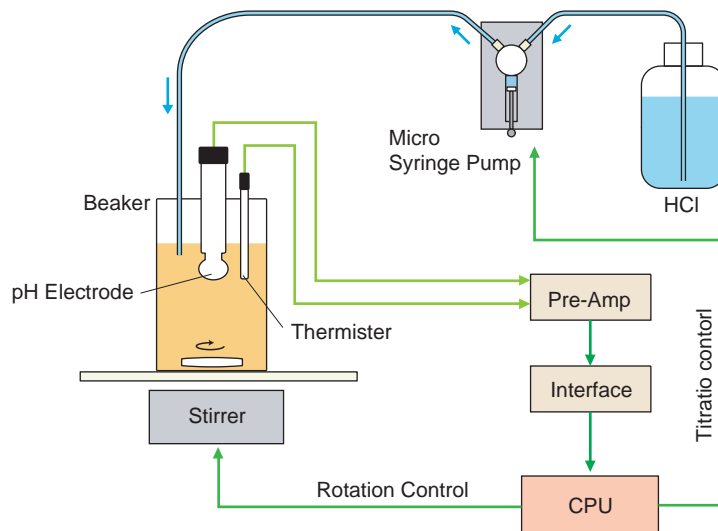
High Cost Performance

The cost of the high accurate titration by this equipment is only about third part of the traditional system using the auto burette and the detector.

Outer View



System



Specifications

- Name
Total Alkalinity titration equipment
- Model
ATT-05
- Measuring Item
Total Alkalinity (micro mol/kg)
- Principle
Open cell method type auto titration using 0.1 mol/L HCl solution.
- pH Sensor
Combined electrode
- Titration
Titration by high accurate dispensing micro syringe pump
- Data Save
Flash memory card
- Measuring Range
Total alkalinity, 2000-2500 micro mol/kg
- Repeatability
within +/- 0.1% (F.S.)
- Power
AC 100V 50/60Hz, 100VA
- Rack Material
High-impact plastic
- Size
about W320xD270xH380 mm
- Weight
about 8 kg

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