

PRODUCT INFORMATION

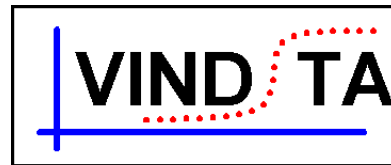
marionda

marine analytics and data

Total alkalinity in seawater (VINDTA 3S):



VINDTA 3S in the lab (VINDTA # 005)



Versatile INSTRUMENT for the DETERMINATION
of TITRATION ALKALINITY



VINDTA 3S packed for a cruise

The **VINDTA** (Versatile INSTRUMENT for the DETERMINATION of TITRATION ALKALINITY) is a system for titration of a sample with acid and analysis of the titration curve to calculate alkalinity. From the first manual instruments in the early nineties of last century, the actual VINDTA 3S evolved. The system was developed to meet the requirements in precision (better 0.1%) for open ocean CO₂ research. A full titration takes less than 20 minutes and requires about 250 ml sample volume (~ 150 ml minimum).

features:

- automated sample handling and titration
- easily transportable and sea-going
- precision typically $\pm 1 \mu\text{mol/kg}$ (open ocean water)
- user friendly software interface using LabVIEW™
- results calculated with GRAN plot and/or non linear curve fit
- manual operation and BASIC- software as option
- optional control PC (Shuttle-PC) tested with the hardware and with all software and drivers installed

LabVIEW™ is a trade mark of National Instruments Inc.

Additional hardware required or recommended:

Old version: METROHM Titrino (719SET or similar) with stirrer 728 and 5 mL burette unit
Metrohm reference electrode # 60729.100, Thermo Orion ROSS electrode #8101BN
New version: Metrohm pH module 867, dosino 800, stirrer 801, 5ml burette unit, Aquatrode
Circulation bath for temperature control (20 or 25°C) of the system and equilibration of sample bottles