



Automate your sample loading and cleaning with the

# ECS

Easy Clean Sampling System



www.rudolphresearch.com/resources/quality



# == The Easy Clean Sampling System automates sample loading and cleaning ==

## Easy Clean Sampling System

Using Rudolph's ECS - Easy Clean Auto Sampler is simple; the operator brings the sample to the density meter, refractometer or polarimeter in any container that has an opening and a sample volume of 3 - 4 ml. A test tube or beaker is commonly used in a lab and sampling from a can or bottle is more common in industrial environments. The operator presses the fill button waits a few seconds while the sample is taken from the sample vessel.

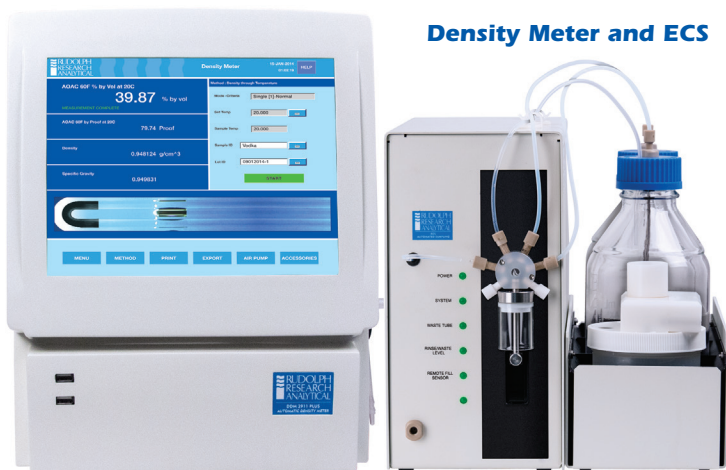
From that point, operation is completely automatic. The sample is measured and the data recorded. Depending on how the system is configured the data may also be printed, saved as an Excel file or transferred to a LIMS system.

Once measurement is complete, the sample is blown to a waste storage vessel using the built in air pump. The measuring cell is flushed with a solvent that will dissolve the sample, flushed again with a second solvent like acetone or alcohol that is fast drying and then blown with air to dry the complete system.

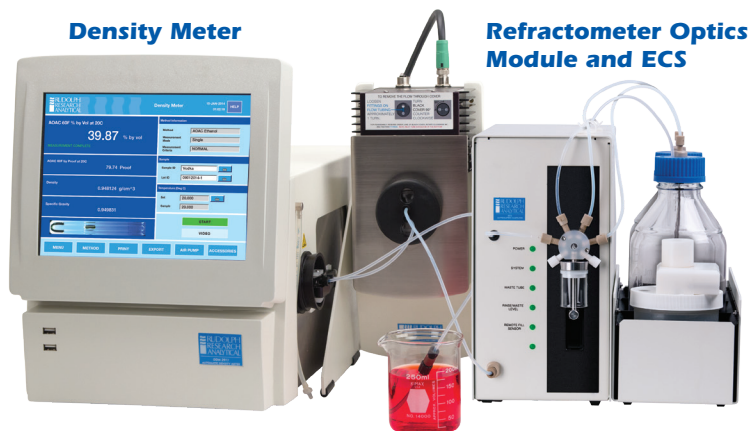
The dry and rinse times are programmable in "Method Set Up". Through a Windows interface, the operator is able to select the amount of time for each rinse and the amount of drying time for each unique sample.

## Simplify with ECS

- Automated sample introduction
- Waste disposal
- Programmable cleaning and drying
- Minimal sample volume: 3-4 ml
- Just place your sample in front of the instrument and press start



Density Meter and ECS



Density Meter

Refractometer Optics Module and ECS



Automatic Polarimeter Autopol V PLUS with ECS

## ECS - Easy Clean Sampling System Specifications

Max. sample viscosity	3000 mPa.s
Filling mode	Piston Pump
Number of rinse solutions	2 separate rinses standard
Rinse level detection	Yes - lightgate
Rinse Time	Programmable & method specific
Waste level detection	Yes - floatgate
Minimum sample volume necessary for measurement	3 - 4 ml
Filling, measuring, and cleaning time	3 - 6 minutes typical
Fill level detection	Yes - lightgate
Drying Time	Programmable & method specific

Auto cleaning detection	Yes - Instrument will continue to rinse and dry until all sample is removed
Expandability	System can pump sample through up to 5 separate instruments
Sample recovery	Yes - sample can be redeposited into sample vessel
Operating Dimensions L x W x H	9.5 x 13 x 10.5" / 24 x 33 x 27 cm
Operating Weight	11 lbs. / 5kg
Shipping Dimensions L x W x H	27 x 20 x 17" / 66 x 54 x 40 cm
Shipping Weight	21 lbs / 9kg
Power Requirements	100 - 240V / 50 - 60Hz