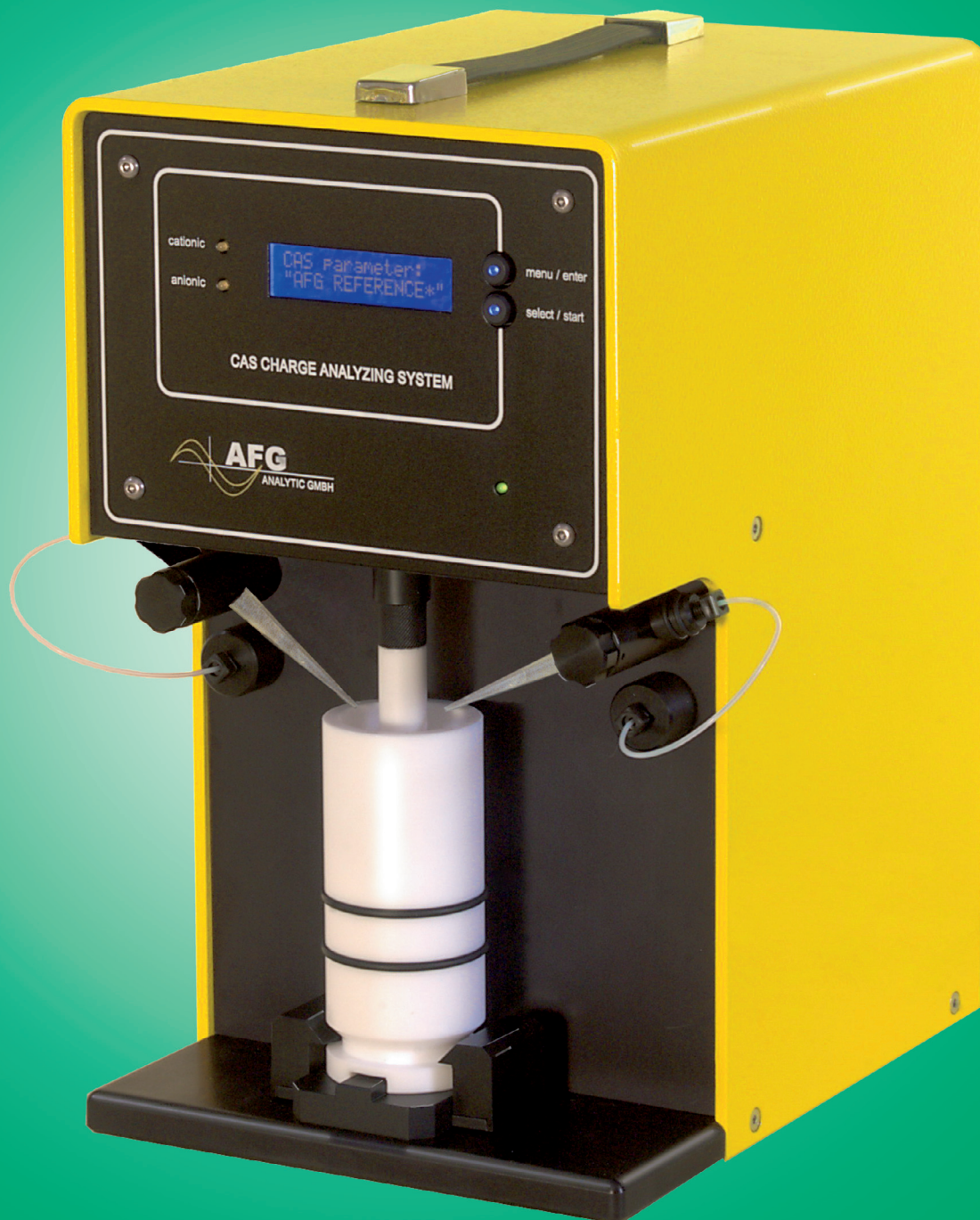


A new era of charge measurement



CAS
Charge Analysing System

CAS Charge Analysing System

The all-new CAS particle charge measurement system takes traditional methods of measuring Streaming Potential and establishes a new era of technology and comfort in particle charge analysis. Using industry accepted techniques of titration CAS determines cationic / anionic and acid / base demands of aqueous charge systems. Both Streaming Potential (mV) and pH are measured simultaneous. Making it possible to easily determine isoelectric and flocculation points of a sample.

How the CAS differs from conventional charge detectors is its integrated titrator and the use of a modern and user-friendly PC software. No longer is it necessary to have separate devices – Charge Detector, pH Meter, Thermometer, Titrator – to conduct charge analysis. The CAS brings it all together in one simple to use portable package. The instrument comes with a highly accurate computer-controlled dosing pump. Expensive external titrators are no longer necessary. The integrated titrator also eliminates the need for hand titrations, saves time and increases accuracy. Essential in busy labs and situations where the consumption rate is very low.

The user-friendly and powerful PC-software allows for easy handling and transfer of test results. Data can be stored, analysed, exported to Excel or e-mailed from one platform. The CAS system comes with a temperature compensated pH-detector. This feature allows determination of the isoelectric point (IEP), but also the examination of the correlation between pH, Titrant Demand and Streaming Potential.

Technical Data

Mains voltage	100-240 VAC 45-65 Hz
Weight	9 kg 16 kg incl. case and accessories
Device dimensions	195 x 335 x 240 mm (W x H x D)
Sample requirements	
Min Sample Volume	10 ml
Max Sample Conductivity	11 mS/cm Sample with much higher conductivity can be measured by selective sample preparation.
Dosing system	
Selectable stop-condition	pH 0 – 14 mV -2000 – +2000 0 – 25 ml anionic / cationic demand 0 – 25 ml acid / base demand stop by user
Resolution	10 µl
Analytical findings:	
Streaming potential	resolution: 1 mV measuring range: -2000 – +2000 mV
pH	resolution: 0,01 pH measuring range: pH 0 – 14
Demand of titrant	resolution: 1 µl
Included accessories:	
Measuring cell Displacement piston pH electrode Pipette 10 ml Screen for filtrating 0,001 N PVS-Na 100 ml 0,001 N PolyDadmac 100 ml PC Software Power cable RS232 cable	

Features of CAS

- Integrated dosing system with high accuracy, **no external titrator required!**
- Completely **compatible measuring results** to common charge detectors with external titrator.
- Optional **second integrated dosing pump**
- Easy operation of the internal dosing unit, no complex titrator handling
- **Easy change of titration solution** by dosage system with minute dead volume. No dismantling and cleaning, only rinsing necessary.
- Compact construction, **only one device.**
- **Integrated pH-measurement** with automatic temperature compensation.
- All functions monitored by micro-controller.
- **High accuracy measuring** by using modern electronic components, by applying a new concept of internal measurement processes and digital measuring data processing by micro-controller and PC software.
- Connection to PC via RS232. Simple operation via USB -> RS232-interface converter in the case of computers without RS232.
- High-performance and **user-friendly PC software** to set parameters and display, evaluate and save the titration curves.
- Easy menu-guided calibration of the pH probe.
- **Can be operated not only as a stand-alone equipment, but also in combination with PC software.**
- Default standard titration procedures and customer-specific processes can be stored in the CAS via the PC software.
- **Fix increment titration, dynamic titration and back-titration** are selectable from given procedures or are **free configurable.**
- Not necessary to set the system to different mains voltages.

Distributor



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