SETA STANHOPE-SETA

Handheld Conductivity Meter

Conductivity Measurement of Oils

www.stanhope-seta.co.uk

Handheld Conductivity Meter For Oils

Key Features

- Measurement 0 to 2000 picosiemens/centimeter (pS/CM)
- High-Accuracy (± 1.5% of reading), AC measurement technology
- Stores up to 8 data locations (User can input location names)
- USB interface for ease of data transfer
- Sensor tip is capable of being fully immersed in liquid chemical
- Fully temperature compensated measurement
- Built-in long life lithium-ion rechargeable battery
- Windows data handling software
- Internal real time date & clock for data record keeping

Principles of Operation

The Seta Hand Held Conductivity Meter provides an accurate and rapid conductivity measurement between 0 and 2000 picosiemens/centimeter (pS/CM).

The conductivity meter is constructed of thermally stable internal electronics and two 316 SS coaxial electrode sensors which are suitable for use from 0 to 35°C.

The conductivity meter incorporates innovative electronics Digital Signal Processing (DSP) techniques to accurately determine the electrical conductivity of oils. Conductivity is highly affected by temperature change and reporting temperature with correction is a key requirement of making measurements. The conductivity meter allows users to measure samples in any container offering an accurate, portable solution to measuring oils.

The instrument allows real time sample averaging with trend indicator and the user is provided with a visual reading that the sample has settled to a stable value for improved accuracy of testing. The meter has integral temperature measurement and compensation which is stored with readings.

An easy to use menu system allows up to 8 samples to be internally stored along with sample temperature, date and time information. This data can be held in internal non volatile memory for either readout on the display or transfer to a personal computer by the built in USB data link. The meter is supplied with software that graphs conductivity and temperature with time/date.

The unit is provided in an industry standard ATEX approved polyamide housing, with built in Lithium Ion rechargeable battery system.

Conductivity Calibration & Verification

The calibration and verification tool can be plugged directly into the Conductivity Meter for quick and easy calibration/verification of the instrument. It is designed to calibrate then verify operation of the instrument in a specified range, and is optimised for AC conductivity measurement with active components ensuring long term stability and accuracy. On completion of the calibration a report is generated showing changes to the instrument and the re-calibration date is automatically updated.

The Calibration & Verification tool fits easily onto the tip of the handheld and has one switch to easily alter the range from low value (1% of scale) to high value (70% of scale). This allows the user to easily check conductivity calibration in the field thus eliminating the costly requirement of the need to returning the instrument for factory calibration.

Optional Accessories

Bench Stand

Designed to hold the handheld meter upright allowing the user to easily run tests. The stand is a sturdy rugged metal design which is easy to assemble and disassemble for transportation.

Carry Case

Designed to fit the meter and all required accessories for running the ASTM D-2624 Test. This case allows for easy transportation, is durable and completely water proof when closed.

USB Cable

Standard A to 5 pin Mini-B USB Cable (6' Long) enabling the meter to communicate with a PC.

Metal Beaker with ground strap - 600mL

The stainless steel beaker is welded with a metal grounding strap to allow any DC Charges to dissipate (without affecting measurement).

Technical Specification

	Conductivity	Temperature
Range:	0-2000 pS/cm (Contact factory for optional ranges)	0-35°C
Accuracy:	+/-1.5 pS/m (+/-1.5% of reading)	+/-0.5°C
Resolution:	0.1 pS/m	0.1°C
Power:	Built-In 2.6AHr Lithium Ion Battery (1000 Samples) Universal Voltage Wall Mount Charger	
Outputs:	128X64 Dot Matrix Display Indicating Conductivity & Temperature Sample Trend Line Graph to Assist Data Collection	
Conductivity Sensor:	316 SS Coaxial Electrode K=.02	
Temperature Sensor:	Platinum RTD NIST Traceable Calibration	
Materials:	Housing Polyamide, sensor 316SS and PEEK	
Calibration:	ASTM D2624 Listed, ATEX Housing – ATEX, FM, CSA, UL, CENELEC	

Order Information

99708-0	Handheld Conductivity Analyser for Fuels
99708-001	USB Cable
99708-002	Bench Stand
99708-003	Metal Beaker with ground strap (600ml)
99708-005	Carry Case