

ProCoMeter <u>Protective</u> <u>Coating</u> <u>Meter</u>

<u>New Innovative Non Destructive Test Equipment</u> <u>Designed & Manufactured by DCVG Ltd:</u>

- The ProCoMeter comes in its own protective case with all components required to carry out the measurements.
- The ProCoMeter has been designed to assess the corrosive status of a metallic structure under an insulated coating.
- Furthermore, the ProCoMeter can assess an organic coating system on any metal structure recording current and voltages to produce various statistics about the coating quality of the metal substrate and utilising a specified criterion to determine its protective ability at that moment in time.
- The ProCoMeter can be used to assess pipelines, bridges, lampposts, aircrafts, trains, buses, cars, artefacts/relics, ships, bridges, trains, trams, etc. Anything that is metallic and also has a protective coating on it can be assessed using the ProCoMeter.
- The ProCoMeter utilises an electrochemical noise technique with Ag/AgCl or Cu/CuSO4 reference probes plugged in to record current and voltages which are then stored within its 2GB internal memory.
- The ProCoMeter is powered by rechargeable batteries making it a portable, flexible device. Charging is carried out via the supplied mains powered charger after 10 hours of use.
- Various settings can be adjusted in the ProCoMeter such as the gain, sample period to be recorded and timing sequence.
- The ProCoMeter can be adjusted to measure utilising one of the five different measurement modes such as SSS-Standard Single Substrate, MSS-Multiple Single Substrate, BNCS-Basic No Connection to the Substrate, MNCS-Multiple No Connection to the Substrate and SC-Single Cell.
- Several samples can be analysed periodically by performing automatic sequences. The values are saved within the internal memory of the ProCoMeter.
- Also work out how fast it is deteriorating by making several measurements over a set time scale.



ProCoMeter Set

Settings 2/4 1.Samp period ms 500 2.Freq. reject: None 3.Settle time s 30 4.Pause time s 30 Previous Next	WE1 WE2 REF Gain: 10 0.002% I: -2.155225e-06 A 1 V: +2.358000e-04 V 1 Gain + New Test 1
Change settings	OFFE
WE1 WE2 REF . Meas Mode: SSS 1.5SS 2.MSS 3.BNCS 4.MNCS 5.SC 5.SC Cancel OK	
Measurement mode	
Pr A Pr B Pr C REF Meas. Mode: MSS Gain: 10 Samp./Set: 512 Set/Input: 2 Cancel OK	

Measurement screen

ProCoMeter device

ProCoMeter Calibration Box

- The role of the ProCoMeter Calibration Box is to check the ProCoMeter calibration accuracy, by connecting the Box outputs to the ProCoMeter inputs. It will generate known and accurate Voltage and Current values, which can be retrieved from the ProCoMeter, to check that the data measured from the device is accurate enough.
- The Calibration Box also contains 2 connection sockets. These sockets can be used to connect a Multimeter (not included). Then, the parameters of the Calibration Box itself can be checked, and its accuracy can be measured.
- The ProCoMeter Calibration Box is supplied as an extra.



ProCoMeter Calibration Box

ProCoMeter Software

- Software is included in the ProCoMeter set.
- Data can be easily transferred from the ProCoMeter memory to computer using the supplied USB cable then analysed using the software analysis system.
- Raw data can be viewed.
- Trends can be applied such as linear or polynomial regression.
- The ProCoMeter will record current & voltage data and determine the standard deviation, the mean, the skew, minimum and maximum current and voltages.
- Calculate the noise resistance (RN).
- Spectral analysis can be applied to data so the power spectral density can be generated from the voltage and current measurements.
- The spectral noise resistance (Rsn) can be calculated from the power spectral density of the current and voltage measurements.





ProCoMeter Software Dashboard

ProCoMeter Software Analysis System

Contact DCVG Ltd For Pricing & More Details About The ProCoMeter Add: Greenbank House, Swan Lane, Hindley Green, Wigan WN2 4AR E-mail: sales@dcvg.com Website: www.dcvg.com



ProCoMeter Connected to the Calibration Box