CST500 Galvanic corrosion/electrochemical noise measuring meter

Overview

CST500 Galvanic corrosion/electrochemical noise measuring meter is composed of high-quality CMOS and BiFET® integrated circuit. It is used to monitor the real-time galvanic corrosion or electrochemical noise signal. You can run the ENTools software to control, or just press the touch key on the panel to operate. The galvanic current density, the galvanic corrosion rate, noise resistance Rn and pitting corrosion index can be obtained. ENTools software also has function of graphing. It support vectorgraph, and the graphs can be saved in Word files.

Working Principle

CST500 employs the industrial-grade MCU control chip, and use chopper-stabilized amplifier Max7650 as the pre-amplifier.Temperature drift is less than 1mV/ ℃ , and time drift is lower than 10mV/Month. Based on the principle of Zero Resistance ammeter, it monitors the electrochemical noise and galvanic current.

Main hardware features :

Built-in double channel 24-bit high precision AD converter;

Maximum sampling rate is 1000Hz;

Auto current range;

Low-pass filter to delete the high-frequency noise.

Communication: RS232/485 circuit

All-optical isolation design is used in circuits to avoid the influence of the ground circuit.

Applications

① lab and onsite field: galvanic corrosion, electrochemical noise and localized corrosion measurement;

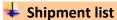② precision impedance transformation and micro current monitoring

Specifications

Data resolution: 24bit Σ - Δ AD

Data acquisition rate: 0.01～1000Hz

Input impedance: $1 \times 10^{11}\Omega$

Potential measuring range: $\pm$5V

Current measuring range:$\pm$20mA

Current range: 20mA～2nA，6 ranges

Potential resolution: 10μV

Current resolution:10pA

Communication:RS485/RS232

Baud rate:115200bps

Power：AC220/ 4 AA rechargeable battery

Shipment list

1) CST500 instrument host

2) ENtools data acquisition and analysis software

3) Electrode cable, power cable, digital cable