ACM Instruments

Pot 16 Iso

FEATURES

- **16 Potentiostats**
- **350 mA per Channel**
- **High Impedance RE**
- **Fixed/Variable Potentials**
- **Very Stable**
- **Measure Current**
- **Measure RE**

APPLICATIONS

- **Cathodic Protection**
- **Coating Disbondment**
- **Cracking**
- **Metal Leaching**
- **Quality Control**
- **Standard Tests**

DESCRIPTION

Isolated Pot 16 has the same specifications as the Pot 16, but each channel is isolated allowing samples to be in the same electrolyte.

Fixed potentials for parallel potentiostatic tests.

This instrument provides 16 potentiostats for long term testing of electrodes at a fixed potential.

Each channel has a fixed current measurement range, selected on purchase for the type of testing to be performed. The standard range is 350 mA with a resolution of 5 micro Amps.

Output potential can either be fixed, selected by a two, three or four position switch, or variable via a 10-turn dialled knob. Extra optional potential selectors may be added and channels grouped. Typical configurations would be all channels set by a two position switch selecting 1.5V or 3V, or channels 1-8 set from -5V to +5V via a 10 turn dialled knob and channels 9-16 set by their own dialled knob. Most standard cathodic disbondment tests (e.g. ISO15711, or ASTM G8, G42, G80, G95 or CSA Z-245) require 1.05V, 1.5V, 3V or 3.5V; however a galvanostat option can be added for the 3mA Australian and New Zealand standards (AS-3862, AS/NZS4352).

Measurement of the current flowing from each potentiostat and the voltage between RE and WE (as a check on operation) is performed by a pair of 24 bit converters, running at a maximum read rate of 4 channels per second.

The software supplied allows for simple set up of data filename and read rate and displays the latest data recorded. The data is stored on the PCs hard disc as the test progresses. In the event of a power cut the data will be added to the earlier data on resumption of the power supply.

An example of the use of a Pot 16 is in performing tests on coated steel to study the likelihood of cathodic disbondment at a fixed potential.

A dedicated and powerful instrument offering very cost effective fixed potentiostats for long term measurement.

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125 Station Road, Cark, Grange-over-Sands, LA11 7NY. England
Telephone: +44 15395 59185 Fax: +44 15395 58562
max@acminstruments.com www.acminstruments.com

Technical Specifications	
Case Dimensions	53 * 18 * 32 cm
Power Supply	110 / 230 VAC 50-60Hz
Weight	8 Kg
Electrode Connectors	BNC 2.5 M length.
Measurement Accuracy	21 Bit A/D (full mains rejection)
Measurement Resolution	1 µV ± 0.0015% nonlinearity
Potentiostat	
Current Output	± 350 mA
Operational Temperature	-5 °C to 72 °C
Calibrated Temperature	25 °C

Requirements

Operating System - Windows 95, 98, ME, NT4, 2000 , XP, Vista or Windows 7

Minimum PC Requirements – Standard PC with free serial port.

Optional Features

- 3mA galvanostatic setting
- Additional voltage selectors
- Rack mounting
- Additional channels (up to 30)

Also available in 4 or 8 channel configurations.

Please visit our website for more detailed technical information.

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