



Conductivity isoPod™ (Model EP357)



- Software controlled
- Plug and play installation
- Electrical isolation minimizes noise and crosstalk
- 12 input ranges, from 2 μ S to 200 mS

Description

An electrically isolated, compact signal conditioner for use with **e-corder** units, for continuous monitoring of solution conductance.

Compatibility

This isoPod be used with most types of two-electrode conductivity cells, including:

- ET915 Dip-In Conductivity Electrode
- ET908 Flow-Thru Conductivity Electrode (for 1/8" OD tubing)
- ET916 Flow-Thru Conductivity Electrode (for 1/16" OD tubing)

Use with eDAQ Chart software version 5.5.6, or later, on Windows XP or later computers.

Specifications

Input ranges:	2, 20, 200 μ S, 2, 20, 200 mS
Error:	<1 % FS on 200 mS and 2 μ S ranges < 0.1% FS on other ranges
Isolation:	> 250 V rms
AC waveform amplitude:	20 or 200 mV p-p
AC waveform shape:	Square pulse
AC waveform frequency:	0.5, 1.0 or 10 kHz
Common mode rejection:	> 120 dB

Applications

Studies where continuous monitoring of solution electrical conductance/resistance is required – e.g. ion chromatography, flow injection analysis, or conductometric titrations.

Theory of Operation

The Conductivity isoPod measures the alternating current (AC) across a suitable conductivity cell by applying a square bipolar potential pulse across the pair electrodes that comprise the cell. A DC analog voltage signal, proportional to the conductance, is output. The isoPod automatically sets excitation amplitude and frequency to an optimal value for a given gain range.

Calibration

The specific conductivity of a solution is obtained by calibrating the conductivity cell. First measure the conductance of a solution of known value (e.g. 0.1 mol/L KCl) then use the Units Conversion feature of the Chart software to equate this signal to the known specific conductivity.

Output signal:	0 – 2 V
Low-pass filter:	1, 2, 5, 10, 20, 50, 100 Hz
Noise:	< 0.1% full scale
Input connector:	BNC
Dimensions (l x w x h):	108 x 58 x 35 mm (4.25" x 2.28" x 1.38")
Weight:	200 g (7 oz)

eDAQ Pty Ltd reserves the right to alter these specifications at any time.